

2014 DRILL BIT CLASSIFIER



SPECIAL SUPPLEMENT TO
World Oil[®]
PUBLISHED IN SEPTEMBER 2014



Fast.
Smooth.
Reliable.



Leverage the rock-crushing strength and stability of roller cone bits and the cutting superiority and continuous shearing action of diamond bits to easily drill curves in challenging carbonates.

The new Kymera™ FSR hybrid bit combines PDC and roller cone bit technology for smoother drilling, remarkable torque management, and precise steerability—powering the bit to go faster, stay on target, and consistently complete the curve in one run.

Call us or visit BakerHughes.com/FastCurve and learn how the new Kymera FSR directional hybrid drill bit tames challenging curves with higher ROP, lower vibration, and consistent performance.

+44 2070 483646 or +1 713-268-6218





World Oil's

2014 DRILL BIT CLASSIFIER

World Oil offers this comprehensive listing of major manufacturers' drilling bits to aid drilling supervisors and engineers in field selection. While this listing has been published annually for many years, changes from year to year are significant. Prior to ordering, users should consult the manufacturer to verify availability and specifications.

How to use the tables. The following tables are divided into six formation categories. Within these categories are listed most available drilling/coring bits by type and manufacturer. To use the listings, identify the formation to be drilled, decide which bit type is appropriate, i.e., roller cone, fixed cutter, steel tooth, insert, diamond, etc., and then choose the manufacturer. Companies were asked to list bit data by: 1) IADC code; 2) readily available sizes (special sizes are often available on request); 3) recommended WOB in lb/in. diameter; and 4) codes for special features and usage, a combination of IADC and *World Oil* special codes (see Nomenclature).

IADC codes. The Bit Classifier uses the International Association of Drilling Contractors' (IADC's) classification system for roller cone and fixed cutter bits. The standards for these classifications are two technical papers that appear in the IADC Drilling Manual, 11th Edition, Chapter A, Sections 2 and 3. The two papers are "The IADC roller bit classification system," adapted from IADC/SPE Paper 23937, presented Feb. 18-21, 1992, and "Development of a new IADC fixed cutter drill bit classification system," Paper IADC/SPE 23940, presented Feb. 18-21, 1992. All manufacturers were asked to submit data based on these classification systems.

Formation categories. The tables show six formation categories corresponding to the IADC formation types, as described below. Companies were asked to list any discrete bit in only one formation type, leaving the user to decide about application in harder, or softer, rock. Nevertheless, duplication of bits in multiple formations remains. The formations are:

- **Soft and soft sticky.** Low compressive strength and high drillability, such as clay, marl, gumbo, unconsolidated sand.
- **Soft-Medium.** Low compressive strength, inter-bedded with hard layers, such as sand, shale, anhydrite.
- **Medium.** Moderate compressive strength, such as shale, chalk, anhydrite, sand.
- **Medium-Hard.** Dense with increasing compressive strength but non- or semi-abrasive, e.g., shale, siltstone, sand, lime, anhydrite.
- **Hard.** Hard and dense with high compressive strength and some abrasive layers, such as sand, siltstone.
- **Extremely hard.** Very hard and abrasive, like quartzite and volcanics.

Nomenclature. *World Oil* shows special features as codes, which include 16 designed by IADC and defined in the above classification papers, plus 11 featured exclusively by *World Oil* for added descriptions. The codes are:

IADC

A Air drilling application	L Lug pads
B Special bearing seal	M Motor application
C Center jet	S Standard steel tooth model
D Deviation control	T Two-cone bit
E Extended jet (full length)	W Enhanced cutting structure
G Gauge/body protection (additional)	X Predominantly chisel tooth insert
H Horizontal steering application	Y Conical tooth insert
J Jet deflection	Z Other shaped insert

World Oil

F Face discharge ports	Q Lateral nozzles
I Thermally stable synthetic diamond (TSP)	R Radial flow hydraulics
K Cross-flow hydraulics	Rst Rotary steerable
N Turbine drilling	U Cutter density: light (l), medium (m), heavy (h), e.g., Ul, Um, Uh
O Milling applications	V Anti-whirl characteristics.
P Percussion drilling	

Companies included. Company names, central mailing addresses and company websites are shown below.

Baker Hughes	9110 Grogans Mill Road, The Woodlands, Texas 77380 www.bakerhughes.com
Bit-Tech SPH, Inc.	P.O. Box 1298, Waskom, Texas 75692 www.bit-tech.com
Drill Master, Inc.	26797 Hanna Road #9, Oak Ridge North, Texas 77385 www.officialdrillmaster.com
Halliburton	P.O. Box 60490, Houston, Texas 77205 www.halliburton.com
Kingdream Public Limited Company	No. 5, Huagongyuan No.1 Road, Miaoshan Division, East Lake New & Hi-Tech. Devel. Zone Wuhan, Hubei Province 430223, PRC China www.kingdream.com
NOV Downhole / ReedHycalog Bits	7909 Parkwood Circle Drive, Houston, Texas 77036 www.nov.com/downhole
Smith Bits, a Schlumberger company	P.O. Box 60068, Houston, Texas 77205 www.smith.com
Tercel Oilfield Products	14902 Sommermeyer Street, Suite 100, Houston, Texas 77041 www.terceloilfield.com
TIX-TSK Corporation	4-11-1, Shiba, Minato-ku, Tokyo 108-0014, Japan www.tix.co.jp
Ulterra Drilling Technologies L.P.	420 Throckmorton, Fort Worth, Texas 76102 www.ulterra.com
Varel International, Inc.	1625 West Crosby Road, Suite 124, Carrollton, Texas 75006 www.varelintl.com

Note: Some companies list the recommended rotary speed range backwards. This is to imply that as the weight on bit increases, the recommended rotary speed generally decreases, and vice versa.

Copyright © 2014 Gulf Publishing Company. All rights reserved.

For additional copies, contact Gulf Publishing Company.

Phone: +1 (713) 529-4301. Fax: +1 (713) 520-4433

Mailing address: Gulf Publishing Company, *World Oil*, Attention: Reprints Department
P.O. Box 2608, Houston, TX 77252 USA.

About the cover: A technician at Halliburton's Drill Bits facility in The Woodlands, Texas, grinds out the matrix material from the pockets, where the cutters will be placed. Photo courtesy of Halliburton.

The MicroCORE™

Cutting System



82%

INCREASE IN ROP
against competitor offsets

Our revolutionary new design redistributes high energy consumption from the center of the drill bit to the more efficient areas of the cutting structure, resulting in faster ROP's and increased cost savings.

Performance where it cuts



TOTAL patented technology

www.terceloilfield.com

TERCEL
PRACTICAL INNOVATION™

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
HA447GJ	447	8%	2,000-5,500	140-60		GS106UB	425x	16, 17, 22, 22½	1,000-4,000	300-50	BGHMWx	GF15	447x	8%, 8%, 8%, 9, 9%, 11%	2,000-5,000	280-50	BGHMx
HA447GX	447	8%, 9%	2,000-5,500	140-60		F05B	427x	12¼	2,000-5,000	160-50	x	GF15B	447x	8%, 12¼	2,000-5,000	280-50	BGHMWx
HAT417	417	4%, 4%, 5%, 6%, 7%, 8%, 8%, 8%, 9%, 10%, 11, 12¼, 13%	2,000-5,000	140-70	CGL	FH108	427x	7%	2,000-5,000	220-50	x	GF15BD	447x	12¼	2,000-5,000	280-50	BGHMWx
HAT427	427	7%, 9%, 12¼	2,000-5,000	140-70	CGY	FHS06	427x	8%	2,000-5,000	220-50	x	GF15BD	447x	8%	2,000-5,000	280-50	BGHMWx
HAT437	437	4%, 5%, 5%, 6, 6%, 6%, 7%, 8%, 8%, 9%, 10%, 11, 12¼	2,000-5,000	140-60	CGL	GF05	427x	9%	1,000-5,000	280-50	BGHMx	GF15B	447x	12¼	2,000-5,000	280-50	BGHMWx
HAT447	447	5%, 6%, 6%, 6%, 7%, 7%, 8%, 8%, 9%, 10%, 10%, 12¼	2,000-5,500	140-60	CGLY	GF05B	427x	12¼	1,000-5,000	280-50	BGHMWx	GF15B	447x	12¼	2,000-5,000	280-50	BGHMWx
HJ417	417	8%, 9%, 9%, 12¼	2,000-5,000	280-70	CGL	GF06UB	427x	12¼	1,000-5,000	280-50	BGHMWx	GFS15	447x	8%	2,000-5,000	280-50	BGHMx
HJ437	437	7%, 8%, 8%, 9%, 9%, 9%, 9%, 12¼	2,000-5,000	280-60	CGL	GF105	427x	9%	1,000-5,000	280-50	BGHMx	GFS15B	447x	12¼	2,000-5,000	280-50	BGHMWx
HJ447	447	8%, 8%, 9%, 12¼	2,000-5,500	240-60	GY	GF105B	427x	11	1,000-5,000	280-50	BGHMWx	GFS15WB	447x	12¼	2,000-5,000	280-50	BGHMWx
HJ447GX	447	9%, 9%, 12¼	2,000-5,500	240-60	GL	GF106UB	427x	12¼	1,000-5,000	280-50	BGHMWx	MF15B	447x	8%, 10%	2,000-5,000	220-50	HmWx
HJS417GL	417	8%	2,000-5,000	280-70	G	GF106UB-DVE	427x	12¼	1,000-5,000	280-50	BGHMWx	MF15T	447x	8%	2,000-5,000	220-50	HmWx
HJS437GL	437	8%	2,000-5,000	280-60	G	GF305B	427x	12¼	1,000-5,000	280-50	BGHMWx	MFS15B	447x	10%	2,000-5,000	220-50	HmWx
HJS447GL	447	8%	2,000-5,500	240-60	G	GF506	427x	8%	1,000-5,000	280-50	BGHMx	MS	447x	8%	#N/A	#N/A	WX
HJT417	417	8%, 9%, 12¼	2,000-5,000	280-70	CGL	GF506B	427x	12¼	1,000-5,000	280-50	BGHMx	SB447	447x	12¼	1,000-4,000	160-50	x
HJT437	437	8%, 8%, 9%, 12¼	2,000-5,000	280-60	CGL	GFS106B	427x	12¼	1,000-5,000	280-50	BGHMWx	XR15	447x	4%, 5%, 5%, 5%	1,000-5,000	300-50	HmWx
HJT447	447	8%, 8%, 12¼	2,000-5,000	240-60	CGLY	GFS106B	427x	12¼	1,000-5,000	280-50	BGHMWx	XR15T	447x	5%, 6, 6%, 6%	1,000-5,000	300-50	HmWx
MD437	437	5%, 6, 6%, 6%, 8%, 8%, 9%, 9%, 12¼	2,000-5,500	300-60	CxY	GFS106V	427x	7%	2,000-5,000	220-50	x	XR15	447x	6	1,000-5,000	300-50	HmWx
MD447	447	6, 6%, 7%, 8%, 8%, 8%, 9%, 9%, 12¼	2,000-5,500	240-60	CxY	FH107Y	427x	7%	2,000-5,000	220-50	x	XR15T	447x	6	1,000-5,000	300-50	BHmWx
SMD437	437	8%, 12¼	2,000-3,000	400-100	GL	TCT110BD	435T	17½	1,000-3,000	300-50	BGHMWx	FH18Y	447x	7%	2,000-5,000	220-50	x
SMD447	447	8%, 12¼	2,000-3,500	400-180	GL	TCT110B	435T	17½	1,000-3,000	300-50	BGHMWx	Tercel					
YC437	437	4%, 4%, 6	1,500-4,000	180-60		TCT110B	435T	17½	1,000-3,000	300-50	BGHMWx	G42FH	427	6, 8%, 9%, 12¼	1,500-3,500	60-120	GW
ReedHycalog Bits						G10B	435x	14%, 16, 17½	1,000-4,000	300-50	BGHMWx	G43FH	437	6, 8%, 9%, 12¼	1,500-3,500	60-120	GW
EMS41H	415	16	1,000-3,500	450-60	CGMNx	G10T	435x	16	1,000-4,000	300-50	BGHMWx	G44SH	445	17½	1,500-4,000	60-110	SG
EMS42H	425	16	1,000-3,500	450-60	CGMNx	G112	435x	36	1,000-4,000	300-50	BGHMWx	P41FH	417	8%, 9%, 12¼	1500-3500	60-160	GW
EMS43H	435	16	1,000-3,500	450-60	CGMNx	G112BD	435x	17½	1,000-4,000	300-50	BGHMWx	P44SH	445	17½	1500-4000	60-160	GWC
EMS44H	445	16	1,000-3,500	450-60	CGMNx	G112HUB	435x	17½	1,000-4,000	300-50	BGHMWx	M41FH	417	8%, 9%, 12¼	1500-3500	80-300	GWB
R01A	417	8%	2,000-5,500	200-60	CxW	G112UB	435x	22	1,000-4,000	300-50	BGHMx	M44SH	445	17½	1500-4000	80-300	CGWB
R03A	417	7%, 8%, 12¼	2,000-5,500	200-60	CxW	GS10	435x	15½	1,000-4,000	300-50	BGHMx	TIX-TSK					
R07	427	11%	2,000-5,500	200-60	YW	GS10B	435x	16, 17½	1,000-4,000	300-50	BGHMWx	M04GF	417x	12¼	1,000-4,000	250-60	GmX
R07A	427	4%, 5%, 12%	2,000-5,500	200-60	CxW	GS12B	435x	16, 17½, 22	1,000-4,000	300-50	BGHMWx	M05GF	417x	8%, 12¼	1,000-4,500	250-60	GmX
R09A	437	7%, 8%, 8%	2,000-5,500	200-60	xW	GS12BD	435x	22	1,000-4,000	300-50	BGHMWx	M08GF	417x	8%, 12¼	1,000-4,500	250-60	GmX
R12A	437	6, 6%, 9%, 10%, 11, 12¼	2,000-5,500	200-60	xW	GS12H	435x	17½	1,000-4,000	300-50	BGHMWx	M10GFP	437x	8%, 8%, 8%, 9%, 11%, 12, 12¼	1,000-4,500	250-60	GLMx
R14	447	7%	2,000-5,000	200-60	YW	GS12HBD	435x	17½	1,000-4,000	300-50	BGHMWx	M15GFP	447x	8%, 8%, 8%, 9%, 11%, 12, 12¼	1,000-5,000	250-60	GLMx
R14A	447	7%, 8%	2,000-5,000	200-60	xW	GS12HUB	435x	17½	1,000-4,000	300-50	BGHMWx	MZ05GFC	415x	16, 17½	1,000-3,500	250-80	CGMx
R15	447	8%, 11%	2,000-5,000	200-60	YW	GS12HUB	435x	17½	1,000-4,000	300-50	BGHMWx	MZ08GFC	425x	16, 17½	1,000-3,500	250-80	CGMx
R15A	447	8%, 8%, 8%, 11%, 12¼	2,000-5,000	200-60	xW	GS12HUB	435x	17½	1,000-4,000	300-50	BGHMWx	MZ10GFC	435x	16, 17½	1,000-3,500	250-80	CGMx
RD12	437	8%	2,000-5,000	180-60	ZWMGH	GS112UB	435x	16, 22, 28	1,000-4,000	300-50	BGHMWx	MZ15G-FPC	445x	16, 17½	1,000-3,500	250-80	CGLMx
RD15	447	7%, 8%, 8%, 9%, 12¼	1,500-5,500	200-60	ZWMGHW	GS112HBD	435x	17½	1,000-4,000	300-50	BGHMWx	X10G	437x	8%, 8%, 8%, 9%, 11%, 12, 12¼	1,500-4,500	120-60	Gx
T41	415	16, 17½, 18%, 22, 23¼, 24, 26	2,000-5,000	350-60	CGMNW	GS112HUB	435x	17½	1,000-4,000	300-50	BGHMWx	X10GY	437x	8%, 12¼	1,500-4,500	120-60	GY
T42	425	16, 22	2,000-5,000	450-60	CGMNW	GS112HUB	435x	17½	1,000-4,000	300-50	BGHMWx	X15G	447x	8%, 8%, 8%, 9%, 11%, 12, 12¼	1,500-5,000	120-60	Gx
T43	435, 437	12¼	1,000-3,500	350-60	CGMNW	GS112HUB	435x	17½	1,000-4,000	300-50	BGHMWx	XZ05GC	415x	16, 17½	1,000-3,500	150-80	CGx
T44	445, 447	12¼	1,000-3,500	350-60	CGMNW	GS112HUB	435x	17½	1,000-4,000	300-50	BGHMWx	XZ08GC	425x	16, 17½	1,000-3,500	150-80	CGx
Smith Bits						GF10B	437x	8%, 9%, 12¼	2,000-5,000	280-50	BGHMWx	XZ10GC	435x	8%, 12¼	1,000-4,000	250-80	GmX
TCT103B	415T	17½	1,000-3,000	300-50	BGHMWx	GF10HB	437x	12¼	2,000-5,000	280-50	BGHMWx	XZ10GFC	435x	16, 17½	1,000-3,500	150-80	CGx
TCT103BD	415T	17½	1,000-3,000	300-50	BGHMWx	GF10WB	437x	12¼	2,000-5,000	280-50	BGHMWx	XZ15GFP	445x	16, 17½	1,000-3,500	150-80	CGLx
G02B	415x	17½	1,000-4,000	300-50	BGHMWx	GF110	437x	8%, 8%	2,000-5,000	280-50	BGHMx	Varel					
G03B	415x	18%	1,000-4,000	300-50	BGHMWx	GF110D	437x	8%	2,000-5,000	280-50	BGHMx	HR04V	415x	14%, 16, 17, 17½	1,000-4,000	300-50	CMW
G04B	415x	12¼, 24, 26, 30	1,000-4,000	300-50	BGHMWx	GF110U	437x	8%, 8%	2,000-5,000	280-50	BGHMx	HE04V	417x	12¼	1,000-5,000	300-50	CMW
G101B	415x	17½	1,000-4,000	300-50	BGHMWx	GF112	437x	8%	2,000-5,000	280-50	BGHMWx	HE04	417x	10%, 10%, 11, 13%, 13%	1,000-5,000	300-50	CMW
G103B	415x	17½	1,000-4,000	300-50	BGHMWx	GF12B	437x	12¼	2,000-5,000	280-50	BGHMWx	HE09V	427x	8%, 8%	1,250-5,000	300-50	CMW
G103BD	415x	17½	1,000-4,000	300-50	BGHMWx	GFK08B	437x	8%	2,000-5,000	280-50	BGHMWx	ER14	435x	22, 23, 23½, 26, 28	1,000-4,500	150-50	CMW
GS03	415x	34	1,000-4,000	300-50	BGHMx	GFS10	437x	10%	2,000-5,000	280-50	BGHMx	ER14V	435x	28, 30	1,000-4,500	150-50	CMW
GS03B	415x	16, 16½, 17½, 18%, 18%	1,000-4,000	300-50	BGHMWx	GFS10B	437x	12, 12¼	2,000-5,000	280-50	BGHMWx	HR14V	435x	15½, 16, 17½, 18%	1,000-4,500	300-50	CMW
GS04B	415x	24, 26	1,000-4,000	300-50	BGHMWx	GFS110	437x	8%	2,000-5,000	280-50	BGHMx	HR13V	435x	16	1,000-4,500	300-50	CMW
GS04BD	415x	28	1,000-4,000	300-50	BGHMWx	GFS110B	437x	12, 12¼	2,000-5,000	280-50	BGHMWx	HE10V	437x	8%, 8%	1,250-5,000	300-50	CMW
GS04UB	415x	23½, 24, 26	1,000-4,000	300-50	BGHMWx	MF10T	437x	8%	2,000-5,000	250-50	HmX	HR12V	435x	14%	1,000-4,500	300-50	CMW
GS101	415x	17½	1,000-4,000	300-50	BGHMWx	MFS10T	437x	8%	2,000-5,000	250-50	HmX	HE12	437x	13%	1,250-5,000	300-50	CMW
GS101B	415x	16, 17½	1,000-4,000	300-50	BGHMWx	SB437	437x	8%, 8%, 12¼, 17½	1,000-4,								

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
MSI619		8%, 8%, 12¼	400-3,000	60-400	GHM-NRstUIVW	MR319MC	M224	12¼, 17½	500-2,500	50-400	UL G H M RST W V	R416	M223, S223	4%, 5%, 6, 6½, 6¾, 7%, 7½, 8½, 8¾, 9%, 12¼, 16, 17½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR
MSI719		8%, 12¼	400-3,000	60-400	GHM-NRstUIVW	SP316C	S122	8½, 8¾	500-2,500	50-400	UL G H M RST W V	R419	M223, S223	6, 7½, 7¾, 8½, 8¾, 9%, 10%, 11%, 12 ¼, 17, 17½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR
MSIZ519		8½, 8¾	400-3,000	60-400	GHM-NRstUIVW	SP316M	S122	8½, 8¾	500-2,500	50-400	UL G H M RST W V	Bi-center PDC drill bits					
MSIZ619		8%	400-3,000	60-400	GHM-NRstUIVW	SP316MC	S122	8½, 8¾	500-2,500	50-400	UL G H M RST W V	ReedHycalog Bits					
S719		12¼	400-3,000	60-400	GHM-NRstUIVW	SP319	S122	6, 8½, 12¼, 17½	500-2,500	50-400	UL G H M RST W V	CSD3211		4½x5%	3,000-3,500	80-200	GHMWUm
SD419		16½	400-3,000	60-400	GHM-NRstUIVW	SP319C	S122	6, 8½, 12¼, 17½	500-2,500	50-400	UL G H M RST W V	CSD3311		4½x5%	3,000-3,500	80-200	GHMWUm
SD519		16	400-3,000	60-400	GHM-NRstUIVW	SP319M	S122	6, 8½, 12¼, 17½	500-2,500	50-400	UL G H M RST W V	PSD3211		4.5x5%	3,000-3,500	80-200	GHMWUm
SDI419		11%, 12¼, 17½	400-3,000	60-400	GHM-NRstUIVW	SP319MC	S122	6, 8½, 12¼, 17½	500-2,500	50-400	UL G H M RST W V	PSD3213		5½x6½, 6x7	3,000-3,500	80-200	GHMWUm
SDI619		12¼, 14¾, 16, 17½	400-3,000	60-400	GHM-NRstUIVW	Ulterra						PSD4213		6½x7½	3,000-3,500	80-200	GHMWUm
SDIZ419		12¼	400-3,000	60-400	GHM-NRstUIVW	U313S	S132	8¾	500-4000	Variable	BCDEFGSU	SBR4213	S422	6x7	3,000-3,500	80-200	GHMWUm
SDIZ519		14¾	400-3,000	60-400	GHM-NRstUIVW	U309M	M343	6½	500-4000	Variable	BCDEFGSU	SBR4219	S422	10½x12, 10½x12¼	2,500-3,000	80-200	GHMWUm
SDSI619		12¼	400-3,000	60-400	GHM-NRstUIVW	U413M	M133, M134, M233	4¾, 5½, 6¾, 6¼, 6½, 7%	500-4000	Variable	BCDEFGSU	Smith Bits					
SDXI516		8½	400-3,000	60-400	GHM-NRstUIVW	U416M	M123, M134, M223, M323	6, 6½, 6¾, 7½, 8½, 8¾, 9½	500-4000	Variable	BCDEFGSU	QDM4219		9½	200-3,000	60-600	GHM-NRstUIVW
SDXI519		8½	400-3,000	60-400	GHM-NRstUIVW	U419M	M123, M132, M323	7½, 8 ½, 9%, 12¼	500-4000	Variable	BCDEFGSU	QDSI4219		9½	200-3,000	60-600	GHM-NRstUIVW
SHOSI519		17	400-3,000	60-400	GHM-NRstUIVW	U513M	M123, M124, M132, M133, M134, M232, M332	5½, 6, 6½, 6¾, 6¾, 6¾, 7¾, 8½, 8¾, 9½	500-4000	Variable	BCDEFGSU	Varel					
SI419		8½	400-3,000	60-400	GHM-NRstUIVW	U516M	M122, M123, M124, M222, M223, M224, M233, M234, M332	6, 6½, 6¾, 6¾, 7¾, 8½, 8¾, 9½, 9½, 12¼	500-4000	Variable	BCDEFGSU	VH416	M323, S323	8½x9%	500-2,500	100-400	BGDH-NOUXR
SI719		16	400-3,000	60-400	GHM-NRstUIVW	U519M	M123, M132, M223, M323	6½, 7½, 8½, 8¾, 9½, 9½, 12¼	500-4000	Variable	BCDEFGSU	VH616	M323, S323	6x7, 8½x9%, 10½x12¼, 10½x12¼, 12¼x14¾, 13½x17½, 14¼x16	500-2,500	100-400	BGDH-NOUXR
SI819		18½, 23	400-3,000	60-400	GHM-NRstUIVW	U619M	M123, M124, M223, M224, M323	7½, 8½, 8¾, 10%, 11, 12¼, 13½	500-4000	Variable	BCDEFGSU	VH619	M323, S323	8½x9%, 12¼x14¾	500-2,500	100-400	BGDH-NOUXR
SI919		22	400-3,000	60-400	GHM-NRstUIVW	U313S	S132	8¾	500-4000	Variable	BCDEFGSU	PDC coring bits					
SSI619		20, 23	400-3,000	60-400	GHM-NRstUIVW	U413S	S133	6¾	500-4000	Variable	BCDEFGSU	Bit-Tech					
SSI819		20	400-3,000	60-400	GHM-NRstUIVW	U416S	S122	7½, 8½, 8¾	500-4000	Variable	BCDEFGSU	CP-440E	M342	7½, 8½, 8¾	300-2,000	60-120	AFG
SXI619		12¼	400-3,000	60-400	GHM-NRstUIVW	U513S	S132	6½, 6¾, 6¾, 7¾, 8½, 8¾, 9½, 9½, 10%	500-4000	Variable	BCDEFGSU	Halliburton					
VIS419		8½, 12¼	400-3,000	60-400	GHM-NRstUIVW	U516S	S122, S123, S222, S223, S323	6½, 6¾, 7¾, 8½, 8¾, 11, 12¼, 13½	500-4000	Variable	BCDEFGSU	FC3443	M243	8½-12¼	250-3,500	50-150	F
VIS519		12¼	400-3,000	60-400	GHM-NRstUIVW	U519S	S122, S123, S222, S223, S323	7½, 8½, 8¾, 9½, 12¼	500-4000	Variable	BCDEFGSU	FC3445A	S243	5½-6¾	250-2,000	50-150	F
VS419		11%, 11½, 12	400-3,000	60-400	GHM-NRstUIVW	U619S	S122, S123, S222, S223, S323	7½, 8½, 8¾, 9½, 12¼	500-4000	Variable	BCDEFGSU	FC3543A	S333	7½-8½	250-3,500	50-150	F
Z519		12¼	400-3,000	60-400	GHM-NRstUIVW	U313S	S132	8¾	500-4000	Variable	BCDEFGSU	FC3636	M434	4¾	200-1,500	50-150	F
Tercel						U313S	S132	8¾	500-4000	Variable	BCDEFGSU	FC3643	M233	7½-12¼	250-3,500	50-150	F
MP310	M132	3½	250-1000	50-400	UL G H M RST W V	U413S	S133	6¾	500-4000	Variable	BCDEFGSU	FC3645	M233	5½-6¾	250-2,000	50-150	F
MP310C	M132	3½	250-1000	50-400	UL G H M RST W V	U416S	S122	7½, 8½, 8¾	500-4000	Variable	BCDEFGSU	FC3645A	S233	5½-6¾	250-2,000	50-150	F
MP310M	M132	3½	250-1000	50-400	UL G H M RST W V	U513S	S132	6½, 6¾, 6¾, 7¾, 8½, 8¾, 9½, 9½, 10%	500-4000	Variable	BCDEFGSU	FC3647	M233	6-12¼	250-3,500	50-150	F
MP310MC	M132	3½	250-1000	50-400	UL G H M RST W V	U516S	S122, S123, S222, S223, S323	6½, 6¾, 7¾, 8½, 8¾, 11, 12¼, 13½	500-4000	Variable	BCDEFGSU	FC3647A	S233	6-12¼	250-3,500	50-150	F
MP313	M233	6½, 6¾, 8 ½, 8¾, 9%	500-2,500	50-400	G	U619M	M123, M124, M223, M224, M323	7½, 8½, 8¾, 10%, 11, 12¼, 13½	500-4000	Variable	BCDEFGSU	FC3653	M233	6-12¼	250-3,500	50-150	F
MP313C	M233	6½, 6¾, 8 ½, 8¾, 9%	500-2,500	50-400	G	U313S	S132	8¾	500-4000	Variable	BCDEFGSU	FC3657	M233	6-12¼	250-3,500	50-150	F
MP313M	M233	6½, 6¾, 8 ½, 8¾, 9%	500-2,500	50-400	G	U413S	S133	6¾	500-4000	Variable	BCDEFGSU	FC3663	M233	6-12¼	250-3,500	50-150	F
MP313MC	M233	6½, 6¾, 8 ½, 8¾, 9%	500-2,500	50-400	G	U416S	S122	7½, 8½, 8¾	500-4000	Variable	BCDEFGSU	FC3847	M233	6-12¼	250-3,500	50-150	F
MP316	M123	6½	500-2,500	50-400	G	U513S	S132	6½, 6¾, 6¾, 7¾, 8½, 8¾, 9½, 9½, 10%	500-4000	Variable	BCDEFGSU	FC3943A	S234	6-12¼	250-3,500	50-150	F
MP316C	M123	6½	500-2,500	50-400	G	U516S	S122, S123, S222, S223, S323	6½, 6¾, 7¾, 8½, 8¾, 11, 12¼, 13½	500-4000	Variable	BCDEFGSU	ReedHycalog Bits					
MP316M	M123	6½	500-2,500	50-400	G	U519S	S122, S123, S222, S223, S323	7½, 8½, 8¾, 9½, 12¼	500-4000	Variable	BCDEFGSU	CSP313	S132	6¾	300-2,000	50-150	GUI
MP316MC	M123	6½	500-2,500	50-400	G	U619S	S122, S123, S222, S223, S323	9%, 12¼	500-4000	Variable	BCDEFGSU	CCP513	S132, S233	6½, 6¾, 8¾, 9%	300-2,000	50-150	GUI
MP416	M223	8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	G	V316	M223, S223	6½, 6¾, 6¾, 7¾, 8½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	CD453		5½, 6, 6¾, 8½	300-2,000	50-150	GUI
MP416C	M223	8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	G	V319	M233, S233	7½, 8½, 12¼	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	CDP519	S323	12¼	300-2,000	50-150	GUI
MP416M	M223	8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	G	V416	M233, S233	4½, 5½, 6, 6½, 6¾, 6¾, 7¾, 8½, 8¾, 9%, 12¼, 16, 17½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	CEP513	S232, S233	8½, 8¾, 8¾	300-2,000	50-150	GUI
MP416MC	M223	8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	G	V419	M123, S123	6, 7½, 7¾, 8½, 8¾, 8¾, 9%, 10%, 11%, 12 ¼, 17, 17½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	CN455		6, 6¾	300-2,000	50-150	GUI
MP419	M122	6¾, 12¼	500-2,500	50-400	G	R316	M223, S223	6½, 6¾, 6¾, 7¾, 8½	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	CSP516	S222	8	300-2,000	50-150	GUI
MP419C	M122	6¾, 12¼	500-2,500	50-400	G	R319	M223, S223	7½, 8½, 12¼	500-2,500	50-400	BGTP-DG1G2G3L-HNOUXR	IEP513	3, 3½	300-2,000	50-150	GUI	
MP419M	M122	6¾, 12¼	500-2,500	50-400	G	Tercel						Surface set diamond coring bits					
MP419MC	M122	6¾, 12¼	500-2,500	50-400	G	Varel						Bit-Tech					
MR313	M233	9%	500-2,500	50-200	G	CMP611						Halliburton					
MR313C	M233	9%	500-2,500	50-200	G	CMP613						CT103UF					
MR313M	M233	9%	500-2,500	50-200	G	CB413						Soft-Medium					
MR313MC	M233	9%	500-2,500	50-200	G	CB613						Steel tooth roller cone bits					
MR319	M224	12¼, 17½	500-2,500	50-400	G	CB419						Baker Hughes					
MR319C	M224	12¼, 17½	500-2,500	50-400	G	RC124						VM-2					
MR319M	M224	12¼, 17½	500-2,500	50-400	G	RC126						RC127					
						RC127						VG-2D0					
						RC131						RC131					

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
GTX-G3	135	8%, 8½, 11%, 12, 12¼, 14¾, 15½, 17½, 18½	1800-5700	195-60	CGS
RC135	135	11½, 17½	1800-5700	195-60	S
VG-3	135	17½	1800-4500	125-60	SW
VGD-3	135	14¾	1800-4500	125-60	MSW
VM-3	135	16, 17½	1600-4100	350-80	BCGMSW
RC136	136	12¼	2200-5700	195-80	S
MX-3	137	8½, 12¼	2400-5600	350-80	BGMX
MXL-3	137	11½	2400-5600	350-80	BGMX
RC137	137	4¼, 8½, 12¼	2200-5700	195-80	S
STX-3	137	3¾, 3¾, 3, 8	1300-4000	285-80	MS
VGD-3	137	12¼	2200-5700	195-80	SW
VM-3	137	8½, 9½, 12¼, 13½	2400-5600	350-80	BCGMSW
VMD-3	137	8½, 12¼	2400-5600	350-80	BCGMSW
Halliburton					
XN4	211	5¼-6	2,000-6,000	60-300	S
XT4	215	14¼-18½	2,000-6,000	60-300	GMW
QH4	216	12¼-12¼	2,000-6,000	60-300	S
Q4/QH4	217	4½-12¼	2,000-6,000	60-300	GMW
Kingdream					
GA214	214	5¼, 6¼, 8¾, 8½, 10½, 10½, 11¾, 12, 12¼, 17, 17½	1,000-4,000	200-80	CGL
GA215	215	5¼, 6¼, 6¾, 8½, 10½, 11¾, 12¼, 13¾, 17, 17½	1,000-4,000	200-80	CG
GAT214	214	12¼	1,000-4,000	200-80	CG
GAT215	215	12¼	1,500-4,000	200-80	CG
HA216	216	3¾, 4, 4¼, 4½, 4¾, 4¾, 5½, 5¾, 6, 6¼, 6¾, 7, 7¼, 8, 8¼	2,500-6,000	90-50	GL
HA217	217	3¾, 3¾, 4¼, 4¼, 4¾, 4¾, 4¾, 5½, 5¾, 6, 6¼, 6¾, 6¾, 7, 7¼, 8, 8¼, 8¾, 9, 10, 10½, 11¾, 12¼, 17½	2,500-6,000	100-50	CGL
HAT217	217	5¼, 6, 6¼, 6¼, 6½, 8, 8½, 8¾, 9, 10, 10½	2,500-6,000	100-50	CG
W211	211	17½	1,500-4,000	200-80	S
W221	221	6½	1,000-4,000	260-60	S
Smith Bits					
SB214	214	14¾, 16, 17½, 18½, 20	2,000-4,000	160-50	S
GVH+	215	26	1,000-4,000	300-50	BGHM
SB215	215	8½, 12¼, 16, 17½	2,000-4,000	160-50	S
SVH	215	8½, 8½, 12¼, 14¾, 17½	2,000-4,000	160-50	S
FV	216	5¼, 6, 6½, 12	2,000-5,000	160-50	S
SB216	216	17½	2,000-4,000	160-50	S
FKVH	217	6½	2,000-5,000	160-50	BS
FVH	217	4¼, 6, 6¾, 8½, 8¾, 12¼	2,000-5,000	160-50	S
SB217	217	11¾	2,000-4,000	160-50	S
Tercel					
G210	211	4¼, 4¼, 4¾, 4¾, 4¾, 5½, 5¼, 6, 6¾, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 8¾, 9, 9½, 10½, 12, 12¼, 13¾, 14, 14¾, 15, 16, 17, 17½	3000-9000	50-90	G
G210H	213	4¼, 4¼, 4¾, 4¾, 4¾, 5½, 5¼, 6, 6¾, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 8¾, 9, 9½, 10½, 12, 12¼, 13¾, 14, 14¾, 15, 16, 17, 17½	3000-9000	50-90	G
G21F	216	6, 6¼, 7¾, 8¾, 8½, 8¾, 9¾, 12¼	3000-8000	50-80	S
G21FH	217	6, 6¼, 7¾, 8¾, 8½, 8¾, 9¾, 12¼	3000-8000	50-80	GW
G21S	214	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 14¾, 16, 17, 17½	3000-8000	50-120	SG
G21SH	215	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 14¾, 16, 17, 17½	3000-8000	50-120	SG
G230	231	4¼, 4¼, 4¾, 4¾, 4¾, 5½, 5¼, 6, 6¾, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 9½, 10½, 12, 12¼, 13¾, 14, 14¾, 15, 16, 17, 17½	3000-9000	50-80	S
G230H	233	4¼, 4¼, 4¾, 4¾, 4¾, 5½, 5¼, 6, 6¾, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 9½, 10½, 12, 12¼, 13¾, 14, 14¾, 15, 16, 17, 17½	3000-9000	50-80	G
G23S	234	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 14, 14¾, 15, 16, 17, 17½	3000-9000	50-90	S
G23SH	235	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	3000-9000	50-90	SG
G33F	236	6, 6¼, 7¾, 8¾, 8½, 8¾, 9, 12¼	3000-8000	50-80	GW
G33FH	237	6, 6¼, 7¾, 8¾, 8½, 8¾, 9, 12¼	3000-8000	50-80	GW
P21SH	215	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	3000-8000	50-200	CWG
P21FH	217	6, 6¼, 7¾, 8¾, 8½, 8¾, 9, 12¼	3000-8000	50-200	WG
P23SH	235	6, 6¼, 6¾, 7¾, 8¾, 8½, 8¾, 9, 10½, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	3000-8000	50-200	CWG
P23FH	237	6, 6¼, 7¾, 8¾, 8½, 8¾, 9, 12¼	3000-8000	50-200	WG
M21SH	215	13¾, 13¾, 14¾, 16, 17, 17½	3000-8000	50-300	CGWB
M21FH	217	8½, 8¾, 9, 10½, 12¼	3000-8000	50-300	WGB
M23SH	235	13¾, 13¾, 14¾, 16, 17, 17½	3000-8000	50-300	CGWB
M23FH	237	8½, 8¾, 9, 10½, 12¼	3000-8000	50-300	WGB
TIX-TSK					
MSS	131	5½, 6, 6¼, 6¼, 7½, 7¾	1,500-4,000	130-60	S
MSS	131	8½, 8½, 8¾, 8¾, 9, 9, 10½, 11, 11½, 12, 12¼	1,500-5,000	130-60	S
MSS	131	13¾, 13¾, 14¾, 15, 16, 17½, 20, 22, 23, 24, 26	1,500-4,000	130-60	S
MSS-TM2	135	16, 17½, 20, 22, 23, 24, 26	1,500-3,500	250-60	GMW
MSS-TX	137	5¼, 6, 7¾	2,000-4,000	120-60	S
MSS-TX	137	8½, 9, 11½, 12¼	2,000-5,000	120-60	S
MSS-TZ	135	8½, 8½, 9, 9, 10½, 11½, 12¼	2,000-4,500	120-60	S
MSS-X	136	5¼, 6, 6¼, 6¼, 7¾	2,000-4,000	120-60	S
MSS-X	136	8½, 8½, 8¾, 9, 9, 10½, 11½, 12¼	2,000-5,000	120-60	S
MSS-X	136	15½, 16, 17½	2,000-4,000	120-60	S
MSS-XZ	134	8½, 12¼	1,500-4,500	250-60	GMW
MSS-XZ	134	16, 17½	1,500-3,500	150-60	W
MSS-Z	134	8½, 8½, 9, 9, 10½, 11½, 12¼	2,000-4,500	110-60	S
MSS-Z	134	16, 17½, 20, 22, 23, 24, 26	1,500-3,500	110-60	S
Varel					
HR3G	135S	15½, 16, 17, 17½	1,250-5,500	300-50	CGMW
DT3	136S	8½, 11½	2,000-5,000	300-50	S
DT3G	137S	5¼, 6, 8¼, 8¾, 8½, 11½, 12, 12¼	2,000-5,000	300-50	CGMW
L131	131S	17½, 26	2,000-5,000	150-60	S
Insert roller cone bits					
Baker Hughes					
GTX-20	515	17½, 24	1,700-4,700	115-25	Cx
GTX-22	515	20, 21	1,700-4,700	115-25	Cx
MX-20	515	16, 16½	1,800-4,500	345-80	BMx
MX-22	515	19, 19.291	2,100-5,300	200-80	BMx
VG-20G	515	17½	1,800-4,700	115-60	BGMWx
VG-20H	515	17½	1,800-4,700	115-60	BGMWx
VG-22	515	22, 23	1,700-4,700	115-25	BGMWx
VM-20G	515	17½, 18½, 18½	2,100-4,500	345-80	BGMWx
GT-20H	517	12¼	2,500-6,000	185-80	Gx
GX-20	517	7¾, 8¾, 8¾, 9, 12¼	2,500-6,000	185-80	x
GX-20G	517	12¼	2,500-6,000	185-80	Gx
GX-20H	517	12¼	2,500-6,000	185-80	x
GX-20HM	517	12¼	2,500-6,000	185-80	Wx
GX-20M	517	7¾, 8¾, 8¾	2,500-6,000	185-80	Wx
GX-22	517	7¾, 8¾	2,500-6,000	185-80	x
GX-22S	517	8½	2,500-6,000	185-80	x
GX-23	517	7¾	2,500-6,000	185-80	x
GX-23S	517	8½	2,500-6,000	185-80	Mx
MX-20	517	6, 6¼, 8¾, 8¾, 9½, 12, 12¼, 12¼	2,400-6,200	350-80	BMx
MX-20G	517	6, 6¼, 8¾, 10½, 11½, 12¼	2,400-6,200	350-80	BGMx
MX-20H	517	5¼, 6, 8¾, 8¾, 9, 9½, 12¼	2,400-6,200	350-80	BMx
STX-20	517	4¼, 6, 6¾, 6¼, 6¾, 6¾	2,000-4,000	270-80	Mx
STX-20H	517	5½	2,000-4,000	270-80	Mx
VG-18	517	6¼	2,000-4,000	270-80	BGMWx
VG-20	517	6¼, 6¼, 10½	2,000-4,000	270-80	BGMWx
VG-20M	517	8¾	2,500-6,000	185-80	BGMWx
VG-22S	517	8¾	2,500-6,000	185-80	BGMWx
VG-20	517	4¼, 5, 6¼, 6¼, 7¾, 8¾, 8¾	2,000-4,000	270-80	BGMWx
VG-21S	517	8¾	2,500-6,000	185-80	BGMWx
VG-22S	517	8¾, 8¾	2,500-6,000	185-80	BGMWx
VG-22S	517	7¾, 8¾	2,500-6,000	185-80	BGMWx
VM-20	517	6¼, 6¼, 8¾, 9½, 12¼	2,400-6,200	350-80	BGMWx
VM-20G	517	10½	2,400-6,200	350-80	BGMWx
VM-20M	517	8¾	2,400-6,200	350-80	BGMWx
VMD-20G	517	8¾, 9½, 12¼	2,400-6,200	350-80	BGMWx
VMD-20G	517	9¾	2,400-6,200	350-80	BGMWx
VMD-22	517	8¾	2,400-6,200	350-80	BGMWx
VMG-20	517	8¾, 9½, 12¼	2,400-6,200	350-80	BGMWx
MX-28	525	14¾	1,800-4,700	310-80	BMx
VG-28G	525	17½	2,000-4,900	110-55	BCGWx
VG-28H	525	17½	2,000-4,900	110-55	BCGWx
VM-20C	525	17½	1,800-4,700	310-80	BCGMWY
VM-28	525	18½	2,100-5,400	175-80	BCGMWx
VM-28G	525	17	1,800-4,700	310-80	BCGMWx
GX-20C	527	7¾, 8¾, 8¾	2,500-6,300	170-80	Y
GX-20CH	527	12¼	2,500-6,300	170-80	Y
GX-25	527	7¾	2,500-6,300	170-80	x
GX-28	527	7¾, 8¾, 8¾, 9½, 12¼	2,500-6,300	170-80	x
GX-28C	527	7¾, 11, 12¼	2,500-6,300	170-80	Y
GX-28CM	527	12¼	2,500-6,300	170-80	WY
GX-28S	527	8¾	2,500-6,300	170-80	x
MX-28	527	8½, 8¾, 12¼	2,600-6,500	350-80	BMx
MX-28G	527	12¼	2,600-6,500	350-80	BMx
STX-28	527	6¼	2,000-4,700	250-80	Mx
VG-20A	527	6¼, 6¾	2,000-4,700	250-80	BGMWx
VG-28	527	12¼	2,500-6,300	170-80	BGMWx
VG-C28	527	12¼	2,500-6,300	170-80	BCGWx
VG-20C	527	8¾	2,500-6,300	170-80	BGMWY
VG-25	527	8¾	2,500-6,300	170-80	BGMWx
VG-26	527	8¾	2,500-6,300	170-80	BGMWx
VG-28	527	6¼, 8¾	2,000-4,700	250-80	BGMWx
VG-28G	527	12¼	2,500-6,300	170-80	BGMWx
VM-20C	527	6¼	2,600-6,000	350-80	BGMWY
VM-20CH	527	6¼	2,600-6,000	350-80	BGMWY
VM-28	527	12¼	2,600-6,500	350-80	BGMWx
VM-28C	527	8¾	2,600-6,500	350-80	BGMWY
VM-28CM	527	12¼	2,600-6,500	350-80	BGMWx
VMD-20C	527	5¼, 8¾	2,600-6,500	350-80	BGMWx
VMD-25	527	8¾	2		

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
VMD-30	537	5%, 6%, 8%, 8%, 9%, 12%	2,600-6,800	350-80	BGMWx
VMG-30	537	7%, 9%, 12%	2,600-6,800	350-80	BGMWx
GTX-33	545	20	1,900-5,300	95-20	Cx
GX-30C	547	7%, 8%, 8%	2,900-7,000	150-75	Y
GX-35	547	7%, 8%, 8%, 12%	2,900-7,000	150-75	x
GX-38C	547	7%, 8%	2,900-7,000	150-75	Y
GX-38CH	547	7%, 8%, 8%, 12%	2,900-7,000	150-75	Y
MX-35	547	5%, 6%	2,600-6,400	350-80	BMx
MX-35C	547	12	2,900-7,100	300-80	BMx
MX-35CG	547	8%, 8%	2,600-6,400	350-80	BGMx
MX-35M	547	5%	2,600-6,400	350-80	BMWx
MX-38C	547	9%	2,900-7,100	300-80	BMx
STX-30C	547	4%, 4%, 6, 6%	2,000-4,700	220-80	MY
STX-35	547	6, 6%, 6%	2,000-4,700	220-80	Mx
VG-25A	547	12%	2,900-7,000	150-75	ABGWx
VG-30A	547	7%, 8%, 8%, 8%, 10%, 11, 12%, 12%	2,900-7,000	150-75	ABGWx
VG-30C	547	8%, 10%	2,900-7,000	150-75	BGWY
VG-35	547	8%	2,900-7,000	150-75	BGWx
VG-35A	547	12%, 12%	2,900-7,000	150-75	ABGWx
VG-35C	547	8%, 12%	2,900-7,000	150-75	BGWY
VG-38	547	12%	2,900-7,000	150-75	BGWx
VG-38C	547	6%, 7%, 8%, 12%	2,900-7,000	150-75	BGWY
VG-38CH	547	7%, 8%, 8%, 12%	2,900-7,000	150-75	BGWY
VGD-30C	547	8%, 9%	2,900-7,000	150-75	BGWY
VGD-35	547	6%, 6%, 8%	2,000-4,700	220-80	BGWx
VGD-38C	547	6%, 7%, 8%, 8%	2,900-7,000	150-75	BGMWY
VGD-38CH	547	8%, 8%	2,900-7,000	150-75	BGMWY
VM-30C	547	6%	2,600-6,400	350-80	BGMWx
VM-35	547	8%	2,900-7,100	300-80	BGMWx
VM-35C	547	8%	2,900-7,100	300-80	BGMWY
VM-35CG	547	12%	2,900-7,100	300-80	BGMWY
VM-35G	547	6%	2,600-6,400	350-80	BGMWx
VMD-30C	547	8%, 8%	2,900-7,100	300-80	BGMWY
VMD-38C	547	8%	2,900-7,100	300-80	BGMWY
VMG-35CG	547	12%	2,900-7,100	300-80	BGMWY
Halliburton					
XT10/XT12/XT14	435	14%-28	3,000-7,000	40-220	GMW
Q12/QH12/QH10	437	4%-13%	3,000-7,000	40-220	GMW
XT14/XT16/QH14	445	12%-28	3,000-7,000	40-220	GMW
Q16/QH14/QH16/Q14	447	6-12%	3,000-7,000	40-220	GMW
Kingdream					
A537	537	8%, 12%	2,000-4,000	120-50	ACG
A547	547	12%	1,500-4,000	120-50	ACG
A547H	547	8%	1,500-4,000	120-50	ACG
GA515	515	13%, 14%, 16, 17%	1,500-4,500	200-80	CGL
GA525	525	17%	1,600-4,500	200-80	CGY
GA535	535	11%, 12%, 14%, 17%	2,000-4,500	200-80	CGY
GA545	545	12%, 14%, 17%	2,000-4,500	200-80	CGY
GAT515	515	8%, 13%, 14%, 17%	1,500-4,500	200-80	CGL
GAT525	525	14%	1,500-4,500	200-80	GYC
GAT535	535	12%, 13%, 13%, 14%, 16, 17%	2,000-4,500	200-80	CGL
GAT545	545	14%	2,000-4,500	200-80	GYC
GJ515	515	16, 17%	1,500-4,500	300-80	CGLY
GJ535	535	8%, 12, 1/2, 16, 17%	2,000-4,500	280-80	CGLx
GJ515	515	8%, 12, 16, 17%	1,500-4,500	300-80	CGLx
GJ535	535	8%, 16, 17%	2,000-4,500	280-80	CGLY
GJ535GH	535	16	2,000-4,500	280-80	G
GJ545	545	8%	2,000-4,500	280-80	CGLY
HA517	517	3%, 4%, 4%, 4%, 4%, 4%, 4%, 4%, 4%, 4%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 9%, 10%, 11, 12, 12%, 12%, 12%	2,000-6,000	120-50	GJx
HA517GJX	517	9%	2,000-6,000	120-50	CGLY
HA527	527	4%, 5%, 6, 6%, 6%, 6%, 7%, 8%, 8%, 8%, 8%, 9%, 11, 12%, 17%	2,000-6,000	120-50	CGLY
HA527GJ	527	7%, 8%	2,000-6,000	120-50	GJLY
HA537	537	3%, 3%, 4%, 4%, 4%, 4%, 5%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 9%, 10%, 11, 12, 12%, 12%	2,800-6,000	110-40	GLY
HA537GHL	537	8%	2,800-6,000	110-40	GL
HA537GX	537	9%, 12%	2,800-6,000	110-40	Gx
HA547	547	4%, 4%, 5%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%	2,800-6,000	110-40	CGLY
HA547GHL	547	8%	2,800-6,000	110-40	GLY
HA5517	517	6, 6%, 7%	2,000-6,000	120-50	CGL
HA5527	527	7%, 8%	2,000-6,000	120-50	GLY
HA5537	537	6, 6%, 6%, 7%, 8%, 8%	2,800-6,000	110-40	GLY
HAS-	537	7%	2,800-6,000	110-40	GLY
537GHL	537	7%	2,800-6,000	110-40	GLY
HAS47	547	6%, 6%, 7%, 8%	2,800-6,000	110-40	GLY
HAT517	517	4%, 4%, 4%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%, 12%	2,000-6,000	120-50	CGL
HAT527	527	5%, 6, 6%, 7%, 8%, 8%, 8%, 9%, 11, 12%	2,000-6,000	120-50	CGLY
HAT-	527	7%, 8%, 8%	2,000-6,000	120-50	GJLY
527GJY	527	7%	2,000-6,000	120-50	Gx
HAT527GX	527	12%	2,000-6,000	120-50	GLY
HAT537	537	4%, 4%, 4%, 4%, 4%, 5%, 5%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%	2,800-6,000	110-40	GLY
HAT547	547	4%, 5%, 5%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%	2,800-6,000	110-40	CGLY
HF517	517	8%	2,000-6,000	120-50	CGL
HF537	537	6%, 7%, 8%, 8%, 9%, 9%, 10%, 12%	2,800-6,000	110-40	GLY
HF545GH	545	12%	2,000-4,500	200-80	G
HF547	547	6%, 7%, 8%, 8%, 9%, 9%, 10%, 12%	2,000-6,000	110-40	GLY
HF547H	547	6%, 7%, 8%, 8%, 9%, 9%, 10%, 12%	2,800-6,000	110-40	GLY
HJ517	517	7%, 8%, 8%, 9%, 9%, 12%, 12%, 12%, 12%, 17%	2,000-6,000	240-50	CGKL
HJ517GX	517	9%, 12%	2,000-6,000	240-50	Gx
HJ527	527	8%, 17%	2,000-6,000	240-50	CGLY
HJ527GJL	527	8%	2,000-6,000	240-50	GJL
HJ537	537	8%, 8%, 9%, 9%, 12%, 12%, 12%, 12%	2,800-6,000	220-40	CGL
HJ547	547	8%, 12%	2,800-6,000	220-40	CG
HJ5517	517	12%	2,000-6,000	240-50	CGL
HJ5527	527	8%	2,000-6,000	240-50	GL
HJ5537	537	8%, 12%	2,800-6,000	220-40	GL
HJ5547GL	547	8%	2,800-6,000	220-40	GL
HJ5517	517	8%, 8%, 8%, 9%, 10%, 12%, 12%, 12%, 13%	2,000-6,000	240-50	CGL
HJT527	527	8%, 12%	2,000-6,000	240-50	G
HJT537	537	8%, 9%, 12%, 12%, 12%, 12%, 12%, 12%, 13%	2,800-6,000	220-40	GL
HJT537GH	537	8%, 8%, 12%	2,800-6,000	220-40	GL
HJT537GX	537	12%	2,800-6,000	220-40	Gx
HJT547	547	8%, 9%, 12%, 12%, 12%	2,800-6,000	220-40	GLY
HJT-	547	8%	2,800-6,000	220-40	GLY
547GHY	547	8%	2,800-6,000	220-40	GLY
MD517	517	5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 11, 12%	2,000-6,000	300-60	GL
MD517HX	517	6, 6%, 8%, 9%, 9%	2,000-6,000	300-60	GLM
MD527	527	5%, 6, 6%, 6%, 7%, 7%, 8%, 8%, 9%, 11, 12%	2,000-6,000	300-60	GLMx
MD537	537	5%, 6, 6%, 6%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%, 13%	2,000-6,000	300-60	GLDxY
MD537H	537	6, 6%, 6%, 7%, 8%, 8%, 8%, 9%, 9%, 10%, 11, 12%	2,000-6,000	300-60	GLMY
MD547	547	6, 6%, 6%, 7%, 8%, 8%, 9%, 12%	2,000-6,000	300-60	GL
SMD517	517	8%, 8%	2,000-6,000	300-60	GL
SMD537	537	8%, 8%, 8%	2,000-6,000	300-60	GL
SMD547	547	8%	2,000-6,000	400-60	GL
ReedHycal Bits					
EMS51A	515	16	2,000-3,500	450-60	CGMN
EMS1	515	14, 14%, 15%	2,000-3,500	450-60	CGMN
EMS53A	535	15%, 17%	2,000-3,500	450-60	CGMN
ETS53A	535	11%	2,000-3,500	450-60	CGMN
JA53	537	7%	2,000-6,000	90-50	AY
R19A	527	7%	2,000-5,000	200-60	xW
R20A	517	8%, 8%, 8%	2,000-5,000	200-60	xW
R21A	517	7%, 8%	2,000-5,000	200-60	xW
R22	517	11	2,000-5,000	200-60	YW
R22A	517	4%, 4%, 4%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 10%, 11, 12%	2,000-5,000	200-60	xW
R23A	517	8%	2,000-5,000	200-60	xW
R24	527	8%	2,000-5,500	180-50	YW
R24A	527	7%, 8%, 12%	2,000-5,500	180-50	xW
R25	527	8%	2,000-5,500	180-50	YW
R25A	527	7%, 8%, 8%, 9%	2,000-5,500	180-50	xW
R27	527	7%, 11	2,000-5,500	180-50	YW
R28A	527	7%, 8%	2,000-5,500	180-50	xW
R30	537	4%, 4%, 4%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 11, 12%	2,000-6,000	180-50	YW
R30A	537	3%, 4%, 4%, 4%, 4%, 4%, 5%, 5%, 5%, 5%, 6, 6%, 6%, 6%, 6%, 6%, 6%, 7%, 7%, 7%, 8%, 8%, 8%, 9%, 9%, 11, 12%	2,000-6,000	180-50	xW
R34	547	8%, 9%	2,000-6,000	180-50	YW
R34A	547	7%, 8%, 8%, 9%	2,000-6,000	180-50	xW
R35	537	7%	2,000-6,000	180-50	YW
R35A	547	7%	2,500-7,500	150-50	xW
R36	537	7%	2,000-6,000	180-50	YW
R37	547	7%, 8%	2,000-6,000	180-50	YW
RD21	517	7%, 8%, 8%, 9%, 9%	2,000-5,000	180-60	ZWMGH
RD21A	517	8%, 9%	2,000-5,000	180-60	ZWMGH
RD25	527	7%, 8%	2,000-5,000	180-60	ZWMGH
RD33	537	7%	2,000-6,000	90-50	ZWMGH
S54A	547	7%	2,000-6,000	180-50	YW
SL51	517	4%	2,000-5,000	200-60	x
SL53A	537	3%, 5%	2,000-6,000	180-50	x
T51	515	12%, 14%, 16, 17%	2,000-3,500	350-60	CGMNW
T52	525	16	2,000-5,000	350-50	CGMNW
T53	535	13%, 14%, 24	2,000-3,500	350-50	CGMNW
T53A	535	17%	2,000-3,500	350-50	CGMNW
T61	615	12%	2,000-3,500	350-50	CGMNW
TD52	527	7%	2,000-5,000	180-60	ZWMGH
Smith Bits					
20GM	515X	16	1,500-4,000	250-50	BGHMX
2JS	515X	17, 17%, 23, 26	1,000-4,000	140-70	X
G20					

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	
XR20D	517X	6%	2,000–5,000	300–50	HMWX	XR30	537X	4 1/8, 4 1/2, 4 3/4, 4 5/8	2,000–5,000	300–50	HMX	Varel	HR24V	515X	16, 17 1/2	1,500–4,750	300–50	CMW
XR20T	517X	5%, 6, 6 1/2, 6 3/4, 6 1/2	2,000–5,000	300–50	HMX	XR20T	517X	6	2,000–5,000	300–50	HMWX	ER24	515X	26, 27	1,500–4,750	150–50	CMW	
XR20W	517X	6	2,000–5,000	300–50	HMWX	XR20W	517X	6	2,000–5,000	300–50	HMWX	HR20V	515Y	17 1/2	1,500–4,750	300–50	CMW	
XR25T	517X	6%	2,000–5,000	300–50	HMX	XR30TD	537X	5 3/4, 6, 6 1/2	2,000–5,000	300–50	HMWX	CM24V	516X	3%	2,000–6,000	275–50		
XR120	517X	6, 6 1/2	2,000–5,000	300–50	HMX	XR30TD	537X	6	2,000–5,000	270–50	HMWX	HE20V	517X	7 1/2, 8 1/2, 9 1/2	2,000–6,000	300–50	MW	
XR520T	517X	5%	2,000–5,000	300–50	HMX	XR32T	537X	6%	2,000–5,000	300–50	HMX	HE21V	517Y	7 1/2, 8 1/2, 8 3/4	2,000–6,000	300–50	MW	
XR5120	517X	6, 6 1/2	2,000–5,000	300–50	HMX	XR130	537X	6 1/2, 6 3/4, 6 5/8	2,000–5,000	300–50	HMX	HE22V	517X	7 1/2, 8 1/2	2,000–6,000	300–50	MW	
F17Y	517Y	7%	2,000–6,000	160–50	Y	XR130D	537Y	6%	2,000–5,000	300–50	HMWX	HE23V	517Y	7 1/2, 8 1/2	2,000–6,000	300–50	MW	
F21YA	517Y	12%	2,000–6,000	160–50	Y	FH30YD	537Y	9 1/2	2,500–6,000	220–50	WY	CM24	517X	4 3/4, 4 1/2, 5 1/2, 5 3/4, 6, 6 1/2, 6 3/4, 6 1/2	2,000–6,000	275–50	MW	
F25Y	517Y	12%	2,000–6,000	160–50	Y	FH134Y	537Y	8 1/2	2,500–6,000	220–50	Y	CM24V	517X	6 3/4	2,000–6,000	275–50	MW	
FH120Y	517Y	7%	2,000–5,000	220–50	Y	FH134YD	537Y	8 1/2	2,500–6,000	220–50	WY	HE24	517X	11	2,000–6,000	300–50		
GF20Y	517Y	8 1/2	2,000–5,000	280–50	BGHMY	GF30Y	537Y	8 1/2, 9 1/2, 9 3/4	2,000–6,000	280–50	BGHMY	HE24V	517X	7 1/2, 7 3/4, 8 1/2, 8 3/4, 9 1/2, 11 1/2, 12, 12 1/4	2,000–6,000	300–50	CMW	
RF20Y	517Y	3 1/2, 3%	2,000–5,000	300–50	HMWX	SBS37DD	537Y	8 1/2	2,000–4,000	160–50	Y	CM25	517Y	6, 6 1/2, 6 3/4	2,000–6,000	275–50	MW	
XR20YDD	517Y	3 3/4	2,000–5,000	270–50	BGHMWX	XR130Y	537Y	6%	2,000–5,000	300–50	HMY	HE25	517Y	11	2,000–6,000	300–50		
XR5120Y	517Y	6%	2,000–5,000	300–50	BGHMY	XRK30TY	537Y	5%	2,000–5,000	300–50	BHMY	HE25V	517Y	12 1/4	2,000–6,000	300–50	MW	
G28B	525X	17 1/2	1,500–4,000	250–50	BGHMWX	FH35	547X	8 1/2, 8 3/4, 9 1/2	2,500–6,000	220–50	X	HE26V	527X	7 1/2	2,000–6,000	300–50	MW	
GS25	525X	14 1/2, 14%	1,000–4,000	250–50	BGHMX	FH135	547X	7 1/2, 8, 8 1/2	2,500–6,000	220–50	X	HE27V	527X	7 1/2	2,000–6,000	300–50	MW	
GS28B	525X	17 1/2	1,000–4,000	250–50	BGHMX	FHK35	547X	8 1/2	2,500–6,000	220–50	BX	CM28	527X	6, 6 1/2, 6 3/4	2,000–6,000	275–50	MW	
FH25	527X	7%	2,000–6,000	220–50	X	GF135B	547X	12%	2,000–6,000	280–50	BGHMWX	HE28V	527X	7 1/2, 8 1/2, 8 3/4	2,000–6,000	300–50	CMW	
FH28	527X	9%	2,000–6,000	220–50	X	SBS47	547X	8 1/2	2,000–4,000	160–50	X	HR28V	527X	14%	1,500–4,750	300–50	CMW	
FH125	527X	8 3/4	2,000–6,000	220–50	X	XR135	547X	6 1/2, 6 3/4	2,000–5,000	300–50	HMX	HE29	527Y	11	2,000–6,000	300–50	MW	
FH125D	527X	8 3/4	2,000–6,000	220–50	WX	F37	547Y	10%	3,000–7,000	160–50	Y	HE29V	527Y	8 1/2, 12 1/4	2,000–6,000	300–50	MW	
FH126	527X	7 1/2	2,000–6,000	220–50	X	F37D	547Y	7%	3,000–7,000	160–50	Y	HE29HV	527Y	7 1/2	2,000–6,000	300–50	MW	
FH128	527X	7 1/2, 8, 8 1/2, 8 3/4	2,000–6,000	220–50	WX	F37HY	547Y	8 1/2, 8 3/4, 9	3,000–7,000	160–50	Y	HE30V	537Y	8 1/2	2,000–6,500	300–50	MW	
FH128D	527X	8 1/2, 8 3/4	2,000–6,000	220–50	X	F37HYD	547Y	8 1/2	3,000–7,000	160–50	WY	HE31V	537Y	11	2,000–6,500	300–50	MW	
FH129	527X	8 3/4	2,000–6,000	220–50	WX	F37Y	547Y	8 1/2, 9 1/2, 11, 12 1/4	3,000–7,000	160–50	Y	HE31V	537Y	11	2,000–6,500	300–50	MW	
FH129D	527X	8 3/4	2,000–6,000	220–50	WX	F37YA	547Y	8 1/2, 9 1/2, 12 1/4	3,000–7,000	160–50	AY	HR34V	535X	14 1/2, 17, 17 1/2	2,250–5,250	300–50	CMW	
FHK128	527X	8 1/2	2,000–6,000	220–50	BX	F37YAD	547Y	12%	3,000–7,000	160–50	AWY	CM34	537X	4 1/2, 4 3/4, 4 1/2, 5 1/2, 5 3/4, 5 1/2, 6, 6 1/2, 6 1/2	2,000–6,500	275–50	MW	
FH28	527X	9 1/2	2,000–6,000	220–50	X	FH137HY	547Y	7 1/2, 8 1/2	3,000–7,000	220–50	Y	HR38V	545X	17 1/2	2,000–5,000	300–50	CMW	
GF26	527X	12%	2,000–5,000	280–50	BGHMX	FH137HYD	547Y	8 1/2	3,000–7,000	220–50	WY	HR35V	545Y	14%	2,000–5,000	300–50	CMW	
GF128	527X	8 1/2	2,000–5,000	280–50	BGHMX	FH138Y	547Y	7 1/2, 8 1/2	3,000–7,000	160–50	Y	AF35	547A	7%	2,500–6,000	300–50	AW	
GF128B	527X	12 1/4, 13%	2,000–5,000	280–50	BGHMWX	FH139HY	547Y	7 1/2, 8 1/2	3,000–7,000	160–50	Y	AF37	547A	11, 12 1/4	2,500–6,000	300–50	AW	
GF128D	527X	8 1/2	2,000–5,000	280–50	BGHMWX	F37	547Y	10%	2,000–6,000	280–50	BGHMY	CM35	547Y	4 3/4, 4 1/2, 6 1/2	2,500–7,000	275–50	MW	
GF26U	527X	12%	2,000–5,000	280–50	BGHMWX	GF135YB	547Y	12%	2,000–6,000	280–50	BGHMWY	CM38	547X	6 1/2, 6 3/4, 6 3/4	2,500–7,000	275–50	MW	
GF5128	527X	8 1/2	2,000–5,000	280–50	BGHMX	GF135YD	547Y	12%	2,000–6,000	280–50	BGHMWY	HE38V	547Y	7 1/2, 8 1/2	2,500–7,000	300–50	CMW	
SBS27	527X	12%	2,000–4,000	160–50	X	XR30TDY	547Y	6	2,000–5,000	300–50	HMWY	HE37V	547Y	7 1/2, 8 1/2, 8 3/4	2,500–7,000	300–50	CMW	
SBS27D	527X	12%	2,000–4,000	160–50	XW	XR30TY	547Y	5 1/2, 6, 6 1/2, 6 3/4	2,000–5,000	300–50	HMY	HE37	547Y	11	2,500–7,000	300–50	CMW	
XR128	527X	6%	2,000–5,000	300–50	HMX	XR30Y	547Y	3 1/2, 4 1/2, 5 1/2	2,000–5,000	300–50	HMY	HE39	547Y	7 1/2, 8 1/2, 12 1/4	2,500–7,000	300–50	CMW	
F25YA	527Y	12%	2,000–6,000	160–50	Y	XR30YD	547Y	6 1/2, 6 3/4	2,000–5,000	300–50	AHMY	HE39H	547Y	7 1/2	2,500–7,000	300–50	CMW	
F26Y	527Y	7%	2,000–6,000	160–50	Y	XR30YDD	547Y	6	2,000–5,000	270–50	HMY	Fish tail bits						
F271Y	527Y	7 1/2, 8 1/2	2,000–7,000	160–50	Y						Bit-Tech	DP-	M131	6 1/2	300–2,000	100–500	ADGMWV	
F27Y	527Y	8 1/2, 11	2,000–7,000	160–50	Y						440-BG							
F27YA	527Y	8 1/2	2,000–7,000	160–50	AY						Halliburton	FM3443/	M431	6 1/2, 6 3/4	500–2,000	60–400	MWV	
FH124Y	527Y	7%	2,000–7,000	220–50	Y						FM3443/							
GF25Y	527Y	8 1/2	2,000–5,000	280–50	BGHMY						FM3443/							
GF25HY	527Y	8 1/2	2,000–5,000	280–50	BGHMWX						FM3445/	M121	6 1/4	500–2,000	60–400	MWV		
XR20YA	527Y	6%	2,000–5,000	300–50	AHMY						FM3445/							
25JS	535X	20	1,000–4,000	140–70	X						FM3445/	M131	9 1/2, 12 1/4	500–2,000	60–400	MWV		
3JS	535X	17 1/2	1,000–4,000	140–70	X						FM3445/							
3JSY	535X	20	1,000–4,000	140–70	Y						FM3445/							
G30	535X	15 1/2	1,500–4,000	240–50	BGHMX						FM3445/							
G30B	535X	17 1/2	1,500–4,000	240–50	BGHMWX						FM3445/							
G30WD	535X	14 3/4	1,500–4,000	240–50	BGHMWX						FM3445/							
GS30	535X	34	1,000–4,000	240–50	BGHMX						FM3445/							
GS30B	535X	16, 18 1/2	1,500–4,000	240–50	BGHMWX						FM3445/							
SBS535	535X	15, 17 1/2, 20, 24, 26	2,000–4,000	160–50	X						FM3445/							
F3	537X	7 1/2, 8 1/2, 12 1/4	2,500–6,000	160–50	X						FM3445/							
F30	537X	10 1/2, 14%	2,500–6,000	160–50	X						FM3445/							
F30T	537X	8 1/2	2,500–6,000	160–50	X						FM3445/							
F30W	537X	8 1/2	2,500–6,000	160–50	X						FM3445/							
F3D	537X	7%	2,500–6,000	160–50	X						FM3445/							
FH30	537X	8 1/2, 8 3/4, 9 1/2	2,500–6,000	220–50	X						FM3445/							
FH30B	537X	8 1/2, 8 3/4	2,500–6,000	220–50	X						FM3445/							
FH30D	537X	8 1/2, 8 3/4	2,500–6,000	220–50	WX						FM3445/							
FH130	537X	7 1/2, 8 1/2	2,500–6,000	220–50	X						FM3445/							
FH130U	537X	7%	2,500–6,000	220–50	X						FM3445/							
FH130W	537X	8 1/2	2,500–6,000	220–50	X						FM3445/							
FH132	537X	8 1/2	2,500–6,000	220–50	X						FM3445/							
FH132D	537X	8 1/2	2,500–6,000	220–50	WX						FM3445/							
FH132U	537X	8 1/2	2,500–6,000	220–50	X						FM3445/							
FHK30	537X	8 1/2, 9 1/2	2,500–6,000	220–50	B													

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	
Halliburton																		
FX26/ FX55/ FX56/ FX63/ FX65/ FX65R/ FX76/ FX96/ MM55/ MM65/ MM65D/ MM65R	M222	6¼–17½	500–2,500	50–350	MWVRst	FX46s/ FX56s/ FX65s/ FX66Ds/ FX75Rs/ FX86s/ SF55/ SF56/ SF65/ SF75/ SF86	S222	8½–16	500–2,500	50–350	MWVRst	MDSI616	M222	6½, 6¾, 7¾, 8¾, 8½, 8¾, 8¾, 9½, 10¼, 10 5/8, 11½, 12¼, 14½, 14¾, 16, 17	500–4,000	60–400	GHM-NRstUmVW	
FX35/ FX45D/ FX45R/ FX55/ FX55D/ FX55R/ FX56/ FX56D/ FX56R/ FX65/ FX65D/ FX65R/ FX66/ FX66D/ FX75/ FX75R/ MM45/ MM45R/ MM55/ MM55D/ MM56/ MM65/ MM65D/ MM66/ MM66R	M223	7¼–17½	500–2,500	50–350	MWVRst	FX46s/ FX55Ds/ FX55Rs/ FX55s/ FX56Ds/ FX56Rs/ FX56s/ FX66s/ SF46/ SF55/ SF56/ SF56R/ SF65/ SF66/ SF75/ SF75D/ FX45Rs/ SF35	S223	8½–17½	500–2,500	50–350	MWVRst	HOX616	M223	8½, 8¾, 10%, 12¼	500–4,000	60–400	GHM-NumVW	
FX55/ FX56/ FX56R/ FX65/ FX75DR/ FX75R/ FX76/ FX85/ FX85D/ FX95R/ FX96/ FX96R/ MM45/ MM45R/ MM56/ MM56D/ MM65/ MM65D/ MM85/ MM96R	M224	7¼–18½	500–2,500	50–350	MWVRst	FX36s/ FX65s/ SF36/ SF55/ SF56/ SF65/ SF65D/ SF66/ SF76	S224	7¼–17½	500–2,500	50–350	MWVRst	HOXS616	M223	8¾	500–4,000	60–400	GHM-NumVW	
FX55/ FX56/ FX56R/ FX65/ FX75DR/ FX75R/ FX76/ FX85/ FX85D/ FX95R/ FX96/ FX96R/ MM45/ MM45R/ MM56/ MM56D/ MM65/ MM65D/ MM85/ MM96R	M225	14½–18½	500–2,500	50–350	MWVRst	FX75Rs/ FX75s/ SF54/ SF54D	S232	6–12¼	500–2,500	50–350	MWVRst	M516	M223	8½, 11%, 12¼	500–4,000	60–400	GHM-NRstUmVW	
FX54/ FX74/ MM54/ MM64	M232	7¼–9¾	500–2,500	50–350	MWVRst	SF54/ SF64	S233	8½–12¼	500–2,500	50–350	MWVRst	M519	M223	8½, 10%	400–3,000	60–400	GHM-NRstUmVW	
FX24/ FX34/ FX44/ FX64D/ FX74/ FX74R/ FX84/ FX94/ MM54/ MM74	M233	6½–16	500–2,500	50–350	MWVRst	SF63/ SF73/ SF53	S242	6–6¾	500–2,500	50–350	MWVRst	M616	M223	7¾, 8¾, 8¾, 9¼, 10%	500–4,000	60–400	GHM-NRstUmVW	
FX84/ FX84R/ MM64/ MM84	M234	8¾–12¼	500–2,500	50–350	MWVRst	Kingdream						MA616	M223	5½, 6, 8¾, 8½	500–4,000	60–400	GHM-NRstUmVW	
MM44D MM63 MM83	M235 M242	5¾ 8¾	500–2,500 500–2,500	50–350 50–350	MWVRst MWVRst	KM1355 M233 5½–17½ 857–2,685 60–300 SGADTR						MA619	M223	8½, 12¼, 18%	400–3,000	60–400	GHM-NRstUmVW	
FX53/ MM63	M243	8½–8¾	500–2,500	50–350	MWVRst	KM1642 M233 5½–17½ 857–2,685 60–300 SGADTR						MD519	M223	8½, 12¼	400–3,000	60–400	GHM-NRstUmVW	
						KM1652 M233 5½–17½ 857–2,685 60–300 SGADTR						MD616	M223	8¼, 8½, 9½, 12¼, 14%	500–4,000	60–400	GHM-NRstUmVW	
						KM1653 M323 5½–17½ 857–2,685 60–300 SGADTR						MDI516	M223	6, 6½, 6½, 6¾, 7¾, 8½, 8¾, 9¼, 12¼	500–4,000	60–400	GHM-NRstUmVW	
						KM1942 M223 5½–17½ 857–2,685 60–300 SGADTR						MDI519	M223	8½, 8¾, 9½, 12¼, 14, 14¾, 17	400–3,000	60–400	GHM-NRstUmVW	
						KM1944 M223 5½–17½ 857–2,685 60–300 SGADTR						MDI619	M223	7¾, 8½, 8¾, 12¼, 14½, 14¾, 16, 16½, 16½, 17½	400–3,000	60–400	GHM-NRstUmVW	
						KM1951 M223 5½–17½ 857–2,685 60–300 SGADTR						MDI716	M223	8½, 8½, 9½, 10%, 11½, 12, 12¼, 14¾, 14¾, 16, 16½, 17½	500–4,000	60–400	GHM-NRstUmVW	
						KS1642 S223 4½–17½ 857–2,685 60–300 SGADTR						MDSI619	M223	12¼, 14%	400–3,000	60–400	GHM-NRstUmVW	
						KS1652 S223 4½–17½ 857–2,685 60–300 SGADTR						MDSI716	M223	8¾, 8½, 8¾, 8¾, 8¾, 9½, 9½, 10¼, 10%, 12¼, 14¾, 16, 16½	500–4,000	60–400	GHM-NRstUmVW	
						KS1942 S223 4½–17½ 857–2,685 60–300 SGADTR						MI619	M223	7¾, 8¾, 12¼, 17	400–3,000	60–400	GHM-NRstUmVW	
						KS1944 S323 4½–17½ 857–2,685 60–300 SGADTR						MI716	M223	6, 7¾, 8½, 9¾, 12, 12¼	500–4,000	60–400	GHM-NRstUmVW	
						KS1951 S223 4½–17½ 857–2,685 60–300 SGADTR						MSI519	M223	7¾, 8½, 8¾, 9¾, 12¼	400–3,000	60–400	GHM-NRstUmVW	
						ReedHycalog Bits						M716	M323	6, 8 ½, 9 7/8, 11, 12, 14 ¾	500–4,000	60–400	GHM-NRstUmVW	
						ST1013 S132 5¾, 12¼ 3,000–3,500 80–200 GHMWUm						MDI616	M323	6, 6¾, 7¾, 8¾, 8½, 8¾, 9½, 9½, 10½, 10%, 11½, 12¼, 13½, 14½, 14¾, 16, 17, 17½	500–4,000	60–400	GHM-NRstUmVW	
						Smith Bits						MSI816	M432	8¾, 8½, 8¾, 9¾, 9¾, 12¼, 13½, 16, 17, 17½	500–4,000	60–400	GHM-NRstUmVW	
						M416 M121 4¾, 4¾, 8½ 500–4,000 60–400 GHM-NRstUmVW						MSI616	M433	6, 6½, 6¾, 7¾, 8½, 8¾, 9¾, 9¾, 10%, 11, 12¼, 13½, 13½, 16	500–4,000	60–400	GHM-NRstUmVW	
						M419 M121 8¾, 8½ 400–3,000 60–400 GHM-NRstUmVW						MSI716	M433	7¾, 7¾, 8½, 8¾, 9¾, 12, 12¼, 16, 17½	500–4,000	60–400	GHM-NRstUmVW	
						MDI419 M121 8½, 8¾, 9, 9½, 11%, 12¼ 400–3,000 60–400 GHM-NRstUmVW						S522	S121	12¼	400–3,000	60–400	GHM-NRstUmVW	
						MI419 M121 8½ 400–3,000 60–400 GHM-NRstUmVW						S519	S123	8½, 9½, 10%, 12¼, 13½, 13¾, 14¾, 17, 17½	400–3,000	60–400	GHM-NRstUmVW	
						MDI416 M123 6¾, 8¾, 12¼ 500–4,000 60–400 GHM-NRstUmVW						SDI519	S123	8½, 8¾, 12¼, 16, 17½, 18½	400–3,000	60–400	GHM-NRstUmVW	
						MDSI416 M123 8½, 9¾, 12¼ 500–4,000 60–400 GHM-NRstUmVW						SI519	S123	8½, 12¼, 15½	400–3,000	60–400	GHM-NRstUmVW	
						MDSI519 M123 8½, 8¾, 9½, 12¼ 400–3,000 60–400 GHM-NRstUmVW						S616	S223	16, 17½	500–4,000	60–400	GHM-NRstUmVW	
						MI316 M123 8½ 500–4,000 60–400 GHM-NRstUmVW						S619	S223	8½, 12¼, 17	400–3,000	60–400	GHM-NRstUmVW	
						MI416 M123 6¾, 7¾, 8½ 500–4,000 60–400 GHM-NRstUmVW						SDI616	S223	8½, 8¾, 11%, 12¼, 13½, 17½	500–4,000	60–400	GHM-NRstUmVW	
						MI516 M123 5¾, 6, 6½, 6¾, 7¾, 7¾, 8½, 8¾, 12¼ 500–4,000 60–400 GHM-NRstUmVW						SI619	S223	12¼, 13½, 17½, 26	400–3,000	60–400	GHM-NRstUmVW	
						MI519 M123 7¾, 8½, 8¾, 9¾, 12¼ 400–3,000 60–400 GHM-NRstUmVW						SDSI519	S423	12¼, 17½	400–3,000	60–400	GHM-NRstUmVW	
						MSI416 M221 6¾, 6¾, 7¾, 8½, 8¾ 500–4,000 60–400 GHM-NRstUmVW						HOX619	8½	400–3,000	60–400	GHM-NRstUmVW		
												M619	12¼	400–3,000	60–400	GHM-NRstUmVW		

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	
M816		8%	500-4,000	60-400	GHM-NRstUmVW	MS516		8½	500-4,000	60-400	GHM-NRstUmVW	SI616		7%, 8½, 8¾, 11, 12¼, 13½, 16	500-4,000	60-400	GHM-NRstUmVW	
M819		9¼	400-3,000	60-400	GHM-NRstUIVW	MS519		16½	400-3,000	60-400	GHM-NRstUIVW	SI719		16	400-3,000	60-400	GHM-NRstUIVW	
MA816		8½	500-4,000	60-400	GHM-NRstUmVW	MS616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	SI816		26	500-4,000	60-400	GHM-NRstUmVW	
MA819		8½	400-3,000	60-400	GHM-NRstUIVW	MS716		17¼	500-4,000	60-400	GHM-NRstUmVW	SI819		18½, 23	400-3,000	60-400	GHM-NRstUIVW	
MA89		8%	500-4,000	60-400	GHM-NRstUmVW	MS816		8%	500-4,000	60-400	GHM-NRstUmVW	SI916		12¼	500-4,000	60-400	GHM-NRstUmVW	
MA916		8¾	500-4,000	60-400	GHM-NRstUmVW	MSD616		12¼	500-4,000	60-400	GHM-NRstUmVW	SI919		22	400-3,000	60-400	GHM-NRstUIVW	
MAI616		5%	500-4,000	60-400	GHM-NRstUmVW	MSI316		8 ½	500-4,000	60-400	GHM-NRstUmVW	SIZ616		8½	500-4,000	60-400	GHM-NRstUmVW	
MASI716		7%, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSI616L		8½	500-4,000	60-400	GHM-NRstUmVW	SSI516		12¼	500-4,000	60-400	GHM-NRstUmVW	
MAX89		8%	500-4,000	60-400	GHM-NRstUmVW	MSI619		8%, 8¾, 12¼	400-3,000	60-400	GHM-NRstUIVW	SSI616		12¼, 17½	500-4,000	60-400	GHM-NRstUmVW	
MAZ616		8½	500-4,000	60-400	GHM-NRstUmVW	MSI719		8¾, 12¼	400-3,000	60-400	GHM-NRstUIVW	SSI619		20, 23	400-3,000	60-400	GHM-NRstUIVW	
MAZ89		8%	500-4,000	60-400	GHM-NRstUmVW	MSI916		16	500-4,000	60-400	GHM-NRstUmVW	SSI819		20	400-3,000	60-400	GHM-NRstUIVW	
MD619		12¼	400-3,000	60-400	GHM-NRstUIVW	MSI616		9%	500-4,000	60-400	GHM-NRstUmVW	SSI916		22	500-4,000	60-400	GHM-NRstUmVW	
MD716		12	500-4,000	60-400	GHM-NRstUmVW	MSIZ516		8½	500-4,000	60-400	GHM-NRstUmVW	SSIZ516		12¼	500-4,000	60-400	GHM-NRstUmVW	
MDA619		12¼	400-3,000	60-400	GHM-NRstUIVW	MSIZ519		8½, 8¾	400-3,000	60-400	GHM-NRstUmVW	SXI616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	
MDCI516		8½	500-4,000	60-400	GHM-NRstUmVW	MSIZ616		8½, 8¾, 9½, 12¼	500-4,000	60-400	GHM-NRstUmVW	SXI619		12¼	400-3,000	60-400	GHM-NRstUmVW	
MDCRI716		10%	500-4,000	60-400	GHM-NRstUmVW	MSIZ619		8%	400-3,000	60-400	GHM-NRstUIVW	VIS416		8½	500-4,000	60-400	GHM-NRstUmVW	
MDI319		8½	400-3,000	60-400	GHM-NRstUIVW	MSIZ716		8½	500-4,000	60-400	GHM-NRstUmVW	VIS419		8½, 12¼	400-3,000	60-400	GHM-NRstUIVW	
MDI719		10%	400-3,000	60-400	GHM-NRstUmVW	MSIZ816		16	500-4,000	60-400	GHM-NRstUmVW	VIS516		8½	500-4,000	60-400	GHM-NRstUmVW	
MDI916		17½	500-4,000	60-400	GHM-NRstUmVW	MSXI616		8½	500-4,000	60-400	GHM-NRstUmVW	VIS519		12¼	400-3,000	60-400	GHM-NRstUIVW	
MDIZ516		7%, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSXI716		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	VM516		8¾	500-4,000	60-400	GHM-NRstUmVW	
MDIZ519		8½, 12¼	400-3,000	60-400	GHM-NRstUIVW	MSZ616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	VS419		11%, 11½, 12	400-3,000	60-400	GHM-NRstUIVW	
MDIZ616		7%, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSZ716		12	500-4,000	60-400	GHM-NRstUmVW	VS516		11%, 11½, 12	500-4,000	60-400	GHM-NRstUmVW	
MDIZ619		12¼	400-3,000	60-400	GHM-NRstUIVW	MV616		6¼	500-4,000	60-400	DGHM-NRstUmVW	Z519		12¼	400-3,000	60-400	GHM-NRstUIVW	
MDIZ716		8½	500-4,000	60-400	GHM-NRstUmVW	MXI616		8½	500-4,000	60-400	GHM-NRstUmVW							
MDS516		12¼	500-4,000	60-400	GHM-NRstUmVW	MZ716		12	500-4,000	60-400	GHM-NRstUmVW							
MDS616		9½, 14¾	500-4,000	60-400	GHM-NRstUmVW	S719		12¼	400-3,000	60-400	GHM-NRstUIVW							
MDS716		8½, 12¼, 16	500-4,000	60-400	GHM-NRstUmVW	SD419		16½	400-3,000	60-400	GHM-NRstUIVW	MP316		M222 8½	500-3,000	50-400	UM G H M RST W V	
MDS816		12¼	500-4,000	60-400	GHM-NRstUmVW	SD516		11%	500-4,000	60-400	GHM-NRstUmVW	MP316C		M222 8½	500-3,000	50-400	UM G H M RST W V	
MDSI419		8½, 12¼	400-3,000	60-400	GHM-NRstUIVW	SD519		16	400-3,000	60-400	GHM-NRstUIVW	MP316M		M222 8½	500-3,000	50-400	UM G H M RST W V	
MDSI516		6, 6¼, 6¾, 7%, 8½, 8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	SDI416		7%	500-4,000	60-400	GHM-NRstUmVW	MP316MC		M222 8½	500-3,000	50-400	UM G H M RST W V	
MDSI816		8%, 8½, 12¼, 17½, 18%, 18¾	500-4,000	60-400	GHM-NRstUmVW	SDI419		11%, 12¼, 17½	400-3,000	60-400	GHM-NRstUIVW	MP416		M222 5½, 8½	500-3,000	50-400	UM G H M RST W V	
MDSI819		14¾, 18½	400-3,000	60-400	GHM-NRstUIVW	SDI516		7%, 8½, 8¾, 8¾, 8¾, 9%, 11%	500-4,000	60-400	GHM-NRstUmVW	MP416C		M222 5½, 8½	500-3,000	50-400	UM G H M RST W V	
MDSI916		8¾	500-4,000	60-400	GHM-NRstUmVW	SDI619		12¼, 14¾, 16, 17½	400-3,000	60-400	GHM-NRstUIVW	MP416M		M222 5½, 8½	500-3,000	50-400	UM G H M RST W V	
MDSIR516		6¾	500-4,000	60-400	GHM-NRstUmVW	SDI716		8½	500-4,000	60-400	GHM-NRstUmVW	MP416MC		M222 5½, 8½	500-3,000	50-400	UM G H M RST W V	
MDSIZ516		8¾	500-4,000	60-400	GHM-NRstUmVW	SDI816		17½, 26	500-4,000	60-400	GHM-NRstUmVW	MP513		M232 6, 6¼, 7%, 8%, 8½, 8¾, 8¾	500-2,500	50-400	UM G H M RST W V	
MDSIZ519		8¾	400-3,000	60-400	GHM-NRstUIVW	SDIZ419		12¼	400-3,000	60-400	GHM-NRstUIVW	MP513C		M232 6, 6¼, 7%, 8%, 8½, 8¾, 8¾	500-2,500	50-400	UM G H M RST W V	
MDSIZ616		8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	SDIZ516		8½	500-4,000	60-400	GHM-NRstUmVW	MP513M		M232 6, 6¼, 7%, 8%, 8½, 8¾, 8¾	500-2,500	50-400	UM G H M RST W V	
MDSIZ716		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	SDIZ519		14¾	400-3,000	60-400	GHM-NRstUIVW	MP513MC		M232 6, 6¼, 7%, 8%, 8½, 8¾, 8¾	500-2,500	50-400	UM G H M RST W V	
MDSIZ816		12¼	500-4,000	60-400	GHM-NRstUmVW	SDSI516		11%	500-4,000	60-400	GHM-NRstUmVW	MP516		M323 7½, 8½, 8¾, 9%	500-2,500	50-400	UM G H M RST W V	
MDSXI616		12¼	500-4,000	60-400	GHM-NRstUmVW	SDSI616		8½, 11%, 12¼, 13½	500-4,000	60-400	GHM-NRstUmVW	MP516C		M222 15½	500-3,000	50-400	UM G H M RST W V	
MDX516		8½	500-4,000	60-400	GHM-NRstUmVW	SDSI619		12¼	400-3,000	60-400	GHM-NRstUIVW	MP516M		M323 7½, 8½, 8¾, 9%	500-2,500	50-400	UM G H M RST W V	
MGR819		16	400-3,000	60-400	GHM-NRstUIVW	SDSI716		17½	500-4,000	60-400	GHM-NRstUmVW	MP516C		M222 15½	500-3000	50-400	UM G H M RST W V	
MI622		12¼	400-3,000	60-400	GHM-NRstUIVW	SDSI816		17, 17½	500-4,000	60-400	GHM-NRstUmVW	MP516M		M323 7½, 8½, 8¾, 9%	500-2,500	50-400	UM G H M RST W V	
MI916		16	500-4,000	60-400	GHM-NRstUmVW	SDXI516		8½	400-3,000	60-400	GHM-NRstUIVW	MP516M		M222 15½	500-3,000	50-400	UM G H M RST W V	
MIZ516		8¾	500-4,000	60-400	GHM-NRstUmVW	SDXI519		8½	400-3,000	60-400	GHM-NRstUIVW	MP516MC		M323 7½, 8½, 8¾, 9%	500-2,500	50-400	UM G H M RST W V	
MIZ616		8½, 8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	SHOSI519		17	400-3,000	60-400	GHM-NRstUIVW	MP516MC		M222 15 ½	500-3000	50-400	UM G H M RST W V	
MIZ716		8½	500-4,000	60-400	GHM-NRstUmVW	SI416		8½	500-4,000	60-400	GHM-NRstUmVW	MP519		M223 6¾, 8½, 8¾, 12¼	500-2,500	50-400	UM G H M RST W V	
MRS681		8%	500-4,000	60-400	GHM-NRstUmVW	SI419		8½	400-3,000	60-400	GHM-NRstUIVW	MP519C		M223 6¾, 8½, 8¾, 12¼	500-2,500	50-400	UM G H M RST W V	
MS419		8½, 8¾	400-3,000	60-400	GHM-NRstUIVW	SI516		6¼, 12¼	500-4,000	60-400	GHM-NRstUmVW	MP519M		M223 6¾, 8½, 8¾, 12¼	500-2,500	50-400	UM G H M RST W V	

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
VH819	S323	14½x17¼, 17x19, 21x22	500–2,500	100–400	BGDH-NOUXX
PDC coring bits					
Bit-Tech					
CP-440-BU	M232	7½, 8½, 8¾	300–2,000	50–500	AFGMWV
CP-440-BU	M342	6, 6½	300–2,000	50–500	AFGMWV
Halliburton					
CD93	M233	6–12¼	250–3,500	80–140	F
FC3643	M343	8½–12¼	250–3,500	50–150	F
FC3643	M343	8½–12¼	250–2,000	50–150	F
FC3647	M343	8½–12¼	250–3,500	50–150	F
FC3737	M343	8½	250–2,000	50–150	F
FC3743	M233	7½–12¼	250–3,500	50–150	F
FC3747	M432	8½	250–2,000	50–150	F
FC3843	M233	7½–12¼	250–3,500	50–150	F
FC3847	M432	8½	250–2,000	50–150	F
FC3937	M432	8½	250–2,000	50–150	F
ReedHycalog Bits					
CCP711	S132, S232, S332	5½, 6¼, 6½, 6¾, 8	300–2,000	50–150	GUI
CCP713	S133, S232, S332	6¼, 6½, 6¾, 7, 7½, 8¾	300–2,000	50–150	GUI
CCP813	S332	8½, 9	300–2,000	50–150	GUI
CDP713	S232, S333	5½, 8¾	300–2,000	50–150	GUI
CEP616	S223, S322, S323	7½, 8½, 8¾, 8½	300–2,000	50–150	GUI
CEP713	S232, S332, S333, S433	7½, 8½, 8¾, 8½, 8¾, 8¾	300–2,000	50–150	GUI
CVP713	S133, S232	6½, 6¾	300–2,000	50–150	GUI
IEP616	3	3	300–2,000	50–150	GUI
IEP713	3, 3½	3, 3½	300–2,000	50–150	GUI
IVP713	3	3	300–2,000	50–150	GUI
Tercel					
CMP611	M232	6¼, 6¾	500–2,500	50–400	
CMP613	M232	8½, 8¾	500–2,500	50–400	
CMP611	M331	6¾	500–2,500	50–400	
CMP811	M331	8¾	500–2,500	50–400	
Varel					
CB613	M232	7½, 8½	1,000–3,000	50–400	G
Surface set diamond coring bits					
Bit-Tech					
CG-300	M623	6, 6¼, 6¾, 7¾, 8¾, 7¾, 8¾	400–2,500	50–500	AGIKM
CN-332	M713	6¼, 6¾, 6¾, 7¾, 8¾	400–2,500	60–120	AGMR
CN-402	M712	6, 6¼, 6¾, 7¾, 8¾	400–2,500	50–500	AGKM
Halliburton					
CT103	M613	6–12¼	250–3,500	80–140	I
CT103UF	M423	8½–12¼	250–3,500	80–140	FI
Surface set diamond bits					
Bit-Tech					
DN-302	M713	4½–4¾, 5½–6½	300–3,500	Variable	Custom
DN-332	M713	4½–4¾, 5½–6½	300–3,500	Variable	Custom
DN-422	M712	1¾, 1¾, 2¼, 2¼, 2½, 2¾, 3¾, 4¾, 4¾, 6, 6¾, 6¾, 6¾, 6¾	300–3,500	60–600	ADGHMNR
Medium					
Steel tooth roller cone bits					
Baker Hughes					
RC211	211	11½	2,500–6,300	170–80	S
RC215	215	9¾	2,000–6,300	170–80	S
RC216	216	4¾, 5½, 5½, 5½, 6, 6¼, 8½	2,000–4,700	250–80	S
RC217	217	9¾, 9¾, 12	2,500–6,300	170–80	S
Halliburton					
XT5	315	14¾	2,000–6,000	40–250	GMW
Q7/OH7	337	9¾–12¼	2,000–6,000	40–250	GMW
Kingdream					
HA317G	317	5¾, 8¾, 8¾	2,500–7,000	80–50	G
HA337G	337	8½, 9¾, 12¼	4,000–7,000	70–40	CG
Smith Bits					
SB315	315	8½	2,000–4,000	160–50	S
SB316	316	6	2,000–4,000	160–50	S
SB326	326	8½	2,000–4,000	160–50	S
FLH	327	8½	2,000–5,000	160–50	S
Tercel					
G31F	316	6, 6¼, 7¾, 8¾, 8¾, 8¾, 9¾, 12¼	4,000–9,000	45–70	
G31FH	317	6, 6¼, 7¾, 8¾, 8¾, 8¾, 9¾, 12¼	4,000–9,000	45–70	GW
Manufacturer, Bit name/model number					
IADC code					
Size range, in.					
Recommended WOB, lb/in. diameter					
Recommended rotary speed, rpm					
Special features/usage					
G31S	314	6, 6¼, 6¾, 7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	45–75	S
G31SH	315	6, 6¼, 6¾, 7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	45–75	SG
G32F	326	6, 6¼, 7¾, 8¾, 8½, 8¾, 9¾, 12¼	4,000–9,000	45–70	
G32FH	327	6, 6¼, 7¾, 8¾, 8½, 8¾, 9¾, 12¼	4,000–9,000	45–70	GW
G32S	324	6, 6¼, 6¾, 7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	45–75	S
G32SH	325	6, 6¼, 6¾, 7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	45–75	SG
P31SH	315	7¾, 8½, 8¾, 9¾, 10¾, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	60–160	CGW
P31FH	317	8½, 8¾, 9¾, 12¼	4,000–9,000	60–160	GW
P32SH	325	7¾, 8½, 8¾, 9¾, 10¾, 12¼, 13¾, 13¾, 14¾, 16, 17, 17½	4,000–9,000	60–160	CGW
P32FH	327	8½, 8¾, 9¾, 10¾, 12¼	4,000–9,000	60–160	GW
M31SH	315	13¾, 13¾, 14¾, 16, 17, 17½	3,000–7,000	80–300	WCGB
M31FH	317	8½, 8¾, 9¾, 12¼	3,000–7,000	80–300	WGB
M32SH	325	13¾, 13¾, 14¾, 16, 17, 17½	3,000–7,000	80–300	WCGB
M32FH	327	8½, 8¾, 9¾, 10¾, 12¼	3,000–7,000	80–300	WGB
TIX-TSK					
MS	211	5½, 5½, 6, 6¾, 6¾, 7¾, 7¾, 7¾	2,000–4,000	120–60	S
MS	211	8¾, 8¾, 8¾, 8¾, 9¾, 9¾, 10¾, 11, 11½, 12, 12¼	2,000–5,000	120–60	S
MS	211	13¾, 13¾, 14¾, 15, 15½, 17½, 20, 22, 23, 24, 26	2,000–4,000	120–60	S
MS-TMZ	215	16, 17½	2,000–4,000	250–60	GMW
MS-TX	217	5½, 6, 6¼, 7¾	2,000–4,000	110–50	S
MS-TX	217	8¾, 9¾, 11½, 12¼	2,000–5,000	110–50	S
MS-TZ	215	8¾, 8¾, 9¾, 11½, 12¼	2,500–5,000	100–60	S
MS-X	216	5½, 5½, 6, 6¾, 6¾, 7¾, 7¾	2,000–4,000	110–50	S
MS-X	216	8¾, 8¾, 8¾, 8¾, 9¾, 9¾, 11½, 12, 12¼	2,000–5,000	110–50	S
MS-X	216	16, 17½	2,000–4,000	110–50	S
MS-XZ	214	8½, 12¼	2,000–5,000	250–60	GMW
MS-XZ	214	16, 17½	2,000–4,000	150–60	W
MS-Z	214	8¾, 8¾, 8¾, 9¾, 9¾, 10¾, 11½, 12, 12¼	2,000–5,000	100–60	S
MS-Z	214	16, 17½, 20, 22, 23, 24, 26	2,000–4,000	100–50	S
Insert roller cone bits					
Baker Hughes					
GX-44	617	8½, 8¾, 12¼	2,900–7,300	140–70	X
GX-44G	617	8½, 8¾, 8¾, 11½, 12¼	2,900–7,300	140–70	GX
MX-40	617	6	2,600–6,800	325–80	BMX
MX-44	617	8½	2,900–7,400	250–80	BMX
MX-44G	617	8½, 12¼	2,900–7,400	250–80	BGMX
STX-40	617	5½, 6, 6¼, 6¼, 6¾, 6¾	2,000–5,300	205–80	MX
VG-44G	617	12¼	2,900–7,300	140–70	BGWX
VGD-40	617	6¼, 6¼	2,000–5,300	205–80	BGMWX
VGD-40H	617	5½	2,000–5,300	205–80	BGMWX
VGD-44	617	7¾	2,900–7,300	140–70	BGMWX
VGD-44G	617	8¾	2,900–7,300	140–70	BGMWX
VM-44G	617	12¼	2,900–7,300	140–70	BGMWX
VXG-44C	622	8¾, 10¾, 12¼	3,200–7,600	130–65	BGMWY
MX-44C	625	14¾	2,000–5,300	155–75	BMY
VG-44C	625	17½	2,200–5,900	80–40	BGWY
VM-40C	625	16	2,000–5,300	155–75	BGMWY
VM-44C	625	17½	2,000–5,300	155–75	BGMWY
GX-44C	627	7¾, 8¾, 8¾, 8¾, 9¾, 12¼	3,200–7,600	130–65	Y
GX-45C	627	7¾, 8¾	3,200–7,600	130–65	Y
MX-40C	627	6½, 6¾	2,600–6,800	260–80	BMY
MX-40C	627	8¾, 8¾, 12	2,900–7,400	200–80	BGMWY
MX-44C	627	5½, 7½	2,600–6,800	260–80	BMY
Manufacturer, Bit name/model number					
IADC code					
Size range, in.					
Recommended WOB, lb/in. diameter					
Recommended rotary speed, rpm					
Special features/usage					
STX-40C	627	6	2,000–5,300	190–80	MY
STX-44C	627	4¾, 4¾, 6¼, 6¼, 6½	2,000–5,300	190–80	MY
VG-38A	627	8½	3,200–7,600	130–65	ABGWX
VG-40A	627	8¾, 8¾, 9¾, 12¼, 12¾	3,200–7,600	130–65	ABGWX
VG-40C	627	6¼	2,000–5,300	190–80	BGWY
VG-44C	627	6¼, 7¾, 8, 6.689, 8¾, 9¾, 12¼	3,200–7,600	130–65	BGWY
VG-45C	627	7¾, 8¾	3,200–7,600	130–65	BGWY
VGD-44	627	8½	3,200–7,600	130–65	BGMWX
VGD-44C	627	7¾, 8½, 12¼	3,200–7,600	130–65	BGMWY
VM-40C	627	10¾	2,900–7,400	200–80	BGMWY
VM-40CG	627	10¾	2,900–7,400	200–80	BGMWY
VM-44C	627	6¼, 8½, 8¾, 12¼	2,900–7,400	200–80	BGMWY
VMD-44C	627	6¼, 8½	2,600–6,800	260–80	BGMWY
VMG-40CG	627	10¾	2,900–7,400	200–80	BGMWY
VMG-44C	627	8½, 12¼	2,900–7,400	200–80	BGMWY
Halliburton					
XT20/XT22/XT19	515	14½–26	3,000–7,000	40–220	GMW
Q20/Q23/QH20/QH21/QH18/QH23	517	4¾–12¼	3,000–7,000	40–220	GMW
XT26	525	14¾–17½	3,000–7,000	40–220	GMW
QH25/Q23/Q24/Q26/Q28/QH24/QH26/Q25/QH23/QH28/Q27/QH27	527	6¼–12¼	3,000–7,000	40–220	GMW
XT28/XT30/XT32	535	14¾–28	4,000–7,000	40–220	GMW
QH31/QH33/Q28/Q30/QH29/QH30	537	4¾–12¼	4,000–7,000	40–220	GMW
QH37/QH38/QH39/Q34/Q37/QH35/Q38/Q39/QH36/QH34/Q36	547	6¼–12¼	4,000–7,000	40–220	GMW
Kingdream					
A617	617	12¼	3,000–6,500	220–40	CGLY
A627	627	6, 6¼, 12¼	3,000–6,000	80–40	CGY
A627H	627	5½, 6, 6¾	3,000–6,000	200–40	CG
GA615G	615	11¾, 12¼, 17½	2,000–4,500	220–50	CL
GA625G	625	17½	2,000–5,000	200–80	CGLY
GAT615G	615	13¾, 13¾, 14¾, 16, 17½	2,000–4,500	220–50	CG
GAT625G	625	16, 17½	2,000–4,500	220–50	CY
GAT615GH	615	17½	2,000–4,500	220–50	S
GJ615GC	615	11¾, 12, ¼, 16, 17½	2,000–4,500	300–80	C
GJ615GH	615	12¼	2,000–4,500	300–80	C
GJT615GH	615	12¼, 16, 17½	2,000–4,500	300–80	GC
HA617G	617	4¾, 4¾, 4¾, 5½, 5½, 6, 6¼, 6¾, 6¾, 7¾, 7¾, 8¾, 8¾, 8¾, 9¾, 9¾, 12¼	3,000–6,000	80–40	CLY
HA627G	627	5½, 6¾, 7¾, 8¾, 8¾, 8¾, 9¾, 12¼	3,000–6,000	80–40	CLY
HA627GH	627	8½	3,000–6,000	80–40	G
HAS617G	617	6¼, 6¼, 7¾, 8¾, 8¾	3,000–6,000	80–40	GLY
HAS-627GLY	627	6¼, 7¾, 8¾, 8¾	3,000–6,000		

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	
HF625H	625	12%	2,000-5,000	200-80	GL	XRI50	627X	6%	2,000-6,000	270-40	HMX	M316+	M123	7%	400-2,500	60-400	GHMIRSTUm	
HF627	627	7%, 8½, 8¾, 9½, 10%, 12¼	3,000-6,000	80-40	GLY	F47	627Y	4½, 10%	3,000-7,000	160-50	Y	M513	M233	5½, 6%	400-2,500	60-400	GHMIRSTUm	
HF627GH	627	6, 6½, 6¾, 7½, 8½, 8¾, 12¼	3,000-6,000	80-40	G	F47H	627Y	8½, 11%, 12¼	3,000-7,000	160-50	Y	M519	M223	9%	500-2,000	60-400	GHMIRSTUm	
HF627HM	627	8½, 9½	3,000-6,000	200-40	G	F47HUY	627Y	8½	3,000-7,000	160-50	Y	M590	M242	3%	400-2,500	60-400	GHMIRSTUm	
HJ617	617	8½, 8¾, 9½, 12¼	3,000-6,000	220-40	CG	F47HY	627Y	7½, 8½, 8¾, 9½, 11%	3,000-7,000	160-50	Y	M616	M223	9%	500-2,000	60-400	GHMIRSTUm	
HJ617GH	617	8½	3,000-6,000	220-40	G	F47HYA	627Y	8¾, 12¼	3,000-7,000	160-50	AY	M719	M323	16	500-2,000	60-400	GHMIRSTUm	
HJ627	627	8½, 12, 12¼	3,000-6,000	200-40	CGLY	F47HYD	627Y	9%	3,000-7,000	160-50	WY	M719	M223	17½	500-2,500	60-400	GHMIRSTUm	
HJT617G	617	8½, 9½, 12¼, 12½	3,000-6,000	220-40	LY	FH47HY	627Y	8¾	3,000-7,000	160-50	Y	M719	M223	8¼	500-2,000	60-400	GHMIRSTUm	
HJT617GH	617	8½, 9½, 12½	3,000-6,000	220-40	L	FH47HYD	627Y	8¾	3,000-7,000	160-50	WY	Halliburton FX35D/ M322 6½-12¼ 500-3,000 45-300 MWWRst FX45D/ FX55/ FX56/ FX65/ FX65D/ FX65R/ FX75/ FX75D/ FX75R/ FX96/ MM55/ MM55D/ MM56/ MM56D/ MM65/ MM65D/ MM65R/ MM66D/ MM75/ MM75D/ MM75R/ MM96						
HJT617GX	617	8½	3,000-6,000	220-40	L	FH48Y	627Y	7%	3,000-7,000	160-50	Y							
MD617	617	4%, 5%, 6, 6½, 6¾, 6½, 6¾, 7½, 8½, 8¾, 9½, 10%, 12¼	3,000-6,500	220-40	GHLMY	FHK45Y	627Y	8½	3,000-7,000	160-50	BWY	FX26/ M323 6-17½ 500-3,000 45-300 MWWRst FX35D/ FX45/ FX45D/ FX45R/ FX46/ FX55/ FX55D/ FX55R/ FX56/ FX56D/ FX56R/ FX65/ FX65D/ FX65DR/ FX65I/ FX65R/ FX66/ FX66D/ FX75/ FX75D/ FX75DR/ FX75R/ FX76/ FX76D/						
ReedHycalog Bits						XR40Y	627Y	4¾, 5½, 5¾, 5½, 5¾, 6, 6½, 6¾, 6½, 6¾	2,000-6,000	270-40	HMY							
EMS62	625	17½	2,000-3,500	450-50	CGMNY	XR40YA	627Y	6¼, 6¾	2,000-6,000	270-40	AHMY							
ETS61A	615	11%	2,000-3,500	450-50	CGMNX	XR40YD	627Y	6	2,000-6,000	270-40	HMWY							
HP62	627	7%	3,500-6,000	70-40	Ax	XR40YDD	627Y	6, 6¼, 6¾	2,000-6,000	270-40	HMWY							
JA62	627	7%, 8¾, 8½, 11	3,500-6,000	70-40	Ax	XR45WY	627Y	6½	2,000-6,000	270-40	HMY							
M4618	617	8¾	2,000-3,500	450-50		XRI40Y	627Y	5%	2,000-6,000	270-40	HMY							
M4652	617	7%	2,000-3,500	450-50		XRI45Y	627Y	6	2,000-6,000	270-40	HMY							
R40	617	6¾, 6½, 6¾, 6¾, 8½, 8¾, 9½, 12½	3,500-6,000	120-40	YW	Tercel												
R40A	617	6, 6½, 6¾, 6¾, 6¾, 7½, 8½, 8¾, 8¾, 9½, 12¼	3,500-6,000	120-40	xW	G61SH	615	17½	2,500-5,500	45-65	SG							
R44	627	10%	3,500-6,000	70-40	Ax	G62SH	625	12¼	3,000-6,000	50-160	SG							
R44A	627	5%, 6, 6½, 6¾, 6¾, 7½, 8½, 9%, 12¼	3,500-6,000	120-40	xW	P61SH	615	17½	2,500-5,500	50-160	CGW							
R45	627	4%, 4½, 4¾, 5½, 6, 6½, 6¾, 6¾, 8½, 8¾, 9%, 11%, 12¼	3,500-6,000	120-40	YW	P62FH	627	12¼	3,000-6,000	50-160	GW							
R48	627	7%, 8%	3,500-6,000	120-40	YW	M61SH	615	17½	3,000-6,000	60-300	WGB							
S61A	617	12	3,500-6,000	120-40	xW	M62FH	627	12¼	3,000-6,000	60-300	WGB							
S62	627	7%	3,500-6,000	120-40	X	TIX-TSK												
SL62	627	4½	3,500-6,000	120-40	Y	K50G	627X	4, 4½	1,000-2,500	60-40	GX							
SL62A	627	6¼	3,500-6,000	120-40	X	M40GFP	617X	8½, 8½, 8½, 8¾, 9½, 9½, 11%, 12, 12¼	2,500-6,000	220-40	GLMX							
Smith Bits						M40GP	617X	5%, 5½, 6, 6¾, 6¾, 7%, 7½	2,500-5,000	220-40	GLMX							
47YGA	612Y	8½	2,000-4,000	160-50	AX	M50GFP	627X	8½, 12, 1¼	2,500-6,000	200-40	GLMX							
4JS	615X	17, 17½	2,000-4,000	140-70	X	M50GP	627X	6, 6½	2,500-5,000	200-40	GLMX							
GI40B	615X	17½	1,500-4,000	240-50	BGHMWW	X40G	617X	5%, 5½, 6, 6¾, 6¾, 7%, 7½	2,500-5,000	80-40	GX							
G40WYD	615Y	14%	1,500-4,000	240-50	BGHMWW	X40G	617X	8½, 8½, 8½, 8¾, 9½, 9½, 11%, 12, 12¼	2,500-6,000	80-40	GX							
G40Y	615Y	14%	1,500-4,000	240-50	BGHMY	X40G	617X	14%, 15½, 16, 17½	2,000-5,500	80-40	GX							
SK47YA	615Y	8½	2,500-5,000	160-50	ABY	X50G	627X	5%, 5½, 6, 6¾, 6¾, 7%, 7½	3,000-5,000	70-40	GX							
SK47YGA	615Y	8½	2,500-5,000	160-50	ABY	X50G	627X	8½, 12¼	3,000-6,000	70-40	GX							
F4	617X	12¼	3,000-7,000	160-50	X	Z40G	615X	8½, 12¼	2,500-5,500	120-40	GX							
F40W	617X	8½	3,000-7,000	160-50	X	Varel												
F45A	617X	8¾	3,000-7,000	160-50	X	AF45	617A	6½, 6¾, 6¾, 6¾, 7%	2,500-7,000	300-50	AW							
FH40	617X	9%	3,000-7,000	160-50	X	AF45H	617A	8½, 8¾, 8¾	2,500-7,000	300-50	AW							
FH45	617X	8½, 9%	3,000-7,000	160-50	X	AF47	627A	6¼, 6¾, 6¾, 7%	2,500-7,000	300-50	AW							
FH40	617X	7%, 8%	3,000-7,000	160-50	X	CM41	617Y	6%	2,500-7,000	275-50	MW							
FH40B	617X	8½	3,000-7,000	160-50	WX	CM44	617X	4¾, 4¾, 5½, 5¾, 6, 6½, 6¾, 6¾	2,500-7,000	275-50	MW							
FH40D	617X	8¾	3,000-7,000	160-50	WX	CM45	617Y	6	2,500-7,000	275-50	MW							
FH45	617X	7%, 8%	3,000-7,000	160-50	X	ER44	615X	26	1,500-4,750	150-50	CMW							
FH45D	617X	8¾	3,000-7,000	160-50	WX	HR44	615X	17½	2,250-5,000	300-50	CMW							
FHKI40B	617X	8½	3,000-7,000	160-50	BWX	RHE44	615X	8½, 12¼	2,250-5,000	300-50	CMW							
GF40	617X	12¼, 17½	3,000-6,500	280-50	BGHMXX	HR45	615Y	17½	2,250-5,000	300-50	CMW							
GF40B	617X	8%	3,000-6,500	280-50	BGHMWW	HE44	617X	8½, 8½, 10%, 11%, 12¼	2,500-7,000	300-50	CMW							
GF40	617X	12¼	3,000-6,500	280-50	BGHMXX	HE44V	617X	7½, 8½, 8½, 8¾, 9%	2,500-7,000	300-50	CMW							
GF45	617X	8½, 12¼	3,000-6,500	280-50	BGHMXX	HE45V	617Y	9%	2,500-7,000	300-50	CMW							
SB617	617X	8½	2,500-5,000	160-50	Y	HE45	617Y	8½, 8½, 11%, 12¼, 12%	2,500-7,000	300-50	CMW							
SB617D	617X	8½	2,500-5,000	160-50	WY	HE47	627Y	7½, 8½, 8¾, 12¼	2,500-7,000	300-50	CMW							
SB617DD	617X	8½	2,500-5,000	160-50	WY	CM47	627Y	4¾, 4¾, 6%, 6½, 6¾	2,500-7,000	275-50	MW							
XR38	617X	6%	2,000-6,000	270-40	HMX	Fish tail bits												
XR40	617X	4¾, 6, 6½, 6¾, 6½, 6¾	2,000-6,000	270-40	HMX	Bit-Tech	M131	6%	300-2,000	100-500	ADGMWV							
XRI40	617X	6%	2,000-6,000	270-40	HMX	DP-440-B1P												
XRI40D	617X	6%	2,000-6,000	270-40	HMXWX	Halliburton	FM3563	M221	6%	500-2,500	60-400	MWV						
F40WUY	617Y	8½	3,000-7,000	160-50	AY	FMF3563/												
F40YA	617Y	8%	3,000-7,000	160-50	AY	FMR3563/												
F47Y	617Y	8¾, 9%, 10%, 12%	3,000-7,000	160-50	Y	PDC drill bits												
F47YA	617Y	7%, 8½, 8¾, 11, 12¼, 12%	3,000-7,000	160-50	Y	Drill Master, Inc.												
F47YAD	617Y	7%	3,000-7,000	160-50	AWY													
F47YD	617Y	10%	3,000-7,000	160-50	AWY													
FH43Y	617Y	7%	3,000-7,000	160-50	Y													
FH43Y	617Y	7%, 8%	3,000-7,000	160-50	Y													
GF40UYB	617Y	8½	3,000-6,500	280-50	BGHMWW													
GF40YB	617Y	8½	3,000-6,500	280-50	BGHMWW													
GF47Y	617Y	12¼	3,000-7,000	280-50	BGHMY													
GF47Y	617Y	12¼	3,000-7,000	280-50	BGHMY													
GF47Y	617Y	10%	3,000-7,000	280-50	BGHMY													
XRK40YD	617Y	6	2,000-6,000	270-40	BHMWY													
F5	627X	12¼	3,000-7,000	160-50	X													
FH50	627X	8½, 8¾, 12¼	3,000-7,000	160-50	X													
GF45	627X	7%, 8%	3,000-7,000	160-50	X													
GF45	627X	8½	3,000-6,500	280-50	BGHMXX													
GF48BD	627X	8½	3,000-7,000	280-50	BGHMY													
XR50	627X	6, 6½, 6¾, 6¾, 6¾	2,000-6,000	270-40	HMX													

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage															
FX76R/ FX85/ FX85D/ FX85DR/ FX85R/ FX86/ FX96D/ MM45/ MM45R/ MM46/ MM55/ MM55D/ MM55DR/ MM56/ MM56D/ MM56R/ MM65/ MM65D/ MM65R/ MM66/ MM66D/ MM75/ MM75D/ MM75DR/ MM75R/ MM76D/ MM76R/ MM85/ MM85D/ MM85R/ MM86/ MM86R/ MM96D/ MM55R/ MM86D/ MM76/ FX65D/ FX66R	M323	6–17½	500–3,000	45–300	MWWRst	FX65/ FX66/ FX95/ FX96/ MM65/ MM66/ MM75/ MM85/ MM85D/ MM95D FX44/ FX54/ FX54DR/ FX54R/ FX55/ FX64/ FX64D/ FX64DR/ FX64I/ FX64R/ FX65/ FX74/ FX84/ MM54/ MM54D/ MM54R/ MM64/ MM64D/ MM64R/ MM65/ MM74D/ MM84/ MM84D/ MM64DR/ MM94D/ MM34D FX54/ FX54DR/ FX54R/ FX64/ FX64D/ FX64R/ FX74/ FX74D/ FX74I/ FX74R/ FX84/ FX84D/ FX84DR/ FX94/ MM54/ MM54D/ MM64/ MM64D/ MM64R/ MM74/ MM74D/ MM84/ MM84D/ MM84R/ MM94/ FX74D/ FX94I FX24I/ FX44/ FX54/ FX64D/ FX74/ FX84/ FX84R/ FX94/ FX94R/ MM44/ MM44D/ MM54/ MM55/ MM64/ MM64D/ MM64R/ MM74D/ MM74R/ MM84/ MM84D/ MM84I/ MM34D	M325	7½–16	500–3,000	45–300	MWWRst	FX40I/ FX64/ FX94/ MM04D/ MM64/ MM94 FX73 FX63/ FX64/ FX64D/ FX73/ FX83/ MM53D/ MM63/ MM73 FX63/ FX64/ FX73/ FX83/ MM53D/ MM73/ MM73D/ MM73R/ MM83/ MM83D/ MM92 FX53/ FX63/ MM63 MM63/ MM73I FX65Ds/ SF46/ SF55/ SF56/ SF65/ SF65D/ SF75/ SF86D/ FX46Rs FX45s/ FX46s/ FX55Ds/ FX55Rs/ FX55s/ FX56Ds/ FX56Rs/ FX56s/ FX65Ds/ FX66s/ SF55/ SF55D/ SF56/ SF65/ SF65D/ SF66/ SF66D/ FX66Ds/ SF75D/ SF96D/ SF96/ FX76Ds FX55s/ SF55D/ SF56/ SF65D/ SF66/ SF86D/ SF96R SF54/ SF64/ SF74D/ SF75R FX64Ds/ FX64s/ SF44/ SF54/ FX34Ds/ SF64 FX54s SF63 SF63 SF32	M332	3½–11	500–3,000	45–300	MWWRst	M333	5½–14¾	500–3,000	45–300	MWWRst	M334	6–12¾	500–3,000	45–300	MWWRst	M335	5½–17½	857–2,685	60–300	SGADTR
FX36/ FX46/ FX55/ FX55D/ FX55DI/ FX55R/ FX56/ FX56R/ FX65/ FX65D/ FX65DR/ FX65R/ FX66/ FX75/ FX75D/ FX75R/ FX76/ FX85/ FX85D/ FX85R/ FX86/ FX86D/ FX95/ FX95R/ FX96/ MM45/ MM46/ MM55/ MM55D/ MM56/ MM56R/ MM65/ MM65D/ MM65R/ MM75/ MM75D/ MM75I/ MM75R/ MM76D/ MM85/ MM85D/ MM85R/ MM95/ MM55R/ MM95D/ MM76/ MM55DI	M324	6½–17½	500–3,000	45–300	MWWRst	MM34D	M333	5½–14¾	500–3,000	45–300	MWWRst	MM34D	M334	6–12¾	500–3,000	45–300	MWWRst	MM34D	M335	5½–17½	857–2,685	60–300	SGADTR									

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
KM1372	M333	5/8-1 1/2	857-2,685	60-300	SGADTR	SK519	M222, M322, M332, M422, S423	8.5, 8 1/4, 12 1/4	1,000-6,000	Variable	GHMWUm-VRst	MAI619	M223	8 1/2	400-3,000	60-400	GHM-NRstUIWV
KM1662	M323	5/8-1 1/2	857-2,685	60-300	SGADTR							MD519	M223	8 1/2, 12 1/4	400-3,000	60-400	GHM-NRstUIWV
KM1663	M323	5/8-1 1/2	857-2,685	60-300	SGADTR							MD616	M223	8 1/4, 8 1/2, 9 1/2, 12 1/4, 14 1/4	500-4,000	60-400	GHM-NRstUmVW
KM1673	M323	5/8-1 1/2	857-2,685	60-300	SGADTR							MDI516	M223	6, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4, 9 1/4, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
KM1952	M323	5/8-1 1/2	857-2,685	60-300	SGADTR							MDI519	M223	8 1/2, 8 3/4, 9 1/2, 12 1/4, 14, 14 1/4, 17	400-3,000	60-400	GHM-NRstUIWV
KM1365	M432	8 1/2	857-2,685	60-300	SGADTR	SK611	M432	8 1/4	1,000-6,000	Variable	GHMWUm-VRst	MDI619	M223	7 1/4, 8 1/2, 8 3/4, 12 1/4, 14 1/4, 14 1/2, 16, 16 1/2, 17 1/2	400-3,000	60-400	GHM-NRstUIWV
KS1052	S424	4 1/2-8 1/2	857-2,685	60-300	SGADTR	SK613	M222, M232, M332, M432, S232, S332, S432, S433	5 1/2, 5 3/4, 6 1/2, 6 3/4, 6 5/8, 7 1/4, 8 1/2, 8 3/4, 8 1/2, 9 1/4, 12 1/4	1,000-6,000	Variable	GHMWUm-VRst	MDI716	M223	8 1/2, 8 3/4, 9 1/2, 10 1/2, 11 1/2, 12, 12 1/4, 14 1/4, 14 1/2, 16, 16 1/2, 17 1/2	500-4,000	60-400	GHM-NRstUmVW
KS1355	S323	4 1/2-17 1/2	857-2,685	60-300	SGADTR							MDSI619	M223	12 1/4, 14 1/4	400-3,000	60-400	GHM-NRstUIWV
KS1362	S333	4 1/2-17 1/2	857-2,685	60-300	SGADTR							MDSI716	M223	8 1/2, 8 3/4, 8 3/4, 8 3/4, 9 1/2, 9 1/2, 10 1/4, 10 1/2, 12 1/4, 14 1/4, 16, 16 1/2	500-4,000	60-400	GHM-NRstUmVW
KS1382	S333	8 1/2-17 1/2	857-2,685	60-300	SGADTR							MI513	M223	6 1/2, 6 3/4, 6 1/2, 7 1/4, 8 3/4	500-4,000	60-400	GHM-NRstUmVW
KS1392	S434	8 1/2-17 1/2	857-2,685	60-300	SGADTR							MI619	M223	7 1/4, 8 1/2, 12 1/4, 17	400-3,000	60-400	GHM-NRstUIWV
KS1653	S323	4 1/2-17 1/2	857-2,685	60-300	SGADTR							MI716	M223	6, 7 1/4, 8 1/2, 9 1/2, 12, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
KS1662	S323	4 1/2-17 1/2	857-2,685	60-300	SGADTR	SK616	M422, M423, M432, M433, S322, S422, S432, S433	8 1/2, 8 3/4, 8 3/4, 9 1/2, 9 1/2, 10 1/2, 12, 12 1/4, 13 1/2, 14 1/2, 14 1/2, 17, 17 1/2, 18 1/2	1,000-6,000	Variable	GHMWUm-VRst	MDSI513	M223	7 1/4, 8 1/2, 8 3/4	500-4,000	60-400	GHM-NRstUmVW
KS1952	S323	4 1/2-17 1/2	857-2,685	60-300	SGADTR							MDI513	M233	5 1/4, 6, 6 1/2, 6 1/2, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4	500-4,000	60-400	GHM-NRstUmVW
KS1953	S323	4 1/2-17 1/2	857-2,685	60-300	SGADTR							MI613	M233	6, 6 1/2, 6 1/2, 6 1/2, 6 3/4, 7 1/4, 8 1/2	500-4,000	60-400	GHM-NRstUmVW
Reedycatalog Bits												M716	M323	6, 8 1/2, 9 1/2, 11, 12, 14 1/4	500-4,000	60-400	GHM-NRstUmVW
DS711	M132, M232, M332, S332	6, 6 1/2, 6 3/4, 6 1/2	1,000-6,000	Variable	GHMWUmV	SK619	M222, M422, M423, M432, S422, S424, S432	8 1/2, 8 1/2, 12 1/4, 16 1/2, 17	1,000-6,000	Variable	GHMWUm-VRst	MDI616	M323	6, 6 1/4, 7 1/4, 8 1/2, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 10 1/2, 11 1/2, 12 1/4, 13 1/2, 14 1/2, 14 1/2, 16, 16 1/2, 17 1/2	500-4,000	60-400	GHM-NRstUmVW
DS713	M332, M432, M433	5 1/2, 5 3/4, 6, 6 1/2, 6 3/4, 8 1/2, 8 3/4, 9 1/2, 12 1/4	1,000-6,000	Variable	GHMWUmV	SK711	M232, M332, M432	5 1/2, 6 1/2, 6 3/4	1,000-6,000	Variable	GHMWUm-VRst	MDI816	M323	8 1/2, 8 1/2, 12 1/4, 13 1/4, 14 1/2, 17, 17 1/2, 18 1/2	500-4,000	60-400	GHM-NRstUmVW
DS716	M222, M422, S422, S423	7 1/4, 8 1/2, 9 1/2, 12 1/4	1,000-6,000	Variable	GHMWUmV	SK713	M432, M433	8 1/4, 14 1/4	1,000-6,000	Variable	GHMWUm-VRst	MI616	M323	7 1/4, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 11, 12 1/4, 13 1/2	500-4,000	60-400	GHM-NRstUmVW
DS719	M421, M423, M433	12, 12 1/4, 16	1,000-6,000	Variable	GHMWUmV	SK716	M322, M422, M423, M423	7 1/4, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 12 1/4, 13 1/2, 18 1/2	1,000-6,000	Variable	GHMWUm-VRst	M716	M323	6, 8 1/2, 9 1/2, 11, 12, 14 1/4	500-4,000	60-400	GHM-NRstUmVW
MS416	M222	7 1/4	1,000-6,000	Variable	GHMWUmV	SK811	M332	6 1/2, 6 3/4	1,000-6,000	Variable	GHMWUm-VRst	MDI616	M323	6, 6 1/4, 7 1/4, 8 1/2, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 10 1/2, 11 1/2, 12 1/4, 13 1/2, 14 1/2, 14 1/2, 16, 16 1/2, 17 1/2	500-4,000	60-400	GHM-NRstUmVW
MS419	S122	8 1/2	1,000-6,000	Variable	GHMWUmV	SK813	M422, M432, M434, S432	8 1/2, 8 1/2, 8 3/4, 10 1/2, 12 1/4, 18 1/2	1,000-6,000	Variable	GHMWUm-VRst	MDI816	M323	8 1/2, 8 1/2, 12 1/4, 13 1/4, 14 1/2, 17, 17 1/2, 18 1/2	500-4,000	60-400	GHM-NRstUmVW
MS513	M232, M332	6 1/2, 8 1/2	1,000-6,000	Variable	GHMWUmV	SK816	M422, S433	12 1/4, 17 1/2, 28	1,000-6,000	Variable	GHMWUm-VRst	MI616	M323	7 1/4, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 11, 12 1/4, 13 1/2	500-4,000	60-400	GHM-NRstUmVW
MS516	M222, M422	8 1/2	1,000-6,000	Variable	GHMWUmV	SK819	M422, M432, S422	12, 12 1/2, 14 1/4	1,000-6,000	Variable	GHMWUm-VRst	M716	M323	6, 6 1/2, 7 1/4, 8 1/2, 8 3/4, 9 1/2, 9 1/2, 10 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
MS519	M422	12 1/4	1,000-6,000	Variable	GHMWUmV	ST1513	S132	8 1/2, 8 1/2	1,000-6,000	Variable	GHMWUmV	MDI616	M323	6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 1/2, 8 3/4, 9 1/2, 9 1/2, 10 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
MS613	M332	8 1/2	1,000-6,000	Variable	GHMWUmV	TF816	S432	22	1,000-6,000	Variable	GHMWUmV	M716	M323	8 1/2, 12 1/4	500-4,000	60-400	DGHM-NRstUmVW
MS616	M422	8 1/2, 8 1/2, 8 3/4, 18, 1/4	1,000-6,000	Variable	GHMWUmV	Smith Bits						M613	M333	6, 7 1/2, 7 1/2	500-4,000	60-400	GHM-NRstUmVW
MS716	M422	10 1/4, 12 1/4	1,000-6,000	Variable	GHMWUmV	M416	M121	4 1/2, 4 3/4, 8 1/2	500-4,000	60-400	GHM-NRstUmVW	M713	M333	5 1/2	500-4,000	60-400	GHM-NRstUmVW
RS508	M143	3 1/4	1,000-6,000	Variable	GHMWUm-VRst	M419	M121	8 1/2	400-3,000	60-400	GHM-NRstUmVW	M813	M333	6	500-4,000	60-400	GHM-NRstUmVW
RS516	M122, M222, M322, M422	6 1/2, 6 1/2, 8 1/2	1,000-6,000	Variable	GHMWUm-VRst	MDI419	M121	8 1/2, 8 3/4, 9 1/2, 11 1/2, 12 1/4	400-3,000	60-400	GHM-NRstUmVW	MDI613	M333	5 1/4, 5 1/2, 5 3/4, 5 3/4, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 1/2, 8 3/4, 9 1/2, 9 1/2, 10 1/2, 11 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
RS519	M322, M323, M422, S422	8 1/2, 12 1/4, 16	1,000-6,000	Variable	GHMWUm-VRst	MI419	M121	8 1/2	400-3,000	60-400	GHM-NRstUmVW	MDI713	M333	5 1/2, 6, 8 1/2, 9 1/2, 12 1/4, 14 1/4	500-4,000	60-400	GHM-NRstUmVW
RS613	M222, M232, M332, S232	5 1/2, 6, 6 1/2, 6 1/2	1,000-6,000	Variable	GHMWUm-VRst	MDI416	M123	6 1/2, 8 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW	MDI813	M333	5 1/2, 8 1/2, 9 1/2, 11 1/2, 12 1/4, 13 1/2, 14 1/2, 14 1/2, 16, 16 1/2	500-4,000	60-400	GHM-NRstUmVW
RS616	M322, M422, M423, S422	8 1/2, 9 1/2, 10 1/2, 12 1/4, 14 1/4, 16	1,000-6,000	Variable	GHMWUm-VRst	MDSI416	M123	8 1/2, 9 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW	MDSI613	M333	5 1/2, 6, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
RS619	M422, S423	12 1/4	1,000-6,000	Variable	GHMWUm-VRst	MDSI519	M123	8 1/2, 8 3/4, 9 1/2, 12 1/4	400-3,000	60-400	GHM-NRstUmVW	MDSI813	M333	8 1/2, 8 1/2, 8 3/4, 10 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
RS711	M233, M432	6 1/2, 6 1/2	1,000-6,000	Variable	GHMWUm-VRst	MI316	M123	8 1/2	500-4,000	60-400	GHM-NRstUmVW	MI713	M333	8 1/2	500-4,000	60-400	GHM-NRstUmVW
RS716	M422, S422	9 1/2, 12 1/4, 14 1/2	1,000-6,000	Variable	GHMWUm-VRst	MI416	M123	6 1/2, 7 1/2, 8 1/2	500-4,000	60-400	GHM-NRstUmVW	MI813	M333	6 3/4, 12 1/4, 16, 17 1/2	500-4,000	60-400	GHM-NRstUmVW
SD513	M132, M232, S134	8 1/2	1,000-6,000	Variable	GHMWUmV	MI516	M123	5 1/4, 6, 6 1/2, 6 1/2, 7 1/4, 7 1/4, 8 1/2, 8 3/4, 12 1/4	500-4,000	60-400	GHM-NRstUmVW	MSI513	M333	6 1/2, 6 3/4, 6 1/2, 8 1/2	500-4,000	60-400	GHM-NRstUmVW
SD516	M132, S422	7 1/4, 12 1/4	1,000-6,000	Variable	GHMWUmV	MI519	M123	7 1/2, 8 1/2, 8 3/4, 9 1/2, 12 1/4	400-3,000	60-400	GHM-NRstUmVW	M916	M423	16	500-4,000	60-400	GHM-NRstUmVW
SD613	S143	6 1/2	1,000-6,000	Variable	GHMWUmV	MSI416	M221	6 1/2, 6 3/4, 7 1/2, 8 1/2, 8 3/4	500-4,000	60-400	GHM-NRstUmVW	MSI816	M432	8 1/2, 8 1/2, 8 3/4, 9 1/2, 9 1/2, 12 1/4, 13 1/2, 16, 17, 17 1/2	500-4,000	60-400	GHM-NRstUmVW
SGF51	M222	8 1/2	1,000-6,000	Variable	GHMWUmV	MDSI616	M222	6 1/2, 6 3/4, 7 1/2, 8 1/2, 8 1/2, 8 3/4, 9 1/2, 10 1/4, 10 1/2, 11 1/2, 12 1/4, 14 1/2, 14 1/2, 16, 17	500-4,000	60-400	GHM-NRstUmVW	MI913	M433	7 1/4, 8 1/2, 8 1/2, 8 1/2, 8 1/2, 11 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
SK511	M132, S132	4 1/2, 4 1/2	1,000-6,000	Variable	GHMWUm-VRst	M513	M223	4 1/2, 4 3/4, 6 1/2	500-4,000	60-400	GHM-NRstUmVW	MSI613	M433	6, 6 1/2, 6 1/2, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
SK513	M122, M132, M133, M232, M332, M333, S232	5 1/2, 5 3/4, 6, 6 1/2, 6 1/2, 6 3/4, 7 1/4, 7 1/4, 8 1/2, 8 1/2	1,000-6,000	Variable	GHMWUm-VRst	M516	M223	8 1/2, 11 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW	MSI616	M433	6, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 11, 12 1/4, 13 1/2, 13 1/2, 16	500-4,000	60-400	GHM-NRstUmVW
SK516	M222, M222, M322, M332, M422, M422, S222, S322, S422	6 1/2, 6 1/2, 6 1/2, 6 1/2, 7 1/4, 8 1/2, 8 1/2, 8 1/2, 8 1/2, 8 1/2, 9 1/2, 9 1/2, 10 1/2, 12 1/4	1,000-6,000	Variable	GHMWUm-VRst	M616	M223	7 1/4, 8 1/2, 8 3/4, 9 1/4, 10 1/4	500-4,000	60-400	GHM-NRstUmVW	MSI713	M433	6, 6 1/2, 6 1/2, 6 3/4, 7 1/4, 8 1/2, 8 3/4, 9 1/2, 10 1/2, 12 1/4	500-4,000	60-400	GHM-NRstUmVW
						MA616	M223	5 1/2, 6, 8 1/2, 8 1/2	500-4,000	60-400	GHM-NRstUmVW	MSI716	M433	7 1/4, 7 1/4, 8 1/2, 8 1/2, 9 1/2, 12, 12 1/4, 16, 17 1/2	500-4,000	60-400	GHM-NRstUmVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
S519	S123	8½, 9½, 10%, 12¼, 13½, 13¾, 14¾, 17, 17½	400–3,000	60–400	GHM-NRstUjVW	MDIZ713		8½	500–4,000	60–400	GHM-NRstUmVW	MSA19		8½, 8¾	400–3,000	60–400	GHM-NRstUjVW
SDI519	S123	8½, 8¾, 12¼, 16, 17½, 18½	400–3,000	60–400	GHM-NRstUjVW	MDIZ716		8½	500–4,000	60–400	GHM-NRstUmVW	MS516		8½	500–4,000	60–400	GHM-NRstUmVW
SI519	S123	8½, 12¼, 15½	400–3,000	60–400	GHM-NRstUjVW	MDS516		12¼	500–4,000	60–400	GHM-NRstUmVW	MS519		16½	400–3,000	60–400	GHM-NRstUjVW
S616	S223	16, 17½	500–4,000	60–400	GHM-NRstUmVW	MDS616		9½, 14¾	500–4,000	60–400	GHM-NRstUmVW	MS613		12¼	500–4,000	60–400	GHM-NRstUmVW
S619	S223	8½, 12¼, 17	400–3,000	60–400	GHM-NRstUjVW	MDS713		6½	500–4,000	60–400	GHM-NRstUmVW	MS616		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW
SDI616	S223	8½, 8¾, 11%, 12¼, 13½, 17½	500–4,000	60–400	GHM-NRstUmVW	MDS716		8½, 12¼, 16	500–4,000	60–400	GHM-NRstUmVW	MS713		12¼	500–4,000	60–400	GHM-NRstUmVW
SI619	S223	12¼, 13½, 17½, 26	400–3,000	60–400	GHM-NRstUjVW	MDS816		12¼	500–4,000	60–400	GHM-NRstUmVW	MS716		17¼	500–4,000	60–400	GHM-NRstUmVW
SDSI519	S423	12¼, 17½	400–3,000	60–400	GHM-NRstUjVW	MDSI413		6½, 6¾, 7½	500–4,000	60–400	GHM-NRstUmVW	MS816		8¾	500–4,000	60–400	GHM-NRstUmVW
H0X1619		8½	400–3,000	60–400	GHM-NRstUjVW	MDSI419		8½, 12¼	400–3,000	60–400	GHM-NRstUmVW	MSDI616		12¼	500–4,000	60–400	GHM-NRstUmVW
M413		7½	500–4,000	60–400	GHM-NRstUmVW	MDSI513		6, 6¾, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW	MSDI713		6½	500–4,000	60–400	GHM-NRstUmVW
M619		12¼	400–3,000	60–400	GHM-NRstUjVW	MDSI516		6, 6¾, 6¾, 7½, 8½, 8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW	MSI1013		12	500–4,000	60–400	GHM-NRstUmVW
M816		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSI713		5¾, 5 7/8, 6, 7¾, 8½, 8¾, 8¾, 8¾	500–4,000	60–400	GHM-NRstUmVW	MSI316		8½	500–4,000	60–400	GHM-NRstUmVW
M819		9¾	400–3,000	60–400	GHM-NRstUjVW	MDSI816		8¾, 8¾, 12¼, 17½, 18½, 18½	500–4,000	60–400	GHM-NRstUmVW	MSI413		6, 6¾	500–4,000	60–400	GHM-NRstUmVW
MA32		6½	500–4,000	60–400	GHM-NRstUmVW	MDSI819		14¾, 18½	400–3,000	60–400	GHM-NRstUjVW	MSI616L		8½	500–4,000	60–400	GHM-NRstUmVW
MA613		6½	500–4,000	60–400	GHM-NRstUmVW	MDSI913		8½, 8¾	500–4,000	60–400	GHM-NRstUmVW	MSI619		8¾, 8¾, 12¼	400–3,000	60–400	GHM-NRstUjVW
MA813		6	500–4,000	60–400	GHM-NRstUmVW	MDSI916		8¾	500–4,000	60–400	GHM-NRstUmVW	MSI719		8¾, 12¼	400–3,000	60–400	GHM-NRstUjVW
MA816		8½	500–4,000	60–400	GHM-NRstUmVW	MDSIR516		6¾	500–4,000	60–400	GHM-NRstUmVW	MSI913		8¾	500–4,000	60–400	GHM-NRstUmVW
MA819		8½	400–3,000	60–400	GHM-NRstUjVW	MDSIR613		8¾	500–4,000	60–400	GHM-NRstUmVW	MSI916		16	500–4,000	60–400	GHM-NRstUmVW
MA89		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIR713		6½, 6¾, 8½	500–4,000	60–400	GHM-NRstUmVW	MSIR513		6½	500–4,000	60–400	GHM-NRstUmVW
MA916		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIR813		8½	500–4,000	60–400	GHM-NRstUmVW	MSIR613		6½, 6¾	500–4,000	60–400	GHM-NRstUmVW
MAI616		5½	500–4,000	60–400	GHM-NRstUmVW	MDSIZ513		8½	500–4,000	60–400	GHM-NRstUmVW	MSIR616		9¾	500–4,000	60–400	GHM-NRstUmVW
MASI613		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ516		8¾	500–4,000	60–400	GHM-NRstUmVW	MSIR713		6½	500–4,000	60–400	GHM-NRstUmVW
MASI716		7½, 8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ519		8¾	400–3,000	60–400	GHM-NRstUmVW	MSIZ413		6¾	500–4,000	60–400	GHM-NRstUmVW
MASIZ513		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ613		5½, 6, 7½	500–4,000	60–400	GHM-NRstUjVW	MSIZ513		6½, 6¾	500–4,000	60–400	GHM-NRstUmVW
MASIZ613		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ616		8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW	MSIZ516		8½	500–4,000	60–400	GHM-NRstUmVW
MAX89		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ713		5½, 8½	500–4,000	60–400	GHM-NRstUmVW	MSIZ519		8½, 8¾	400–3,000	60–400	GHM-NRstUjVW
MAZ616		8½	500–4,000	60–400	GHM-NRstUmVW	MDSIZ716		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW	MSIZ613		6½, 6¾, 7½	500–4,000	60–400	GHM-NRstUmVW
MAZ89		8¾	500–4,000	60–400	GHM-NRstUmVW	MDSIZ813		12¼	500–4,000	60–400	GHM-NRstUmVW	MSIZ616		8½, 8¾, 9¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
MD613		6½, 8½	500–4,000	60–400	GHM-NRstUjVW	MDSIZ816		12¼	500–4,000	60–400	GHM-NRstUmVW	MSIZ619		8¾	400–3,000	60–400	GHM-NRstUjVW
MD619		12¼	400–3,000	60–400	GHM-NRstUjVW	MDSIZ913		8¾	500–4,000	60–400	GHM-NRstUmVW	MSIZ713		8½	500–4,000	60–400	GHM-NRstUjVW
MD713		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW	MDSXI613		8½	500–4,000	60–400	GHM-NRstUmVW	MSIZ716		8½	500–4,000	60–400	GHM-NRstUmVW
MD716		12	500–4,000	60–400	GHM-NRstUmVW	MDSXI616		12¼	500–4,000	60–400	GHM-NRstUmVW	MSIZ813		8½	500–4,000	60–400	GHM-NRstUmVW
MD813		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW	MDSXI713		8½	500–4,000	60–400	GHM-NRstUmVW	MSIZ816		16	500–4,000	60–400	GHM-NRstUmVW
MDA619		12¼	400–3,000	60–400	GHM-NRstUjVW	MDSXI813		8½	500–4,000	60–400	GHM-NRstUmVW	MST913		5½	500–4,000	60–400	GHM-NRstUmVW
MDCI516		8½	500–4,000	60–400	GHM-NRstUmVW	MDSX-IZ713		8½	500–4,000	60–400	GHM-NRstUmVW	MSXI613		8½	500–4,000	60–400	GHM-NRstUmVW
MDCRI713		8½	500–4,000	60–400	GHM-NRstUmVW	MDX516		8½	500–4,000	60–400	GHM-NRstUmVW	MSXI616		8½	500–4,000	60–400	GHM-NRstUmVW
MDCRI716		10¼	500–4,000	60–400	GHM-NRstUmVW	MDX613		6½	500–4,000	60–400	GHM-NRstUmVW	MSXI716		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW
MDI313		6½, 8½	500–4,000	60–400	GHM-NRstUmVW	MDX713		8½	500–4,000	60–400	GHM-NRstUmVW	MSXIZ616		8½	500–4,000	60–400	GHM-NRstUmVW
MDI319		8½	400–3,000	60–400	GHM-NRstUjVW	MGR819		16	400–3,000	60–400	GHM-NRstUmVW	MSZ616		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW
MDI413		4¾, 6, 6¾, 6¼, 6¾, 7½	500–4,000	60–400	GHM-NRstUmVW	MI413		6½	500–4,000	60–400	GHM-NRstUjVW	MSZ713		5½	500–4,000	60–400	GHM-NRstUmVW
MDI719		10%	400–3,000	60–400	GHM-NRstUjVW	MI916		16	500–4,000	60–400	GHM-NRstUmVW	MSZ716		12	500–4,000	60–400	GHM-NRstUmVW
MDI916		17½	500–4,000	60–400	GHM-NRstUmVW	MIZ516		8¾	500–4,000	60–400	GHM-NRstUmVW	MV616		6¼	500–4,000	60–400	DGHM-NRstUmVW
MDIZ513		6½	500–4,000	60–400	GHM-NRstUmVW	MIZ613		7½	500–4,000	60–400	GHM-NRstUmVW	MXI616		8½	500–4,000	60–400	GHM-NRstUmVW
MDIZ516		7½, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW	MIZ616		8½, 8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW	MZ713		5½	500–4,000	60–400	GHM-NRstUmVW
MDIZ519		8½, 12¼	400–3,000	60–400	GHM-NRstUjVW	MIZ716		8½	500–4,000	60–400	GHM-NRstUmVW	MZ716		12	500–4,000	60–400	GHM-NRstUmVW
MDIZ613		6, 8¾	500–4,000	60–400	GHM-NRstUmVW	MIZ913		8½	500–4,000	60–400	GHM-NRstUmVW	S413		3¾	500–4,000	60–400	GHM-NRstUmVW
MDIZ616		7½, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW	MR613		5½	500–4,000	60–400	GHM-NRstUmVW	S613		17½	500–4,000	60–400	GHM-NRstUmVW
MDIZ619		12¼	400–3,000	60–400	GHM-NRstUjVW	MRS681		8¾	500–4,000	60–400	GHM-NRstUmVW	S719		12¼	400–3,000	60–400	GHM-NRstUjVW
						MS413		6½	500–4,000	60–400	GHM-NRstUmVW	SD419		16½	400–3,000	60–400	GHM-NRstUjVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
SD516	11%		500-4,000	60-400	GHM-NRstUmVW	SST913		6, 8½	500-4,000	60-400	GHM-NRstUmVW	MP616M	M322	8, 8½, 8½, 8½, 8½, 10%, 11%, 12, 12¼	500-2,500	50-400	UM G H M RST W V
SD519	16		400-3,000	60-400	GHM-NRstUmVW	SXI616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	MP616MC	M322	8, 8½, 8½, 8½, 8½, 10%, 11%, 12, 12¼	500-2,500	50-400	UM G H M RST W V
SDAI513	8½		500-4,000	60-400	GHM-NRstUmVW	SXI619		12¼	400-3,000	60-400	GHM-NRstUmVW	MP619	M322	5½, 8½, 8½, 8½, 9%, 9%	500-2,500	50-400	UM G H M RST W V
SDI313	8½, 8¾		500-4,000	60-400	GHM-NRstUmVW	TBR5613		6, 7½, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MP619C	M322	5½, 8½, 8½, 8½, 9%, 9%	500-2,500	50-400	UM G H M RST W V
SDI413	6¾, 7½, 8½, 8¾		500-4,000	60-400	GHM-NRstUmVW	VIS416		8½	500-4,000	60-400	GHM-NRstUmVW	MP619M	M322	5½, 8½, 8½, 8½, 9%, 9%	500-2,500	50-400	UM G H M RST W V
SDI416	7½		500-4,000	60-400	GHM-NRstUmVW	VIS419		8½, 12¼	400-3,000	60-400	GHM-NRstUmVW	MP619MC	M322	5½, 8½, 8½, 8½, 9%, 9%	500-2,500	50-400	UM G H M RST W V
SDI419	11%, 12¼, 17½		400-3,000	60-400	GHM-NRstUmVW	VIS516		8½	500-4,000	60-400	GHM-NRstUmVW	MP716	M323	9%	500-2,500	50-400	UM G H M RST W V
SDI513	6, 6½, 6¼, 6½, 6¾, 7½, 8½, 8¾, 8½		500-4,000	60-400	GHM-NRstUmVW	VIS519		12¼	400-3,000	60-400	GHM-NRstUmVW	MP716C	M323	9%	500-2,500	50-400	UM G H M RST W V
SDI516	7½, 8½, 8¾, 8¾, 8½, 9%, 11%		500-4,000	60-400	GHM-NRstUmVW	VIS613		8¾	500-4,000	60-400	GHM-NRstUmVW	MP716M	M323	9%	500-2,500	50-400	UM G H M RST W V
SDI613	8½, 8¾, 17½		500-4,000	60-400	GHM-NRstUmVW	VM516		8¾	500-4,000	60-400	GHM-NRstUmVW	MP716MC	M323	9%	500-2,500	50-400	UM G H M RST W V
SDI619	12¼, 14¾, 16, 17½		400-3,000	60-400	GHM-NRstUmVW	VS419		11%, 11½, 12	400-3,000	60-400	GHM-NRstUmVW	MP716MC	M323	9%	500-2,500	50-400	UM G H M RST W V
SDI713	6¼, 6¾, 7½, 8½, 8¾		500-4,000	60-400	GHM-NRstUmVW	VS516		11%, 11½, 12	500-4,000	60-400	GHM-NRstUmVW	MR316	M322	6	500-2,500	50-400	UM G H M RST W V
SDI716	8½		500-4,000	60-400	GHM-NRstUmVW	Z519		12¼	400-3,000	60-400	GHM-NRstUmVW	MR316C	M322	6	500-2,500	50-400	UM G H M RST W V
SDI816	17½, 26		500-4,000	60-400	GHM-NRstUmVW	Tercel						MR316M	M322	6	500-2,500	50-400	UM G H M RST W V
SDIZ419	12¼		400-3,000	60-400	GHM-NRstUmVW	MD519	M322	6¾, 8½, 8½, 9½, 12¼	500-2,500	50-400	UM G H M RST W V N	MR316MC	M322	6	500-2,500	50-400	UM G H M RST W V
SDIZ513	6¼, 8½		500-4,000	60-400	GHM-NRstUmVW	MD519C	M322	6¾, 8½, 8½, 9½, 12¼	500-2,500	50-400	UM G H M RST W V N	MR513	M333	7½, 8½, 8¾	500-2,500	50-400	UM G H M RST W V
SDIZ516	8½		500-4,000	60-400	GHM-NRstUmVW	MD519M	M322	6¾, 8½, 8½, 9½, 12¼	500-2,500	50-400	UM G H M RST W V N	MR513C	M333	7½, 8½, 8¾	500-2,500	50-400	UM G H M RST W V
SDIZ519	14¾		400-3,000	60-400	GHM-NRstUmVW	MD519MC	M322	6¾, 8½, 8½, 9½, 12¼	500-2,500	50-400	UM G H M RST W V N	MR513M	M333	7½, 8½, 8¾	500-2,500	50-400	UM G H M RST W V
SDSI516	11%		500-4,000	60-400	GHM-NRstUmVW	MP413	M331	6¾, 7½, 12¼	500-2,500	50-400	UM G H M RST W V	MR513MC	M333	7½, 8½, 8¾	500-2,500	50-400	UM G H M RST W V
SDSI616	8½, 11%, 12¼, 13½		500-4,000	60-400	GHM-NRstUmVW	MP413C	M331	6¾, 7½, 12¼	500-2,500	50-400	UM G H M RST W V	MR516	M433	7½, 8½, 8¾, 9%, 11, 12¼	500-2,500	50-400	UH G H M RST W V
SDSI619	12¼		400-3,000	60-400	GHM-NRstUmVW	MP413M	M331	6¾, 7½, 12¼	500-2,500	50-400	UM G H M RST W V	MR516C	M433	7½, 8½, 8¾, 9%, 11, 12¼	500-2,500	50-400	UH G H M RST W V
SDSI713	8½		500-4,000	60-400	GHM-NRstUmVW	MP413MC	M331	6¾, 7½, 12¼	500-2,500	50-400	UM G H M RST W V	MR516M	M433	7½, 8½, 8¾, 9%, 11, 12¼	500-2,500	50-400	UH G H M RST W V
SDSI716	17½		500-4,000	60-400	GHM-NRstUmVW	MP419	M322	8½	500-2,500	50-400	UM G H M RST W V	MR516MC	M433	7½, 8½, 8¾, 9%, 11, 12¼	500-2,500	50-400	UH G H M RST W V
SDSI816	17, 17½		500-4,000	60-400	GHM-NRstUmVW	MP419C	M322	8½	500-2,500	50-400	UM G H M RST W V	MR616	M322	10%, 12, 12¼, 13¾, 15½	500-2,500	50-400	UM G H M RST W V
SDXI516	8½		400-3,000	60-400	GHM-NRstUmVW	MP419M	M322	8½	500-2,500	50-400	UM G H M RST W V	MR616C	M322	10%, 12, 12¼, 13¾, 15½	500-2,500	50-400	UM G H M RST W V
SDXI519	8½		400-3,000	60-400	GHM-NRstUmVW	MP419MC	M322	8½	500-2,500	50-400	UM G H M RST W V	MR616M	M322	10%, 12, 12¼, 13¾, 15½	500-2,500	50-400	UM G H M RST W V
SDXIZ513	8½		500-4,000	60-400	GHM-NRstUmVW	MP509	M342	6, 6½	500-2,500	50-400	UM G H M RST W V	MR616MC	M322	10%, 12, 12¼, 13¾, 15½	500-2,500	50-400	UM G H M RST W V
SHOSI519	17		400-3,000	60-400	GHM-NRstUmVW	MP509C	M342	6, 6½	500-2,500	50-400	UM G H M RST W V	MR619	M322	12¼, 15½	500-2,500	50-400	UM G H M RST W V
SI416	8½		500-4,000	60-400	GHM-NRstUmVW	MP509M	M342	6, 6½	500-2,500	50-400	UM G H M RST W V	MR619C	M322	12¼, 15½	500-2,500	50-400	UM G H M RST W V
SI419	8½		400-3,000	60-400	GHM-NRstUmVW	MP509MC	M342	6, 6½	500-2,500	50-400	UM G H M RST W V	MR619M	M322	12¼, 15½	500-2,500	50-400	UM G H M RST W V
SI513	6¼, 6¾, 7½		500-4,000	60-400	GHM-NRstUmVW	MP513	M322	5, 5½	500-2,500	50-400	UM G H M RST W V	MR619MC	M322	12¼, 15½	500-2,500	50-400	UM G H M RST W V
SI516	6¼, 12¼		500-4,000	60-400	GHM-NRstUmVW	MP513C	M322	5, 5½	500-2,500	50-400	UM G H M RST W V	SD519	S222	8½, 12¼, 16, 17½, 22	1,000-4,000	50-400	UM G H M RST W V
SI613	8¾		500-4,000	60-400	GHM-NRstUmVW	MP513M	M322	5, 5½	500-2,500	50-400	UM G H M RST W V	SD519C	S222	8½, 12¼, 16, 17½, 22	1,000-4,000	50-400	UM G H M RST W V
SI616	7½, 8½, 8¾, 11, 12¼, 13½, 16		500-4,000	60-400	GHM-NRstUmVW	MP513MC	M322	5, 5½	500-2,500	50-400	UM G H M RST W V	SD519M	S222	8½, 12¼, 16, 17½, 22	1,000-4,000	50-400	UM G H M RST W V
SI719	16		400-3,000	60-400	GHM-NRstUmVW	MP516	M322	6, 7½, 8½, 8¾, 10%, 12¼	500-2,500	50-400	UM G H M RST W V	SD519MC	S222	8½, 12¼, 16, 17½, 22	1,000-4,000	50-400	UM G H M RST W V
SI816	26		500-4,000	60-400	GHM-NRstUmVW	MP516C	M322	6, 7½, 8½, 8¾, 10%, 12¼	500-2,500	50-400	UM G H M RST W V	SP513	S332	3¼, 4¼, 6¼, 6¼, 6¾, 8½, 8¾, 8¾	1,000-4,000	50-400	UM G H M RST W V
SI819	18½, 23		400-3,000	60-400	GHM-NRstUmVW	MP516M	M322	6, 7½, 8½, 8¾, 10%, 12¼	500-2,500	50-400	UM G H M RST W V	SP513C	S332	3¼, 4¼, 6¼, 6¼, 6¾, 8½, 8¾, 8¾	1,000-4,000	50-400	UM G H M RST W V
SI913	16		500-4,000	60-400	GHM-NRstUmVW	MP516MC	M322	6, 7½, 8½, 8¾, 10%, 12¼	500-2,500	50-400	UM G H M RST W V	SP513M	S332	3¼, 4¼, 6¼, 6¼, 6¾, 8½, 8¾, 8¾	1,000-4,000	50-400	UM G H M RST W V
SI916	12¼		500-4,000	60-400	GHM-NRstUmVW	MP519	M322	6, 6½, 8½, 9½, 10%	500-2,500	50-400	UM G H M RST W V	SP513MC	S332	3¼, 4¼, 6¼, 6¼, 6¾, 8½, 8¾, 8¾	1,000-4,000	50-400	UM G H M RST W V
SI919	22		400-3,000	60-400	GHM-NRstUmVW	MP519 C	M322	6, 6½, 8½, 9½, 10%	500-2,500	50-400	UM G H M RST W V	SP516	S322	6¼, 7½, 8 ½, 8½, 8¾, 9%	1,000-4,000	50-400	UM G H M RST W V
SIZ616	8½		500-4,000	60-400	GHM-NRstUmVW	MP519 M	M322	6, 6½, 8½, 9½, 10%	500-2,500	50-400	UM G H M RST W V	SP516C	S322	6¼, 7½, 8 ½, 8½, 8¾, 9%	1,000-4,000	50-400	UM G H M RST W V
SIZ913	16		500-4,000	60-400	GHM-NRstUmVW	MP519 MC	M322	6, 6½, 8½, 9½, 10%	500-2,500	50-400	UM G H M RST W V	SP516M	S322	6¼, 7½, 8 ½, 8½, 8¾, 9%	1,000-4,000	50-400	UM G H M RST W V
SSI516	12¼		500-4,000	60-400	GHM-NRstUmVW	MP613	M333	6¼, 6¼, 6¾, 7¾, 8½, 8¾	500-2,500	50-400	UM G H M RST W V	SP516MC	S322	6¼, 7½, 8 ½, 8½, 8¾, 9%	1,000-4,000	50-400	UM G H M RST W V
SSI616	12¼, 17½		500-4,000	60-400	GHM-NRstUmVW	MP613C	M333	6¼, 6¼, 6¾, 7¾, 8½, 8¾	500-2,500	50-400	UM G H M RST W V	SP519	S322	8½, 8¾, 9%, 11%	1,000-4,000	50-400	UM G H M RST W V
SSI619	20, 23		400-3,000	60-400	GHM-NRstUmVW	MP613M	M333	6¼, 6¼, 6¾, 7¾, 8½, 8¾	500-2,500	50-400	UM G H M RST W V	SP519C	S322	8½, 8¾, 9%, 11%	1,000-4,000	50-400	UM G H M RST W V
SSI819	20		400-3,000	60-400	GHM-NRstUmVW	MP613MC	M333	6¼, 6¼, 6¾, 7¾, 8½, 8¾	500-2,500	50-400	UM G H M RST W V	SP519M	S322	8½, 8¾, 9%, 11%	1,000-4,000	50-400	UM G H M RST W V
SSI916	22		500-4,000	60-400	GHM-NRstUmVW	MP616	M322	8, 8½, 8½, 8½, 8½, 10%, 11%, 12, 12¼	500-2,500	50-400	UM G H M RST W V	SP519MC	S322	8½, 8¾, 9%, 11%	1,000-4,000	50-400	UM G H M RST W V
SSIZ516	12¼		500-4,000	60-400	GHM-NRstUmVW	MP616C	M322	8, 8½, 8½, 8½, 8½, 10%, 11%, 12, 12¼	500-2,500	50-400	UM G H M RST W V	SP613	S322	6, 8½, 12¼	1,000-4,000	50-400	UM G H M RST W V
SST1213	12¼		500-4,000	60-400	GHM-NRstUmVW							SP613C	S322	6, 8½, 12¼	1,000-4,000	50-400	UM G H M RST W V

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
QDM7313		9%, 12%	200-3,500	60-400	GHM-NRstUmVW
QDM7413		9, 9%	200-3,500	60-400	GHM-NRstUmVW
QDMI4213		7½	200-3,500	60-400	GHM-NRstUmVW
QDMI4216		9½	200-3,000	60-400	GHM-NRstUmVW
QDMI4219		9½	200-3,000	60-400	GHM-NRstUmVW
QDMI5313		10%	200-3,500	60-400	GHM-NRstUmVW
QDMI5316		10%	200-3,000	60-400	GHM-NRstUmVW
QDMS-7413		9	200-3,500	60-400	GHM-NRstUmVW
QDS4213		7	200-3,500	60-400	GHM-NRstUmVW
QDS5213		14%, 17½	200-3,500	60-400	GHM-NRstUmVW
QDS5216		9%, 12%	200-3,000	60-400	GHM-NRstUmVW
QDS6313		7, 17½	200-3,500	60-400	GHM-NRstUmVW
QDS7213		14%	200-3,500	60-400	GHM-NRstUmVW
QDSI4219		9½	200-3,000	60-400	GHM-NRstUmVW
QDSI5216		14%, 17½	200-3,000	60-400	GHM-NRstUmVW
QDSI7313		9%, 12%	200-3,500	60-400	GHM-NRstUmVW
QDSS-7313		12%	200-3,500	60-400	GHM-NRstUmVW
SHO716		16, 16%, 16½	200-3,000	60-400	GHM-NUMVW
SHO1513		7½	200-3,500	60-400	GHM-NUMVW
SHO1516		17½	200-3,000	60-400	GHM-NUMVW
SHO1616		9%, 10%, 14%, 14%	200-3,000	60-400	GHM-NUMVW
SHOSS16		8½, 10½	200-3,000	60-400	GHM-NUMVW
SHOS1616		17½, 18%	200-3,000	60-400	GHM-NUMVW
SHOSI1616		12½, 17½, 24	200-3,000	60-400	GHM-NUMVW
Varel					
VH613	M323	3½x4, 4½x5½, 5½x6½, 5½x7, 6x6½, 6½x7½	500-2,500	100-400	BGDH-NOU XR
VH713	M323	5½x6½, 5½x6½, 5½x6½, 6½x7½, 8½x10, 10½x12½, 10½x12½	500-2,500	100-400	BGDH-NOU XR
VH813	M423	7½x8½	500-2,500	100-400	BGDH-NOU XR
PDC coring bits					
Bit-Tech					
CP-440	M342	7½, 8½, 8½	300-2,000	60-120	AFG
Halliburton					
CD93	M233	6-12½	250-3,500	50-150	F
FC3643	M343	8½-12½	250-3,500	50-150	F
FC3647	M343	8½-12½	250-3,500	50-150	F
FC3743	M432	5½-12½	250-3,500	50-150	F
FC3747	M432	8½	250-2,000	50-150	F
FC3843	M433	6½-12½	250-3,500	50-150	F
FC3843A	S433	8½	250-2,500	50-150	F
FC3844	M433	8½	250-2,500	50-150	F
FC3847	M433	6½, 7½, 8½, 12½	250-2,500	50-150	F
Varel					
CB713		5½, 6, 6½, 8½, 8½	1,000-3,000	50-400	G
Surface set diamond coring bits					
Bit-Tech					
CG-300F	M623	6, 6½, 6½, 7½, 8½	400-2,500	50-500	AGIKM
CN-333G	M713	6½, 6½, 6½, 7½, 8½	400-2,500	50-500	AGMR
CN-403	M712	6, 6½, 6½, 7½, 8½	400-2,500	50-500	AGKM
Varel					
CB300	M713	8 ½	100-1,500	60-150	G
CP320	M723	5½, 6, 6½, 8½, 8½, 8½, 8½	100-1,500	60-150	G
Surface set diamond bits					
Bit-Tech					
DG-420F	M622	1½, 1½, 2½, 2½, 2½, 3½, 4½, 4½, 6½, 6½, 6½, 6½	600-3,500	60-600	ADGHIMR
DN-303	M713	4½-4½, 5½-6½	600-3,500	60-600	Custom
DN-333	M713	4½-4½, 5½-6½	600-3,500	60-600	Custom
DN-423	M722	1½, 1½, 2½, 2½, 2½, 3½, 4½, 4½, 6½, 6½, 6½, 6½	600-3,500	60-600	ADGHMNR

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
Halliburton					
TB16	M713	6½, 8½, 12½, 12½	300-3,000	80-1,000	MN
TB26	M713	3½, 3½, 5½, 6, 6½, 6½, 7½, 8½, 8½, 8½, 9½, 12½, 12½	300-3,000	80-1,000	MN
TB583	M713	6½	300-3,000	80-1,000	MN
TB593	M713	6, 6½, 6½, 8½	300-3,000	80-1,000	MN
TB117	M634	5½, 8½	300-3,000	80-1,000	IMN
TT521	M622	5½-12½	300-3,000	80-1,000	IMN
TT561	M624	4½-12½	300-3,000	80-1,000	IMN
TT593	M724	3½, 3½	300-3,000	80-1,000	IMN
Hammer bits					
Smith Bits					
H1006D	HAMM	6, 6½, 6½, 6½	250-500	40-20	AWP
H1206	HAMM	8½, 8½	250-500	40-20	AP
H1206D	HAMM	8½, 8½	250-500	40-20	AWP
H1209	HAMM	8½, 9½, 9½, 9½, 9½, 12½, 12½	300-700	40-20	AP
H1209D	HAMM	7½, 8½, 8½, 8½, 8½, 11	300-700	40-20	AWP
H1411D	HAMM	12, 12½, 12½	300-700	40-20	AWP
H1509	HAMM	8½, 10½, 11, 12½, 12½	300-600	40-20	AP
H1512	HAMM	8½, 8½, 12½	400-650	40-20	AP
Medium-Hard					
Steel tooth roller cone bits					
Baker Hughes					
RC321	321	6½, 6½, 8½, 9½	3,200-7,600	120-60	S
RC347	347	8½, 9, 10½, 12½	2,200-7,300	105-35	S
Smith Bits					
GF128	527X	8½	2,000-5,000	280-50	BGHMX
GF28B	527X	12½	2,000-5,000	280-50	BGHMWX
GF28D	527X	8½	2,000-5,000	280-50	BGHMWX
GF528	527X	8½	2,000-5,000	280-50	BGHMX
XR128	527X	6½	2,000-5,000	300-50	HMX
F27Y	527Y	7½, 8½	2,000-7,000	220-50	Y
TIX-TSK					
MH	231	3½, 4, 4½, 4½	1,500-2,500	60-40	S
MH	231	4½, 4½, 5, 5½	1,500-3,000	60-40	S
MH	231	5½, 5½, 6, 6½, 6½, 6½, 7½, 7½, 7½	2,000-4,500	100-60	S
MH	231	8½, 8½, 8½, 8½, 9½, 10½, 11, 11½, 12, 12½	2,500-5,500	100-60	S
MH	231	13½, 14½, 15, 15½, 16, 17½, 20	2,500-4,500	100-60	S
MH	231	20, 22, 23, 24, 26	2,500-4,000	100-60	S
MH-TX	237	5½, 6	2,000-4,500	90-50	S
MH-TZ	237	8½, 12½	2,500-5,500	90-50	S
MH-TZ	235	8½, 12½	2,500-5,500	80-50	S
MH-X	236	5½, 5½, 6, 6½, 7½	2,000-4,500	90-50	S
MH-X	236	8½, 8½, 8½, 8½, 9½, 10½, 11, 11½, 12, 12½	2,500-5,500	90-50	S
MH-XZ	234	8½, 12½	2,500-5,500	250-50	GMW
MH-XZ	234	16, 17½	2,500-4,000	150-50	W
MH-XZ	234	8½, 12½	2,500-5,500	80-50	S
Varel					
DT4	216S	3½, 3½, 4½, 4½, 4½, 4½, 5½, 6, 11½, 12	2,000-5,000	300-50	MW
DT4G	217S	5½, 6, 6½, 7½, 8½, 8½, 8½, 10½, 11½, 12, 12½	2,000-5,000	300-50	CMW
L2	211S	3½, 3½, 3½, 3½, 4½, 4½, 4½, 4½, 4½, 5½, 5½, 5½, 5½, 6, 6½, 6½, 6½, 6½, 7½, 8½, 8½, 8½, 26	3,000-6,000	85-35	S
HR4	214S	17½	2,000-6,250	300-50	CMW
HR4G	215S	17½	2,000-6,250	300-50	CMW
ER4G	215S	26	2,000-6,250	150-50	CGM
Insert roller cone bits					
Baker Hughes					
GX-55	637	8½	3,200-7,600	120-60	Y
GX-55R	637	7½	3,200-7,600	120-60	X
GX-55RG	637	8½, 8½	3,200-7,600	120-60	GY
MX-50	637	5½, 6, 6½, 7½	2,600-6,800	195-80	BMY
MX-55	637	6, 8½, 8½	2,900-7,400	150-75	BMY
STX-50	637	4½, 5½, 5½, 5½, 6, 6½, 6½, 6½, 6½	2,000-5,300	175-80	MX
STX-50R	637	6½	2,000-5,300	175-80	MY
VG-50	637	4½, 5, 6½	2,000-5,300	175-80	BGWY
VG-55	637	6, 8½, 8½	3,200-7,600	120-60	BGWY
VG-55M	637	4½	2,000-5,300	175-80	BGWY
VGD-50	637	5½, 5½, 6½	2,000-5,300	175-80	BGMWY

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
VGD-50RG	637	8½	3,200-7,600	120-60	BGMWY
VM-55	637	8½, 12½	2,900-7,400	150-75	BGMWY
VM-55G	637	8½	2,900-7,400	150-75	BGMWY
VMD-55	637	5½, 6, 8½, 12½	2,900-7,400	150-75	BGMWY
VMG-55	637	8½	2,900-7,400	150-75	BGMWY
VM-68G	645	14%	2,000-5,100	75-40	BGMWY
GX-66	647	8½	3,200-7,600	105-55	Y
GX-68	647	9½	3,200-7,600	105-55	Y
MX-66	647	6	2,600-6,800	130-65	BMY
STX-66	647	6½, 6½	2,000-5,300	160-80	MY
VG-66	647	6½	2,000-5,300	160-80	BGWY
VG-68	647	4½, 8½	2,000-5,300	160-80	BGWY
VG-68G	647	12½	3,200-7,600	105-55	BGMWY
VG-66	647	6½	2,000-5,300	160-80	BGMWY
VM-66	647	8½, 8½	2,900-7,400	100-50	BGMWY
VMD-66G	647	8½	2,900-7,400	100-50	BGMWY
VMD-68	647	8½	2,900-7,400	100-50	BGMWY
VMG-68	647	8½	2,900-7,400	100-50	BGMWY
Halliburton					
XT40	615	18½	4,000-7,500	35-140	GMW
QH44/QH45/Q42/QH42/Q43/XT42/Q44/QH43/Q40/QH40	617	4½-16	4,000-7,500	35-140	GMW
Q47/QH47/Q48/Q46/QH48/XT47/Q50/QH50	627	4½-14½	4,000-7,500	35-140	GMW
XT55	635	17½-28	4,000-7,500	35-140	GMW
Q55/QH55/Q52/QH57	637	5½-12½	4,000-7,500	35-140	GMW
Q69/QH69	647	8½-8½	4,000-7,500	35-140	GMW
Kingdream					
GJ635GH	635	12½	2,800-6,000	280-80	G
HA637	637	4½, 4½, 5½, 5½, 6, 6½, 6½, 7½, 8½, 8½, 8½, 9½, 12½	3,500-7,000	70-40	CGLY
HA637GH	637	6	3,500-7,000	70-40	G
HA647	647	6, 7½, 8½, 8½, 9½, 9½, 10½, 12½	3,500-7,000	70-40	GLY
HA647H	647	6, 7½, 8½, 8½, 9½, 9½, 10½, 12½	3,500-7,000	70-40	GLY
HAS637GY	637	6½, 8½, 8½	3,500-7,000	70-40	GLY
HF637H	637	6, 6½, 6½, 8½, 8½, 9½, 10½, 12½	2,000-6,000	200-40	GLY
HF647HM	647	7½, 8½, 8½, 8½, 9½, 10½, 12½	2,000-6,000	200-40	GLY
HJ637	637	8½, 9½, 12½	2,500-6,000	200-40	GLY
HJ637GH	637	8½	2,500-6,000	200-40	GY
HJS-637GLY	637	8½	2,500-6,000	200-40	GLY
MD637	637	4½, 6, 6½, 6½, 6½, 7½, 8½, 8½, 8½, 12½	3,000-7,000	220-40	HDY
MD637HX	637	7½, 8½, 8½	3,000-7,000	220-40	
MD647	647	6, 8½, 8½	3,000-7,000	220-40	DHX
ReedHycalog Bits					
JA63	637	8½	3,500-6,000	120-40	AY
R50	637	3½, 3½, 5½, 6½, 6½, 6½, 7½, 8½, 8½, 8½, 9½, 10½	3,500-6,000	120-40	YW
R60	647	6½, 7½, 12½	3,500-6,000	120-40	YW
R65	647	8½	3,500-6,00		

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb./in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb./in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb./in. diameter	Recommended rotary speed, rpm	Special features/usage	
F59Y	647Y	8%	3,000–7,000	110–50	Y	FX66/	M422	6–17½	500–3,500	40–250	MVWRst	FX65/	M424	5½–16	500–3,500	40–250	MVWRst	
F67	647Y	12¼	3,000–7,000	110–50	Y	FX66D/						FX65D/						
F67UY	647Y	8½	3,000–7,000	110–50	Y	FX75/						FX65DR/						
F67Y	647Y	7¼, 8½, 8¾, 9½, 9¾, 10%	3,000–7,000	110–50	Y	FX75R/						FX65R/						
FHK69UY	647Y	8½	3,000–7,000	110–50	BWY	MM55/						FX66/						
FHKI-	647Y	8½	3,000–7,000	110–50	BWY	MM55D/						FX66D/						
69UYD						MM56/						FX75/						
GF65YB	647Y	8½	3,000–7,000	280–50	BGHMWY	MM56D/						FX75D/						
GF65YDBD	647Y	8½	3,000–7,000	280–50	BGHMWY	MM65/						FX75R/						
GF65Y	647Y	8½	3,000–7,000	280–50	BGHMY	MM65D/						FX85/						
XR60Y	647Y	6%	2,000–6,000	270–40	HMV	MM65DR/						FX85D/						
XR65Y	647Y	6	2,000–6,000	270–40	HMV	MM66/						FX85R/						
XR68Y	647Y	6%	2,000–6,000	270–40	HMV	MM66D/						FX96/						
XRI65Y	647Y	6%	2,000–6,000	270–40	HMV	MM75D/						MM26/						
XRK65	647Y	6	2,000–6,000	270–40	BHMY	MM55R/						MM45D/						
						MM86D						MM55/						
Tercel						FX26/	M423	4¼–16	500–3,500	40–250	MVWRst	MM55D/						
G63SH	635	17½	3,000–6,000	45–85	SG	FX35/						MM56/						
P63SH	635	17½	3,000–6,000	50–120	CGW	FX35D/						MM65/						
P64FH	637	8½, 8¾, 12¼	3,000–6,000	50–120	GW	FX45/						MM65D/						
TIX-TSK						FX45D/						MM65DR/						
A60	632Y	9%, 12¼	3,000–5,500	60–40	AY	FX46/						MM65R/						
A60	632Y	15	2,500–5,000	60–40	AY	FX53D/						MM66D/						
X60G	637Y	5%, 5¾, 6, 6%	3,000–5,000	60–40	GY	FX54/						MM75/						
X60G	637Y	8½, 12¼	3,000–6,000	60–40	GY	FX55/						MM75D/						
Varel						FX55D/						MM75R/						
CM54	637x	6%, 6½, 6%	2,500–7,000	275–50	MW	FX56/						MM85/						
CM55	637Y	5½, 5¾, 6, 6½, 6¾, 6%	2,500–7,000	275–50	MW	FX56D/						MM85D/						
CM57	637Y	6%	2,500–7,000	275–50	MW	FX56R/						MM85R/						
CM67	637Y	6%	2,500–7,000	275–50	MW	FX64D/						MM95/						
HE55	637Y	8½, 11%	2,500–7,000	300–50	CMW	FX64I/						MM95D/						
HE57	637Y	7%	2,500–7,000	300–50	CMW	FX65/						MM96/						
HE67	647Y	8%, 8½, 8¾, 12¼	2,500–7,000	300–50	CMW	FX65D/						FX95D/						
PDC drill bits						FX65DR/						FX46R/	M425	6–16	500–3,500	40–250	MVWRst	
Bit-Tech						FX65R/						FX65D/						
B45	M242	6%, 6¼, 7%, 8½, 8%	400–3,000	60–600	ADGMWV	FX66/						FX75I/						
B46	M242	6%, 6¼, 7%, 8½, 8%	400–3,000	60–600	ADGMWV	FX75/						MM26						
DP-	M242	7%, 8½, 8%	200–3,000	60–600	ADGMWV	FX75D/						FX05/	M425	6–16	500–3,500	40–250	MVWRst	
440-B2U						FX75DR/						FX65D/						
HP-440-B	M342	3¼, 3¾, 3¾, 3¾, 4, 4¼, 4¼, 4¾, 4¾, 4¾, 5¾, 6, 6¼, 6¼, 6½, 6¾	200–3,000	200–1,000	ADFGHM-NWV	FX75R/						FX75D/						
HP-440-B13	M232	6, 6½, 6¾, 6¾, 6¾	200–3,000	60–600	ADGHMWW	FX84R/						FX94/						
Drill Master, Inc.						FX85/						FX95/						
M513	M232	6%	200–2,500	60–350	GHMIRSTUm	FX85D/						FX96D/						
M513	M233	6½, 8%, 8½	200–2,500	60–350	GHMIRSTUm	FX85R/						MM05/						
M513	M233	7%	200–2,500	60–400	GHMIRSTUm	FX86/						MM65D/						
M513SB	M332	8%	200–3,000	60–350	DHM-WNRRSThV	FX86R/						MM75D/						
M613	M232	6%	200–3,000	60–350	GHMIIUm	MM25/						MM94/						
M613	M233	12¼	200–2,500	60–400	GHMIRSTUm	MM45/						MM95						
M613	M332	6½, 6%	200–2,500	60–350	GHMIRSTUm	MM45D/						FX44/	M432	3¾–10%	500–3,500	40–250	MVWRst	
M613	M333	8%, 8½, 9%	200–2,500	60–400	GHMIRSTUm	MM55/						FX44D/						
M613+SB	M432	8%	200–3,000	60–350	DHM-WNRRSThV	MM55D/						FX54/						
M619	M323	12¼	200–2,500	60–400	GHMIRSTUm	MM55DR/						FX54D/						
M619	M323	17½	200–2,500	60–400	GHMIIUh	MM66/						FX54R/						
M690	M343	4%	200–3,000	60–350	GHMIIU	MM66R/						FX64/						
M690	M342	4%	200–3,000	60–350	GHMIRSTUm	MM65/						FX64D/						
M690	M342	5%	200–3,000	60–350	GHMIRSTUh	MM65D/						FX65D/						
M690	M343	7%	200–2,500	60–350	GHMIRSTUh	MM66/						FX74/						
M713	M333	7%, 8%, 8½, 8¾, 9¾, 12¼	200–2,500	60–400	GHMIRSTUm	MM66D/						FX74D/						
M713	M432	6%, 6½	200–2,500	60–350	GHMIRSTUm	MM75/						FX83/						
M713	M433	9%	200–2,500	60–400	GHMIIUh	MM75D/						FX84/						
M713+	M432	9%	200–3,000	60–350	GHMIRSTUm	MM75DR/						FX84I/						
M716	M423	17½	200–2,500	60–400	GHMIIUh	MM75R/						FX94/						
M790	M443	5%	200–3,000	60–350	GHMIRSTUm	MM76D/						MM54/						
M790	M443	6%, 6¼, 6¾, 6%	200–2,500	60–350	GHMIRSTm	MM85D/						MM54D/						
M819	M423	17½	200–2,500	60–350	GHMIIUh	MM86/						MM64/						
Halliburton						MM86D/						MM64D/						
FX35/	M422	6–17½	500–3,500	40–250	MVWRst	FX65D/						MM74D/						
FX45/						FX74D/						MM75D/						
FX46/						FX75D/						MM84D						
FX55/						FX46D						FX34D/	M433	3.615–17½	500–3,500	40–250	MVWRst	
FX55D/						FX26I/	M424	5¾–16	500–3,500	40–250	MVWRst	FX44/						
FX55R/						FX45/						FX44R/						
FX56/						FX45D/						FX54/						
FX65/						FX55/						FX54D/						
FX65D/						FX55D/						FX54R/						
FX65DR/						FX55R/						FX64/						
FX65R/						FX56/						FX64D/						
						FX56D/						FX64DR/						
						FX56R/						FX64I/						
						FX64D						FX64R/						
												FX65/						
												FX65D						

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
FX73/ FX74/ FX74D/ FX74I/ FX74R/ FX75D/ FX84/ FX84D/ FX84DI/ FX84R/ FX94/ FX94R/ FXT74D/ MM44/ MM44D/ MM54/ MM54D/ MM64/ MM64D/ MM64R/ MM74/ MM74D/ MM84/ MM84D/ MM84R/ MM94/ MM94R/ FX74DI/ MM94D	M433	3.615–17½	500–3,500	40–250	MVWRst	FX53/ FX62I/ FX63/ FX63D/ FX73/ MM63/ MM63D/ MM73/ MM73D/ MM92	M443	3¾–6¾	500–3,500	40–250	MVWRst	MI416	M123	6¼, 7¼, 8 ½	500–4,000	60–400	GHM-NRstUmVW
FX44D/ FX54/ FX54D/ FX54R/ FX64/ FX64D/ FX64DI/ FX64R/ FX74/ FX74D/ FX74DR/ FX74R/ FX75D/ FX84/ FX84D/ FX84DR/ FX84I/ FX84R/ FX94/ FX94R/ MM54D/ MM55D/ MM64/ MM64D/ MM64I/ MM74/ MM74D/ MM74R/ MM75R/ MM84/ MM84D/ MM84I	M434	5¾–12¼	500–3,500	40–250	MVWRst	FX46s/ FX46s/ FX46s/ FX46Ds/ FX46s/ FX55Ds/ FX55s/ FX56s/ FX65Ds/ FX65Rs/ FX65s/ FX66s/ FX75s/ SF56/ SF65/ SF65R	M444	6	500–3,500	40–250	MVWRst	HOX616	M223	8½, 8¾, 10¾, 12¼	500–4,000	60–400	GHM-NUmVW
FX64/ FX64D/ FX64DI/ FX64R/ FX74/ FX74D/ FX74DR/ FX74R/ FX75D/ FX84/ FX84D/ FX84DR/ FX84I/ FX84R/ FX94/ FX94R/ MM54D/ MM55D/ MM64/ MM64D/ MM64I/ MM74/ MM74D/ MM74R/ MM75R/ MM84/ MM84D/ MM84I	M435	5¾–12¼	500–3,500	40–250	MVWRst	FX46s/ FX56s/ SF56/ SF76	S421	8½	500–3,500	40–250	MVWRst	HOXS616	M223	8¾	500–4,000	60–400	GHM-NUmVW
FX53/ FX62/ FX62I/ FX63/ FX73/ FX82/ FX83/ FX92/ FX93/ FX93D/ MM53D/ MM62/ MM63/ MM73/ FX83I/ MM53	M442	3½–8¾	500–3,500	40–250	MVWRst	FX54s/ FX56s/ SF56/ SF76	S422	6½–8¾	500–3,500	40–250	MVWRst	M513	M223	4½, 4¾, 6¾	500–4,000	60–400	GHM-NRstUmVW
												M516	M223	8½, 11¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
												M616	M223	7¾, 8½, 8¾, 9¼, 10¾	500–4,000	60–400	GHM-NRstUmVW
												MA616	M223	5½, 6, 8¾, 8½	500–4,000	60–400	GHM-NRstUmVW
												MD616	M223	8¼, 8½, 9½, 12¼, 14¾	500–4,000	60–400	GHM-NRstUmVW
												MDI516	M223	6, 6¼, 6½, 6¾, 7¼, 8½, 8¾, 9¼, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MDI716	M223	8¾, 8½, 9½, 10¾, 11½, 12, 12¼, 14¾, 14¼, 16, 16½, 17½	500–4,000	60–400	GHM-NRstUmVW
												MDSI716	M223	8¾, 8½, 8¾, 8¾, 8¾, 9¼, 9½, 10¼, 10¾, 12¼, 14¾, 16, 16½	500–4,000	60–400	GHM-NRstUmVW
												MI513	M223	6¼, 6¼, 6½, 7¼, 8¾	500–4,000	60–400	GHM-NRstUmVW
												MI716	M223	6, 7¼, 8½, 9¾, 12, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MASI513	M233	7¾, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
												MDI513	M233	5¾, 6, 6¼, 6¼, 6½, 6¾, 7¼, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
												MI613	M233	6, 6¼, 6¼, 6½, 6¾, 6¾, 7¼, 8¾	500–4,000	60–400	GHM-NRstUmVW
												M716	M323	6, 8½, 9¾, 11, 12, 14¾	500–4,000	60–400	GHM-NRstUmVW
												MDI616	M323	6, 6¾, 7¼, 8¾, 8½, 8¾, 9¾, 9¾, 10½, 10¾, 11½, 12¼, 13½, 14½, 14¾, 16, 17, 17½	500–4,000	60–400	GHM-NRstUmVW
												MDI816	M323	8¾, 8½, 12¼, 13¾, 14½, 17, 17½, 18½	500–4,000	60–400	GHM-NRstUmVW
												MI616	M323	7¼, 8½, 8¾, 9¾, 10¾, 11, 12¼, 13½	500–4,000	60–400	GHM-NRstUmVW
												MDSI516	M323	6¼, 6½, 7¾, 8½, 8¾, 9¾, 9¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MV716	M323	8½, 12¼	500–4,000	60–400	DGHM-NRstUmVW
												M613	M333	6, 7½, 7¾	500–4,000	60–400	GHM-NRstUmVW
												M713	M333	5¾	500–4,000	60–400	GHM-NRstUmVW
												M813	M333	6	500–4,000	60–400	GHM-NRstUmVW
												MDI613	M333	5¼, 5½, 5¾, 5¾, 6, 6¼, 6¾, 7, 8½, 8¾, 8¾, 9, 9½, 9¾, 11½, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MDI711	M333	6¼, 6½, 6¾	500–4,500	60–400	GHM-NRstUhVW
												MDI713	M333	5¾, 6, 8½, 9½, 12¼, 14¾	500–4,000	60–400	GHM-NRstUmVW
												MDI813	M333	5¾, 8½, 9½, 11¾, 12¼, 13½, 14¼, 14¾, 16, 16½	500–4,000	60–400	GHM-NRstUmVW
												MDSI613	M333	5¾, 6, 6¼, 6¾, 7¾, 8½, 8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MDSI813	M333	8¾, 8½, 8¾, 10¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
												MI711	M333	6	500–4,500	60–400	GHM-NRstUhVW
												MI713	M333	8½	500–4,000	60–400	GHM-NRstUmVW
												MI813	M333	6¾, 12¼, 16, 17½	500–4,000	60–400	GHM-NRstUmVW
												MDSI513	M333	6¼, 6¼, 6½, 8¾	500–4,000	60–400	GHM-NRstUmVW
												M916	M423	16	500–4,000	60–400	GHM-NRstUmVW
												MDSI816	M432	8¾, 8½, 8¾, 9¾, 9¾, 12¼, 13½, 16, 17, 17½	500–4,000	60–400	GHM-NRstUmVW
												MI913	M433	7¾, 8¾, 8½, 8¾, 8¾, 11½, 12¼	500–4,000	60–400	GHM-NRstUmVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
MSI613	M433	6, 6½, 6¾, 6½, 6¾, 6¾, 7¾, 8½, 8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	MDI716		8½	500-4,000	60-400	GHM-NRstUmVW	MS613		12¼	500-4,000	60-400	GHM-NRstUmVW
MSI616	M433	6, 6½, 6¾, 7¾, 8½, 8¾, 9½, 9¾, 10¾, 11, 12¼, 13¼, 13½, 16	500-4,000	60-400	GHM-NRstUmVW	MDS516		12¼	500-4,000	60-400	GHM-NRstUmVW	MS616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW
MSI711	M433	5½, 5¾, 5¾, 6, 6½, 6¾	500-4,500	60-400	GHM-NRstUhVW	MDS616		9½, 14¾	500-4,000	60-400	GHM-NRstUmVW	MS713		12¼	500-4,000	60-400	GHM-NRstUmVW
MSI713	M433	6, 6½, 6¾, 6¾, 7¾, 8½, 8¾, 9¾, 9¾, 10¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	MDS713		6¾	500-4,000	60-400	GHM-NRstUmVW	MS716		17¼	500-4,000	60-400	GHM-NRstUmVW
MSI716	M433	7½, 7¾, 8½, 8¾, 9¾, 12, 12¼, 16, 17½	500-4,000	60-400	GHM-NRstUmVW	MDS716		8½, 12¼, 16	500-4,000	60-400	GHM-NRstUmVW	MS816		8¾	500-4,000	60-400	GHM-NRstUmVW
MSI813	M433	6¼, 6¾, 8½, 8¾, 9¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	MDS816		12¼	500-4,000	60-400	GHM-NRstUmVW	MSDI616		12¼	500-4,000	60-400	GHM-NRstUmVW
S616	S223	16, 17½	500-4,000	60-400	GHM-NRstUmVW	MDSI413		6¾, 6¾, 7¾	500-4,000	60-400	GHM-NRstUmVW	MSDI713		6½	500-4,000	60-400	GHM-NRstUmVW
SDI616	S223	8½, 8¾, 11¾, 12¼, 13½, 17½	500-4,000	60-400	GHM-NRstUmVW	MDSI513		6, 6¾, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSI1013		12	500-4,000	60-400	GHM-NRstUmVW
M20		6¾, 6¾	500-4,500	60-400	GHM-NRstUhVW	MDSI516		6, 6¾, 6¾, 7¾, 8½, 8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	MSI316		8½	500-4,000	60-400	GHM-NRstUmVW
M413		7¾	500-4,000	60-400	GHM-NRstUmVW	MDSI711		8½	500-4,500	60-400	GHM-NRstUhVW	MSI413		6, 6¾	500-4,000	60-400	GHM-NRstUmVW
M511		4½	500-4,500	60-400	GHM-NRstUhVW	MDSI713		5¾, 5¾, 6, 7¾, 8½, 8¾, 8¾, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSI611		6¾	500-4,500	60-400	GHM-NRstUhVW
M711		5¾	500-4,500	60-400	GHM-NRstUhVW	MDSI811		6½	500-4,500	60-400	GHM-NRstUhVW	MSI616L		8½	500-4,000	60-400	GHM-NRstUmVW
M816		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSI816		8¾, 8¾, 12¼, 17½, 18¾, 18¾	500-4,000	60-400	GHM-NRstUmVW	MSI811		6½	500-4,500	60-400	GHM-NRstUhVW
MA32		6¾	500-4,000	60-400	GHM-NRstUmVW	MDSI913		8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MSI913		8¾	500-4,000	60-400	GHM-NRstUmVW
MA613		6¾	500-4,000	60-400	GHM-NRstUmVW	MDSI916		8¾	500-4,000	60-400	GHM-NRstUmVW	MSI916		16	500-4,000	60-400	GHM-NRstUmVW
MA813		6	500-4,000	60-400	GHM-NRstUmVW	MDSIR516		6¾	500-4,000	60-400	GHM-NRstUmVW	MSIR513		6¾	500-4,000	60-400	GHM-NRstUmVW
MA816		8½	500-4,000	60-400	GHM-NRstUmVW	MDSIR613		8¾	500-4,000	60-400	GHM-NRstUmVW	MSIR613		6¾, 6¾	500-4,000	60-400	GHM-NRstUmVW
MA89		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIR713		6¾, 6¾, 8½	500-4,000	60-400	GHM-NRstUmVW	MSIR616		9¾	500-4,000	60-400	GHM-NRstUmVW
MA916		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIR813		8½	500-4,000	60-400	GHM-NRstUmVW	MSIR713		6¾	500-4,000	60-400	GHM-NRstUmVW
MAI616		5¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ513		8½	500-4,000	60-400	GHM-NRstUmVW	MSIZ413		6¾	500-4,000	60-400	GHM-NRstUmVW
MAS1613		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ516		8¾	500-4,000	60-400	GHM-NRstUmVW	MSIZ513		6¾, 6¾	500-4,000	60-400	GHM-NRstUmVW
MAS1716		7¾, 8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ613		5¾, 6, 7¾	500-4,000	60-400	GHM-NRstUmVW	MSIZ516		8½	500-4,000	60-400	GHM-NRstUmVW
MASIZ513		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ616		8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	MSIZ613		6¾, 6¾, 7¾	500-4,000	60-400	GHM-NRstUmVW
MASIZ613		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ713		5¾, 8½	500-4,000	60-400	GHM-NRstUmVW	MSIZ616		8½, 8¾, 9¾, 12¼	500-4,000	60-400	GHM-NRstUmVW
MAX89		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ716		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	MSIZ713		8½	500-4,000	60-400	GHM-NRstUmVW
MAZ616		8½	500-4,000	60-400	GHM-NRstUmVW	MDSIZ811		6½	500-4,500	60-400	GHM-NRstUmVW	MSIZ716		8½	500-4,000	60-400	GHM-NRstUmVW
MAZ89		8¾	500-4,000	60-400	GHM-NRstUmVW	MDSIZ813		12¼	500-4,000	60-400	GHM-NRstUmVW	MSIZ813		8½	500-4,000	60-400	GHM-NRstUmVW
MD611		6¾	500-4,500	60-400	GHM-NRstUhVW	MDSIZ816		12¼	500-4,000	60-400	GHM-NRstUmVW	MSIZ816		16	500-4,000	60-400	GHM-NRstUmVW
MD613		6¾, 8½	500-4,000	60-400	GHM-NRstUmVW	MDSIZ913		8¾	500-4,000	60-400	GHM-NRstUmVW	MST913		5¾	500-4,000	60-400	GHM-NRstUmVW
MD713		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	MDSXI613		8½	500-4,000	60-400	GHM-NRstUmVW	MSXI613		8½	500-4,000	60-400	GHM-NRstUmVW
MD716		12	500-4,000	60-400	GHM-NRstUmVW	MDSXI616		12¼	500-4,000	60-400	GHM-NRstUmVW	MSXI616		8½	500-4,000	60-400	GHM-NRstUmVW
MD813		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW	MDSXI713		8½	500-4,000	60-400	GHM-NRstUmVW	MSXI716		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW
MDCI516		8½	500-4,000	60-400	GHM-NRstUmVW	MDSXI813		8½	500-4,000	60-400	GHM-NRstUmVW	MSXI2616		8½	500-4,000	60-400	GHM-NRstUmVW
MDCRI713		8½	500-4,000	60-400	GHM-NRstUmVW	MDSX-IZ713		8½	500-4,000	60-400	GHM-NRstUmVW	MSZ616		8½, 12¼	500-4,000	60-400	GHM-NRstUmVW
MDCRI716		10¾	500-4,000	60-400	GHM-NRstUmVW	MDX516		8½	500-4,000	60-400	GHM-NRstUmVW	MSZ713		5¾	500-4,000	60-400	GHM-NRstUmVW
MDI313		6½, 8½	500-4,000	60-400	GHM-NRstUmVW	MDX613		6¾	500-4,000	60-400	GHM-NRstUmVW	MSZ716		12	500-4,000	60-400	GHM-NRstUmVW
MDI413		4¾, 6, 6¾, 6¼, 6¾, 7¾	500-4,000	60-400	GHM-NRstUmVW	MDX713		8½	500-4,000	60-400	GHM-NRstUmVW	MV616		6¾	500-4,000	60-400	GHM-NRstUmVW
MDI511		6¾, 6¾	500-4,500	60-400	GHM-NRstUhVW	MI413		6½	500-4,000	60-400	GHM-NRstUmVW	MXI616		8½	500-4,000	60-400	GHM-NRstUmVW
MDI611		6, 6¾, 6¾, 8½, 8¾	500-4,500	60-400	GHM-NRstUhVW	MI811		6	500-4,500	60-400	GHM-NRstUhVW	MZ713		5¾	500-4,000	60-400	GHM-NRstUmVW
MDI811		6½	500-4,500	60-400	GHM-NRstUhVW	MI916		16	500-4,000	60-400	GHM-NRstUmVW	MZ716		12	500-4,000	60-400	GHM-NRstUmVW
MDI916		17½	500-4,000	60-400	GHM-NRstUmVW	MIZ516		8¾	500-4,000	60-400	GHM-NRstUmVW	S413		3¾	500-4,000	60-400	GHM-NRstUmVW
MDIZ513		6¾	500-4,000	60-400	GHM-NRstUmVW	MIZ613		7¾	500-4,000	60-400	GHM-NRstUmVW	S613		17½	500-4,000	60-400	GHM-NRstUmVW
MDIZ516		7¾, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MIZ616		8½, 8¾, 12¼	500-4,000	60-400	GHM-NRstUmVW	SD516		11¾	500-4,000	60-400	GHM-NRstUmVW
MDIZ611		6¾	500-4,000	60-400	GHM-NRstUhVW	MIZ716		8½	500-4,000	60-400	GHM-NRstUmVW	SDAI513		8½	500-4,000	60-400	GHM-NRstUmVW
MDIZ613		6, 8¾	500-4,000	60-400	GHM-NRstUmVW	MIZ913		8½	500-4,000	60-400	GHM-NRstUmVW	SDI313		8½, 8¾	500-4,000	60-400	GHM-NRstUmVW
MDIZ616		7¾, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW	MR613		5¾	500-4,000	60-400	GHM-NRstUmVW	SDI413		6¾, 7¾, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW
MDIZ713		8½	500-4,000	60-400	GHM-NRstUmVW	MRS681		8¾	500-4,000	60-400	GHM-NRstUmVW	SDI416		7¾	500-4,000	60-400	GHM-NRstUmVW
						MS413		6¾	500-4,000	60-400	GHM-NRstUmVW	SDI511		6¾	500-4,500	60-400	GHM-NRstUmVW
						MS516		8½	500-4,000	60-400	GHM-NRstUmVW	SDI513		6, 6¾, 6¾, 6½, 6¾, 7¾, 8½, 8¾	500-4,000	60-400	GHM-NRstUmVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
SDI516		7%, 8%, 8%, 8%, 8%, 9%, 11%	500-4,000	60-400	GHM-NRStUmVW	MD616C	M422	6, 7%, 8%, 12%, 16, 17½	500-4,000	50-400	UH G H M RST W V N	MP813	M432	5%, 6, 6%, 7%, 8½, 8%, 12¼	500-2,500	50-400	UH G H M RST W V N
SDI611		6, 6¼, 6½, 6¾, 7½, 8½, 8¾, 9%	500-4,500	60-400	GHM-NRStUHVW	MD616M	M422	6, 7%, 8%, 12¼, 16, 17½	500-4,000	50-400	UH G H M RST W V N	MP813C	M432	5%, 6, 6%, 7%, 8½, 8%, 12¼	500-2,500	50-400	UH G H M RST W V N
SDI613		8½, 8¾, 17½	500-4,000	60-400	GHM-NRStUmVW	MD616MC	M422	6, 7%, 8%, 12¼, 16, 17½	500-4,000	50-400	UH G H M RST W V N	MP813M	M432	5%, 6, 6%, 7%, 8½, 8%, 12¼	500-2,500	50-400	UH G H M RST W V N
SDI711		6, 6¼, 6½, 6¾	500-4,500	60-400	GHM-NRStUHVW	MD619	M422	7%, 8½, 12¼, 16, 17½	1,000-4,000	50-400	UH G H M RST W V N	MP813MC	M432	5%, 6, 6%, 7%, 8½, 8%, 12¼	500-2,500	50-400	UH G H M RST W V N
SDI713		6¼, 6¾, 7%, 8½, 8¾	500-4,000	60-400	GHM-NRStUmVW	MD619C	M422	7%, 8½, 12¼, 16, 17½	1,000-4,000	50-400	UH G H M RST W V N	MP816	M422	8½, 10%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDI716		8½	500-4,000	60-400	GHM-NRStUmVW	MD619M	M422	7%, 8½, 12¼, 16, 17½	1,000-4,000	50-400	UH G H M RST W V N	MP816C	M422	8½, 10%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDI816		17½, 26	500-4,000	60-400	GHM-NRStUmVW	MD619MC	M422	7%, 8½, 12¼, 16, 17½	1,000-4,000	50-400	UH G H M RST W V N	MP816M	M422	8½, 10%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDIZ513		6¼, 8½	500-4,000	60-400	GHM-NRStUmVW	MD713	M432	5%, 6, 6½, 6%	500-4,000	50-400	UH G H M RST W V N	MP816MC	M422	8½, 10%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDIZ516		8½	500-4,000	60-400	GHM-NRStUmVW	MD713C	M432	5%, 6, 6½, 6%	500-4,000	50-400	UH G H M RST W V N	MP819	M422	5%, 6, 6¾, 8%, 8½, 9%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDIZ611		8¾	500-4,500	60-400	GHM-NRStUHVW	MD713M	M432	5%, 6, 6½, 6%	500-4,000	50-400	UH G H M RST W V N	MP819C	M422	5%, 6, 6¾, 8%, 8½, 9%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDSI516		11%	500-4,000	60-400	GHM-NRStUmVW	MD713MC	M432	5%, 6, 6½, 6%	500-4,000	50-400	UH G H M RST W V N	MP819M	M422	5%, 6, 6¾, 8%, 8½, 9%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDSI616		8½, 11%, 12¼, 13½	500-4,000	60-400	GHM-NRStUmVW	MD716	M422	6, 8%, 8½	500-4,000	50-400	UH G H M RST W V N	MP819MC	M422	5%, 6, 6¾, 8%, 8½, 9%, 12¼	500-3,000	50-400	UH G H M RST W V N
SDSI713		8½	500-4,000	60-400	GHM-NRStUmVW	MD716C	M422	6, 8%, 8½	500-4,000	50-400	UH G H M RST W V N	MR613	M432	5%, 6, 6¼, 6¾, 8, 8½, 10½, 11%, 15½	1,000-4,000	50-400	UH G H M RST W V N
SDSI716		17½	500-4,000	60-400	GHM-NRStUmVW	MD716M	M422	6, 8%, 8½	500-4,000	50-400	UH G H M RST W V N	MR613C	M432	5%, 6, 6¼, 6¾, 8, 8½, 10½, 11%, 15½	1,000-4,000	50-400	UH G H M RST W V N
SDSI816		17, 17½	500-4,000	60-400	GHM-NRStUmVW	MD716MC	M422	6, 8%, 8½	500-4,000	50-400	UH G H M RST W V N	MR613M	M432	5%, 6, 6¼, 6¾, 8, 8½, 10½, 11%, 15½	1,000-4,000	50-400	UH G H M RST W V N
SDXIZ513		8½	500-4,000	60-400	GHM-NRStUmVW	MD719	M422	8½	500-4,000	50-400	UH G H M RST W V N	MR616	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI416		8½	500-4,000	60-400	GHM-NRStUmVW	MD719C	M422	8½	500-4,000	50-400	UH G H M RST W V N	MR616C	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI513		6¼, 6¼, 7%	500-4,000	60-400	GHM-NRStUmVW	MD719M	M422	8½	500-4,000	50-400	UH G H M RST W V N	MR616M	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI516		6¼, 12¼	500-4,000	60-400	GHM-NRStUmVW	MD719MC	M422	8½	500-4,000	50-400	UH G H M RST W V N	MR616MC	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI613		8¾	500-4,000	60-400	GHM-NRStUmVW	MP609	M443	4½, 4¾, 6, 6½, 6¾, 6¾	500-2,500	50-400	UH G H M RST W V N	MR616C	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI616		7¾, 8½, 8¾, 11, 12¼, 13½, 16	500-4,000	60-400	GHM-NRStUmVW	MP609C	M443	4½, 4¾, 6, 6½, 6¾, 6¾	500-2,500	50-400	UH G H M RST W V N	MR616M	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI816		26	500-4,000	60-400	GHM-NRStUmVW	MP609M	M443	4½, 4¾, 6, 6½, 6¾, 6¾	500-2,500	50-400	UH G H M RST W V N	MR616MC	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI913		16	500-4,000	60-400	GHM-NRStUmVW	MP609MC	M443	4½, 4¾, 6, 6½, 6¾, 6¾	500-2,500	50-400	UH G H M RST W V N	MR616M	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SI916		12¼	500-4,000	60-400	GHM-NRStUmVW	MP613	M432	4½, 5%, 6, 6½, 7, 7½, 8½, 8¾, 10½, 11%, 12¼, 15½	500-3,000	50-400	UH G H M RST W V N	MR616M	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SIZ616		8½	500-4,000	60-400	GHM-NRStUmVW	MP613C	M432	4½, 5%, 6, 6½, 7, 7½, 8½, 8¾, 10½, 11%, 12¼, 15½	500-3,000	50-400	UH G H M RST W V N	MR616MC	M422	6, 8½, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
SIZ913		16	500-4,000	60-400	GHM-NRStUmVW	MP613MC	M432	4½, 5%, 6, 6½, 7, 7½, 8½, 8¾, 10½, 11%, 12¼, 15½	500-3,000	50-400	UH G H M RST W V N	MR619	M422	6, 8½, 9%	1,000-4,000	50-400	UH G H M RST W V N
SSI516		12¼	500-4,000	60-400	GHM-NRStUmVW	MP616	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR619C	M422	6, 8½, 9%	1,000-4,000	50-400	UH G H M RST W V N
SSI616		12¼, 17½	500-4,000	60-400	GHM-NRStUmVW	MP616C	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR619M	M422	6, 8½, 9%	1,000-4,000	50-400	UH G H M RST W V N
SSI916		22	500-4,000	60-400	GHM-NRStUmVW	MP616M	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR619MC	M422	6, 8½, 9%	1,000-4,000	50-400	UH G H M RST W V N
SSIZ516		12¼	500-4,000	60-400	GHM-NRStUmVW	MP616MC	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR713	M432	5%, 5%, 6½, 8½	1,000-4,000	50-400	UH G H M RST W V N
SST1213		12¼	500-4,000	60-400	GHM-NRStUmVW	MP616M	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR713C	M432	5%, 5%, 6½, 8½	1,000-4,000	50-400	UH G H M RST W V N
SST913		6, 8½	500-4,000	60-400	GHM-NRStUmVW	MP616MC	M422	5%, 6, 6½	500-3,000	50-400	UH G H M RST W V N	MR713M	M432	5%, 5%, 6½, 8½	1,000-4,000	50-400	UH G H M RST W V N
SXI616		8½, 12¼	500-4,000	60-400	GHM-NRStUmVW	MP619	M431	7%, 12¼, 17½	500-2,500	50-400	UH G H M RST W V N	MR713MC	M432	5%, 5%, 6½, 8½	1,000-4,000	50-400	UH G H M RST W V N
TBR5613		6, 7%, 8½, 8¾	500-4,000	60-400	GHM-NRStUmVW	MP619C	M431	7%, 12¼, 17½	500-2,500	50-400	UH G H M RST W V N	MR716	M422	6, 8½, 8¾, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
VIS416		8½	500-4,000	60-400	GHM-NRStUmVW	MP619M	M431	7%, 12¼, 17½	500-2,500	50-400	UH G H M RST W V N	MR716C	M422	6, 8½, 8¾, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
VIS516		8½	500-4,000	60-400	GHM-NRStUmVW	MP619MC	M431	7%, 12¼, 17½	500-2,500	50-400	UH G H M RST W V N	MR716M	M422	6, 8½, 8¾, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
VIS613		8¾	500-4,000	60-400	GHM-NRStUmVW	MP713	M432	5%, 6, 6½, 8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	UH G H M RST W V N	MR716MC	M422	6, 8½, 8¾, 12¼, 16	1,000-4,000	50-400	UH G H M RST W V N
VM516		8¾	500-4,000	60-400	GHM-NRStUmVW	MP713C	M432	5%, 6, 6½, 8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	UH G H M RST W V N	MR813	M432	5%, 6, 8%, 8½	1,000-4,000	50-400	UH G H M RST W V N
VS516		11%, 11%, 12	500-4,000	60-400	GHM-NRStUmVW	MP713M	M432	5%, 6, 6½, 8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	UH G H M RST W V N	MR813C	M432	5%, 6, 8%, 8½	1,000-4,000	50-400	UH G H M RST W V N
Tercel						MP713MC	M432	5%, 6, 6½, 8½, 8¾, 9%, 10%, 12¼	500-2,500	50-400	UH G H M RST W V N	MR813M	M432	5%, 6, 8%, 8½	1,000-4,000	50-400	UH G H M RST W V N
MD613	M433	6, 8½, 12¼	1,000-4,000	50-350	UH G H M RST W V N	MP716	M422	8%, 8½, 10%, 12¼, 16	500-3,000	50-400	UH G H M RST W V N	MR813MC	M432	5%, 6, 8%, 8½	1,000-4,000	50-400	UH G H M RST W V N
MD613C	M433	6, 8½, 12¼	1,000-4,000	50-350	UH G H M RST W V N	MP716C	M422	8%, 8½, 10%, 12¼, 16	500-3,000	50-400	UH G H M RST W V N	MR816	M422	8½, 10%, 12, 12¼, 14%, 16	1,000-4,000	50-400	UH G H M RST W V N
MD613C	M432	5%, 6, 6¼, 6½, 8½	500-3,000	50-400	UH G H M RST W V N	MP716M	M422	8%, 8½, 10%, 12¼, 16	500-3,000	50-400	UH G H M RST W V N	MR816C	M422	8½, 10%, 12, 12¼, 14%, 16	1,000-4,000	50-400	UH G H M RST W V N
MD613M	M433	6, 8½, 12¼	1,000-4,000	50-350	UH G H M RST W V N	MP716MC	M422	8%, 8½, 10%, 12¼, 16	500-3,000	50-400	UH G H M RST W V N	MR816M	M422	8½, 10%, 12, 12¼, 14%, 16	1,000-4,000	50-400	UH G H M RST W V N
MD613M	M432	5%, 6, 6¼, 6½, 8½	500-3,000	50-400	UH G H M RST W V N	MP719	M422	6, 8½, 12¼, 16	500-2,500	50-400	UH G H M RST W V N	MR816MC	M422	8½, 10%, 12, 12¼, 14%, 16	1,000-4,000	50-400	UH G H M RST W V N
MD613MC	M433	6, 8½, 12¼	1,000-4,000	50-350	UH G H M RST W V N	MP719C	M422	6, 8½, 12¼, 16	500-2,500	50-400	UH G H M RST W V N	MR819	M422	8½, 12, 12¼	1,000-4,000	50-400	UH G H M RST W V N
MD613MC	M432	5%, 6, 6¼, 6½, 8½	500-3,000	50-400	UH G H M RST W V N	MP719M	M422	6, 8½, 12¼, 16	500-2,500	50-400	UH G H M RST W V N	MR819C	M422	8½, 12, 12¼	1,000-4,000	50-400	UH G H M RST W V N
MD616	M422	6, 7%, 8½, 12¼, 16, 17½	500-4,000	50-400	UH G H M RST W V N	MP719MC	M422	6, 8½, 12¼, 16	500-2,500	50-400	UH G H M RST W V N	MR819M	M422	8½, 12, 12¼	1,000-4,000	50-400	UH G H M RST W V N

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
MR819MC	M422	8½, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N
MSD619	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SD619	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SD619C	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SD619MC	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SD713	S434	5½	1,000–4,000	50–400	UH G H M RST W V
SD713C	S434	5½	1,000–4,000	50–400	UH G H M RST W V
SD713M	S434	5½	1,000–4,000	50–400	UH G H M RST W V
SD713MC	S434	5½	1,000–4,000	50–400	UH G H M RST W V
SD716	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SD716C	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SD716M	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SD716MC	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SD719	S424	12¼	1,000–4,000	50–400	UH G H M RST W V
SD719C	S424	12¼	1,000–4,000	50–400	UH G H M RST W V
SD719M	S424	12¼	1,000–4,000	50–400	UH G H M RST W V
SD719MC	S424	12¼	1,000–4,000	50–400	UH G H M RST W V
SD816	S422	8½, 12	1,000–4,000	50–400	UH G H M RST W V
SD816C	S422	8½, 12	1,000–4,000	50–400	UH G H M RST W V
SD816M	S422	8½, 12	1,000–4,000	50–400	UH G H M RST W V
SD816MC	S422	8½, 12	1,000–4,000	50–400	UH G H M RST W V
SD819	S322	12, 12¼	1,000–4,000	50–400	UM G H M RST W V
SD819C	S422	8½, 8 ½, 9½, 10%	1,000–4,000	50–400	UH G H M RST W V
SD819MC	S322	12, 12¼	1,000–4,000	50–400	UM G H M RST W V
SD819C	S422	8½, 8 ½, 9½, 10%	1,000–4,000	50–400	UH G H M RST W V
SD819M	S322	12, 12¼	1,000–4,000	50–400	UM G H M RST W V
SD819MC	S422	8½, 8 ½, 9½, 10%	1,000–4,000	50–400	UH G H M RST W V
SD819MC	S322	12, 12¼	1,000–4,000	50–400	UM G H M RST W V
SD913	S432	6½, 6¾, 8½	1,000–4,000	50–400	UH G H M RST W V
SD913C	S432	6½, 6¾, 8½	1,000–4,000	50–400	UH G H M RST W V
SD913M	S432	6½, 6¾, 8½	1,000–4,000	50–400	UH G H M RST W V
SD913MC	S432	6½, 6¾, 8½	1,000–4,000	50–400	UH G H M RST W V
SP613	S432	4½, 5½, 5¾, 5½, 6, 6½, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP613C	S432	4½, 5½, 5¾, 5½, 6, 6½, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP613M	S432	4½, 5½, 5¾, 5½, 6, 6½, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP613MC	S432	4½, 5½, 5¾, 5½, 6, 6½, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP619	S422	6, 6¼, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP619C	S422	6, 6¼, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP619M	S422	6, 6¼, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP619MC	S422	6, 6¼, 6¾	1,000–4,000	50–400	UH G H M RST W V
SP713	S434	5½, 6	1,000–4,000	50–400	UH G H M RST W V
SP713C	S434	5½, 6	1,000–4,000	50–400	UH G H M RST W V
SP713M	S434	5½, 6	1,000–4,000	50–400	UH G H M RST W V
SP713MC	S434	5½, 6	1,000–4,000	50–400	UH G H M RST W V
SP813	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP813C	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP813M	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP813MC	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP813M	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP813MC	S432	5½, 5¾, 5¾, 5¾, 6, 6½, 8½, 8½, 9¼, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP816	S422	9½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP816C	S422	9½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP816M	S422	9½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP816MC	S422	9½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SP819	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SP819C	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SP819M	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SP819MC	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V
SR613	S432	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR613C	S432	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR613M	S432	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR613MC	S432	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR616	S421	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR616C	S421	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR616M	S421	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR616MC	S421	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR619	S422	8½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SR619C	S422	8½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SR619M	S422	8½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SR619MC	S422	8½, 9¾	1,000–4,000	50–400	UH G H M RST W V
SR713	S433	6, 6¼, 8½	1,000–4,000	50–400	UH G H M RST W V
SR713C	S433	6, 6¼, 8½	1,000–4,000	50–400	UH G H M RST W V
SR713M	S433	6, 6¼, 8½	1,000–4,000	50–400	UH G H M RST W V
SR713MC	S433	6, 6¼, 8½	1,000–4,000	50–400	UH G H M RST W V
SR716	S423	8½	1,000–4,000	50–400	UH G H M RST W V
SR716C	S423	8½	1,000–4,000	50–400	UH G H M RST W V
SR716M	S423	8½	1,000–4,000	50–400	UH G H M RST W V
SR716MC	S423	8½	1,000–4,000	50–400	UH G H M RST W V
SR813	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR813C	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR813M	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR813MC	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR816	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR816C	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR816M	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR816MC	S423	8½, 12¼	1,000–4,000	50–400	UH G H M RST W V
SR819	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SR819C	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SR819M	S422	8½	1,000–4,000	50–400	UH G H M RST W V
SR819MC	S422	8½	1,000–4,000	50–400	UH G H M RST W V
Uiterra					
U513M	M123, M124, M132, M133, M134, M232, M233, M332, M333, M334, M432, M433	5½, 6, 6¼, 6¼, 6½, 6¾, 7¾, 8½, 8½, 9¾	500–4,000	Variable	BCDEFGSU
U516M	M122, M222, M223, M224, M233, M332, M422, M423, M424	6, 6¼, 6¼, 6¼, 6¾, 7¾, 8½, 8½, 9½, 9½, 12¼	500–4,000	Variable	BCDEFGSU
U519M	M123, M132, M223, M333, M334, M423	6¼, 7¾, 8½, 8½, 9½, 9½, 12¼	500–4,000	Variable	BCDEFGSU
U609M	M443, M444	4½, 4½, 6	500–4,000	Variable	BCDEFGSU
U611M	M233, M332, M333	4½, 4½, 6, 6¼	500–4,000	Variable	BCDEFGSU
U613M	M133, M232, M233, M234, M332, M333, M334, M432, M433, M434	4½, 4½, 5½, 6, 6¼, 6¼, 6¾, 6¾, 7¾, 8½, 8½, 9½, 12¼	500–4,000	Variable	BCDEFGSU
U616M	M123, M222, M223, M224, M322, M323, M324, M422, M423, M424, M432, M433, M434	6½, 6½, 6¾, 7¾, 8½, 8½, 8½, 9½, 10½, 11, 12, 12¼, 13½, 14¾	500–4,000	Variable	BCDEFGSU
U619M	M123, M124, M223, M224, M323, M423, M432, M433	7¾, 8½, 8½, 10½, 11, 12¼, 13½	500–4,000	Variable	BCDEFGSU
U709M	M443	6.5	500–4,000	Variable	BCDEFGSU
U711M	M223, M232, M333, M434	5½, 6½, 6¾	500–4,000	Variable	BCDEFGSU
U713M	M223, M232, M233, M234, M243, M333, M334, M423, M434	5½, 6, 6¾, 6¾, 6¾, 7¾, 8½, 8½, 8½, 12¼	500–4,000	Variable	BCDEFGSU
U716M	M223, M323, M324, M423, M424, M433, M443	7¾, 8½, 8½, 8½, 9½, 10½, 12, 12¼, 16	500–4,000	Variable	BCDEFGSU
U719M	M323	12¼	500–4,000	Variable	BCDEFGSU
U809M	M342, M443	6½, 6½, 7¾, 8½	500–4,000	Variable	BCDEFGSU
U811M	M333, M424, M433, M443	6½, 7¾, 8½, 8½	500–4,000	Variable	BCDEFGSU
U813M	M233, M333, M423, M433, M434	6, 6¼, 6¾, 7¾, 8½, 9½, 10½, 11, 12¼	500–4,000	Variable	BCDEFGSU
U816M	M323, M324, M424	8½, 8½, 9½, 9½, 12¼, 17½	500–4,000	Variable	BCDEFGSU
U909M	M442, M443	6½, 6¾	500–4,000	Variable	BCDEFGSU
U913M	M433, M434	8¼, 9¾	500–4,000	Variable	BCDEFGSU
U916M	M323	7.875	500–4,000	Variable	BCDEFGSU
U513S	S132, S232, S233, S332, S333, S432	4½, 6½, 6¾, 6¾, 7¾, 8½, 8½, 9½, 10½, 12¼, 12¾	500–4,000	Variable	BCDEFGSU

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
U516S	S122, S123, S222, S233, S323, S422	6½, 6¾, 7¼, 8½, 8¾, 11, 12¼, 13¾, 14¾	500-4,000	Variable	BCDEFGSU
U519S	S122, S123, S222, S233, S323, S422	7¼, 8½, 8¾, 9½, 12¼, 17½	500-4,000	Variable	BCDEFGSU
U611S	S132, S133, S233, S332, S432	4¾, 6, 6½, 6¾	500-4,000	Variable	BCDEFGSU
U613S	S131, S132, S232, S233, S332, S432	6¼, 6¾, 6¾, 7¾, 8¾, 8¾	500-4,000	Variable	BCDEFGSU
U616S	S122, S222, S233, S323, S422, S423, S424	7¼, 8½, 8¾, 9½, 11, 12¼, 14¾, 17½	500-4,000	Variable	BCDEFGSU
U619S	S122, S222, S233, S323	8½, 9½, 12¼	500-4,000	Variable	BCDEFGSU
U711S	S232	6¼, 6¾	500-4,000	Variable	BCDEFGSU
U716S	S424	8½	500-4,000	Variable	BCDEFGSU
U816S	S422	16	500-4,000	Variable	BCDEFGSU
Varel					
R713	M433	5½, 5¾, 5¾, 6, 6¾, 6¾, 6¾, 7¾, 8¾, 8¾, 8¾, 9½, 9½, 10½, 11½, 12¼	1,000-3,500	50-400	BGTP-DG1G2G3L-HNOLXR
R813	M433	5½, 5¾, 6, 6¾, 6¾, 6¾, 7¾, 7¾, 8¾, 8¾, 8¾, 9½, 9½, 10½, 11½, 12¼	1,000-3,500	50-400	BGTP-DG1G2G3L-HNOLXR
R716	M423	7¾, 8¾, 8¾, 8¾, 8¾, 9½, 9½, 10½, 10½, 11, 11½, 12, 12¼, 13¾, 14¾, 16, 17½	1,000-3,500	50-400	BGTP-DG1G2G3L-HNOLXR
R816	M423	7¾, 8¾, 8¾, 9½, 9½, 12, 12¼, 16, 17, 17½	1,000-3,500	50-400	BGTP-DG1G2G3L-HNOLXR
Bi-center PDC drill bits					
Drill Master, Inc.					
MBC7-131113	M434	14½ x 12¼	200-1,700	60-400	RSTMWU
ReedHycalog Bits					
CSD6411	S433	14½ x 17½, 8½ x 9½	3,000-3,500	80-200	GHMWU
CSD6413	S433	17 x 20, 18 x 22, 19¼ x 23¼	3,000-3,500	80-200	GHMWU
PSD6613		12¼ x 13¾	3,000-3,501	80-201	GHMWU
SR7113	S433	12 x 14¾	3,000-3,500	80-200	GHMWU
Smith Bits					
SH0516	S223	10½, 13½, 17½	200-3,000	60-400	GHM-NRstUmVW
QDS7313	S333	8½, 9½, 11, 12¼, 20	200-3,500	60-400	GHM-NRstUmVW
OHWSD-1513		8½	200-3,500	60-400	GHM-NRstUmVW
QDM4213		7, 7½	200-3,500	60-400	GHM-NRstUmVW
QDM7313		9½, 12¼	200-3,500	60-400	GHM-NRstUmVW
QDM7413		9, 9½	200-3,500	60-400	GHM-NRstUmVW
QDM4213		7½	200-3,500	60-400	GHM-NRstUmVW
QDM4216		9½	200-3,000	60-400	GHM-NRstUmVW
QDM5313		10¾	200-3,500	60-400	GHM-NRstUmVW
QDM5316		10¾	200-3,000	60-400	GHM-NRstUmVW
QDM5-7413		9	200-3,500	60-400	GHM-NRstUmVW
QDS4213		7	200-3,500	60-400	GHM-NRstUmVW
QDS5213		14¾, 17½	200-3,500	60-400	GHM-NRstUmVW
QDS5216		9½, 12¼	200-3,000	60-400	GHM-NRstUmVW
QDS6313		7, 17½	200-3,500	60-400	GHM-NRstUmVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
QDS7213		14¾	200-3,500	60-400	GHM-NRstUmVW
QDSI5216		14¾, 17½	200-3,000	60-400	GHM-NRstUmVW
QDSI7313		9½, 12¼	200-3,500	60-400	GHM-NRstUmVW
QDSSI-7313		12¼	200-3,500	60-400	GHM-NRstUmVW
SH0716		16, 16¾, 16¾	200-3,000	60-400	GHM-NUmVW
SH0I513		7½	200-3,500	60-400	GHM-NUmVW
SH0I516		17½	200-3,000	60-400	GHM-NUmVW
SH0I616		9½, 10¾, 14¾, 14¾	200-3,000	60-400	GHM-NUmVW
SHOS516		8½, 10½	200-3,000	60-400	GHM-NUmVW
SHOS616		17½, 18¾	200-3,000	60-400	GHM-NUmVW
SHOSI616		12¼, 17½, 24	200-3,000	60-400	GHM-NUmVW
Varel					
VH609	M243	3¾x4½, 4¾x5¼, 4¾x5¼, 4¾x5¾	500-2,500	100-400	BGDH-NOUXR
VH709	M242	4¾x4¾, 8½x9	500-2,500	100-400	BGDH-NOUXR
PDC coring bits					
Bit-Tech					
CP-440BU	M232	7¾, 8¾, 8¾	300-2,000	50-500	AFGMVW
CP-440BU	M342	6, 6¾	300-2,000	50-500	AFGMVW
CP-440P	M342	7¾, 8¾, 8¾	300-2,000	60-120	AFG
CP-B66	M232	6¾	300-2,000	50-500	AFGMVW
Halliburton					
FC3043	M433	8½-12¼	250-3,500	50-150	F
FC3743/3	M432	5½-12¼	250-3,500	50-150	F
FC3743/3					
FC3843	M433	6½-12¼	250-3,500	50-150	F
FC3843/1	M343	8½-12¼	250-3,500	50-150	F
FC3844/1	M343	8½-12¼	250-3,500	50-150	F
FC3844/2	M344	8½-12¼	250-3,500	50-150	F
FC3847/1					
FC3847/2					
FC3923	M433	8½	250-3,500	50-150	F
FC3933	M433	8½	250-3,500	50-150	F
FC3943/1	M433	8½	250-3,500	50-150	F
FC3943/2					
ReedHycalog Bits					
CEP913	S232, S432, S433, S433	7¾, 8¾, 8¾, 8, ¾, 8¾	300-2,000	50-150	GUI
CVP913	S232	6	300-2,000	50-150	GUI
IEP913		3	300-2,000	50-150	GUI
Varel					
CB809	M442	6, 8½	1,000-2,000	50-150	G
CB713	M332	5½, 6, 6¾, 8¾, 8¾, 8¾, 8¾	1,000-2,000	50-150	G
CB813	M332	8¾, 8¾, 8½	1,000-2,000	50-150	G
Surface set diamond coring bits					
Bit-Tech					
CG-300PG	M623	6, 6¾, 6¾, 7¾, 8¾	400-2,500	50-500	AGIKM
CN-334G	M813	6¾, 6¾, 6¾, 7¾, 8¾	400-2,500	50-500	AGRM
CN-404G	M612	6, 6¾, 6¾, 7¾, 8¾	400-2,500	50-500	AGKM
CN-404RS	M812	6¾, 7¾, 8¾, 8¾	400-2,500	50-500	AGKM
CN-424BL	M842	6¾, 6¾	400-2,500	50-500	AGRM
Halliburton					
CT103	M623	6-12¼	250-3,500	110-150	I
CT303HS	M623	6-12¼	250-3,500	110-150	I
CT313SB	M623	6-12¼	250-3,500	110-150	IW
CT403	M624	6-12¼	250-3,500	110-150	I
CT93	M623	6-12¼	250-3,500	110-150	I
Varel					
CB500		5¾, 6, 6¾, 8¾, 8½	500-1,500	50-1,000	G
Surface set diamond bits					
Bit-Tech					
DG-420PG	M622	1¾, 1¾, 2½, 2½, 2½, 3¾, 4¾, 4¾, 6¾, 6¾, 6¾	300-3,500	60-600	ADGHMR
Halliburton					
DN-304G	M813	4½-4¾, 5½-6¾	Variable	Variable	Custom
DN-334G	M813	4½-4¾, 5½-6¾	Variable	Variable	Custom
DN-424G	M812	1¾, 1¾, 2½, 2½, 2½, 3¾, 4¾, 4¾, 6¾, 6¾, 6¾	300-3,500	60-600	ADGHMNR
Halliburton					
TT521	M622	3¾-12¼	300-3,000	80-1,000	IMN
TT561	M624	4¾-12¼	300-3,000	80-1,000	IMN
Varel					
VN300	M714	2½, 2½, 2½, 2½, 3¾, 3¾, 3¾, 3¾, 4, 4¾, 4¾, 4¾, 6, 6¾	400-2,500	50-1,000	G

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
Impregnated diamond bits					
Smith Bits					
KH813	M433	8½, 11½, 12¼	400-4,000	60-2,000	GHMNUHVV
KH609		4½, 4¾	400-4,000	60-2,000	GHMNUHVV
KH613		5½, 5¾, 6½	400-4,000	60-2,000	GHMNUHVV
KH713		6, 6¾, 8¾, 8½	400-4,000	60-2,000	GHMNUHVV
KH716		8½, 12¼	400-4,000	60-2,000	GHMNUHVV
KH713		6½	400-4,000	60-2,000	GHMNUHVV
KH813		8½, 10¾	400-4,000	60-2,000	GHMNUHVV
KH913		8½, 12¼	400-4,000	60-2,000	GHMNUHVV
Hammer bits					
Smith Bits					
H1006D	HAMM	6, 6¼, 6¾, 6½	250-500	40-20	AWP
H1206	HAMM	8½, 8¾	250-500	40-20	AP
H1206D	HAMM	8½, 8¾	250-500	40-20	AWP
H1209	HAMM	8¾, 9½, 9¾, 9¾, 9¾, 12¼, 12¾	300-700	40-20	AP
H1209D	HAMM	7¾, 8¾, 8¾, 8¾, 8¾, 11	300-700	40-20	AWP
H1411D	HAMM	12, 12¼, 12¾	300-700	40-20	AWP
H1509	HAMM	8¾, 10¾, 11, 12¼, 12¾	300-600	40-20	AP
H1512	HAMM	8¾, 8¾, 12¾	400-650	40-20	AP
H1809	HAMM	17½	400-600	40-20	AWP
H1809D	HAMM	17½	400-600	40-20	AWP
H1812	HAMM	14¾, 14¾, 15	300-600	40-20	AP
Hard					
Steel tooth roller cone bits					
TIX-TSK					
H	321	3¾, 4, 4¾, 4½	1,500-2,500	60-40	S
H	321	4¾	1,500-3,000	60-40	S
H	321	5½, 5¾, 6, 6¾, 6¾, 6¾, 7¾, 7¾, 7¾	2,500-5,000	80-40	S
H	321	13¾, 14¾, 15, 15½, 16, 17½, 20, 22, 24	3,000-5,000	80-40	S
H	321	8¾, 8¾, 8¾, 8¾, 9¾, 9¾, 10¾, 11, 12, 12¼	3,000-6,000	80-40	S
HR	341	8½, 12¼	3,000-6,000	70-40	S
HR-X	346	8½, 12¼	3,000-6,000	70-40	S
HR-Z	344	8½, 12¼	3,000-6,000	70-40	S
HS	311	6, 6¾, 7½, 7¾, 7¾	2,500-5,000	80-40	S
HS	311	8¾, 8¾, 8¾, 8¾, 9¾, 9¾, 10¾, 11, 12, 12¼	3,000-6,000	80-40	S
HS	311	14¾, 15, 15½, 16, 17½, 20, 22, 24	3,000-5,000	80-40	S
HS-TX	317	5¾, 6	3,000-5,000	70-40	S
HS-TX	317	8½, 12¼	3,000-6,000	70-40	S
HS-TXZ	315	8½, 12¼	3,000-6,000	180-40	GM
HS-TZ	315	8½, 12¼	3,000-6,000	70-40	S
HS-TZ	315	16, 17½	3,000-5,000	70-40	S
HS-X	316	5¾, 6, 6¾	3,000-5,000	70-40	S
HS-X	316	8½, 12¼	3,000-6,000	70-40	S
HS-XZ	314	8½, 12¼	3,000-6,000	180-40	GM
HS-Z	314	8½, 12¼	3,000-6,000	70-40	S
H-X	326	5¾, 6, 6¾	3,000-5,000	70-40	S
H-X	326	8½, 12¼	3,000-6,000	70-40	S
H-XZ	324	8½, 12¼	3,000-6,000	180-40	GM
H-Z	324	8½, 12¼	3,000-6,000	70-40	S
Varel					
DT6	236S	4¾, 4¾, 4¾, 4¾	2,000-5,000	300-50	MW
L1	311S	3¾, 4¾, 6¾	3,500-6,500	75-35	S
LH1	321S	2¾, 2¾, 3¾, 4, 4¾, 4¾, 4¾, 4¾	3,500-7,000	65-35	S
Insert roller cone bits					
Baker Hughes					
STX-70	737	4¾, 6	2,000-5,300	150-75	MY
STX-70G	737	6¾, 6¾	2,000-5,300	150-75	MY

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
ReedHycal Bits					
R70	737	6%, 6½, 7%, 8%, 8½, 8¾	3,500–6,500	100–40	YW
Smith Bits					
FH170UY	737Y	8½	3,000–7,000	110–50	Y
FH170Y	737Y	8½	3,000–7,000	110–50	Y
XR70Y	737Y	4¾, 6	2,000–6,000	270–40	HMY
Tercel					
G73FH	737	6, 8½, 9%, 12¼	3,000–6,000	50–110	GW
P73FH	737	8½, 8¾, 9%, 12¼	3,000–6,000	50–100	GW
TIX-TSK					
X65G	727Y	8½, 12¼	3,000–6,000	60–40	GY
X70G	737Y	5%, 5½, 7%	3,000–5,000	60–40	GY
X70G	737Y	8½, 12¼	3,000–6,000	60–40	GY
PDC drill bits					
Bit-Tech					
DP440B2UP	M242	7%, 8½, 8¾	400–3,000	60–300	ADGMWV
HP440B13P	M232	6, 6½, 6¾, 6¾, 6¾	200–3,000	60–300	ADGHMWW
HP-440BP	M342	3¼, 3¾, 3¾, 3¾, 4, 4½, 4½, 4, 4¾, 4¾, 4¾, 5¼, 6, 6½, 6¾, 6¾, 6¾	200–3,000	60–300	ADFGHM-NWV
Drill Master, Inc.					
M813	M433	17½	235–2,500	50–350	GHMUIH
M813	M333	12¼	500–2,000	100–400	GHMIRStUH
M813	M433	8½, 8¾, 8¾	500–3,000	100–400	GHMIRStUH
M813	M433	9¾	500–2,000	100–400	GHMIRStUH
M813	M433	17½	235–2,500	50–350	GHMUIH
M890	M443	6%	400–2,000	60–900	GHMIRStUH
M890	M443	6%	400–2,000	60–900	GHMIRStUH
M913	M433	8½	500–3,000	100–400	GHMIRStUH
M913	M433	12¼	500–2,000	100–400	GHMIRStUH
M990	M443	7%, 8%, 8½, 9½	500–3,000	100–400	GHMIRStUH
M990	M443	9¾, 12¼	500–2,000	100–400	GHMIRStUH
ReedHycal Bits					
FT613	M332	6%, 8%	1,000–6,000	Variable	GHMWUHV
DS1011	M432	8%	1,000–6,000	Variable	GHMWUHV
DS1013	M432	8½, 9%, 12, 12½	1,000–6,000	Variable	GHMWUHV
DS1013	M433				
DS1016	M422	14%	1,000–6,000	Variable	GHMWUHV
FT616	M422	13%	1,000–6,000	Variable	GHMWUHV
FT1713	M432	5½, 6	1,000–6,000	Variable	GHMWUHV
FT1716	M422	12¼	1,000–6,000	Variable	GHMWUHV
FT813	M442	8¾, 8¾, 12¼	1,000–6,000	Variable	GHMWUHV
RS1013	M432	18½	1,000–6,000	Variable	GHMWUHV-Rst
RS1016	M432	14%	1,000–6,000	Variable	GHMWUHV-Rst
TF913	S432	16	1,000–6,000	Variable	GHMWUHV
TF916	S432	16	1,000–6,000	Variable	GHMWUHV
TU1016	M432	16½, 17½	1,000–6,000	Variable	GHMWUHV
TU1016	S432				
TU1019	S422	24, 28	1,000–6,000	Variable	GHMWUHV
TU1019	S432				
Smith Bits					
M513	M223	4½, 4¾, 6%	500–4,000	60–400	GHM-NRstUmVW
M513	M223	6%, 6¼, 6½, 7%, 8¾	500–4,000	60–400	GHM-NRstUmVW
MAS1513	M233	7%, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
MD1513	M233	5½, 6, 6½, 6¾, 6½, 6¾, 7%, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
M1613	M233	6, 6½, 6¾, 6¾, 6¾, 6¾, 7%, 8¾	500–4,000	60–400	GHM-NRstUmVW
M613	M333	6, 7½, 7%	500–4,000	60–400	GHM-NRstUmVW
M713	M333	5%	500–4,000	60–400	GHM-NRstUmVW
M813	M333	6	500–4,000	60–400	GHM-NRstUmVW
MD1613	M333	5¼, 5½, 5½, 5½, 6, 6½, 6¾, 7, 8½, 8¾, 8¾, 9, 9½, 9½, 11½, 12¼	500–4,000	60–400	GHM-NRstUmVW
MD1711	M333	6%, 6½, 6¾	500–4,500	60–400	GHM-NRstUHVW
MD1713	M333	5½, 6, 8½, 9½, 12¼, 14¾	500–4,000	60–400	GHM-NRstUHVW
MD1813	M333	5½, 8½, 9½, 11½, 12¼, 13½, 14¾, 14¾, 16, 16½	500–4,000	60–400	GHM-NRstUHVW
MDS1613	M333	5½, 6, 6½, 6¾, 7%, 8½, 8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
MDS1813	M333	8%, 8½, 8¾, 10%, 12¼	500–4,000	60–400	GHM-NRstUmVW
MI711	M333	6	500–4,500	60–400	GHM-NRstUHVW
MI713	M333	8½	500–4,000	60–400	GHM-NRstUHVW
MI813	M333	6¾, 12¼, 16, 17½	500–4,000	60–400	GHM-NRstUmVW
MSI513	M333	6%, 6¼, 6½, 8¾	500–4,000	60–400	GHM-NRstUmVW
MI913	M433	7%, 8%, 8½, 8¾, 8¾, 11%, 12¼	500–4,000	60–400	GHM-NRstUmVW
MSI613	M433	6, 6½, 6¾, 6½, 6½, 6¾, 7¼, 8½, 8¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
MSI711	M433	5%, 5½, 5½, 6, 6¼, 6¼	500–4,500	60–400	GHM-NRstUHVW
MSI713	M433	6, 6½, 6¾, 6¾, 7¼, 8½, 8¾, 9¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
MSI813	M433	6½, 6½, 8½, 8¾, 9¾, 12¼	500–4,000	60–400	GHM-NRstUmVW
M609	M442	3½, 3¾, 3¾, 3¾, 4¾, 4¾, 4¾	500–5,000	60–400	GHM-NRstUHVW
M909	M442	4¾, 4¾, 4¾, 6, 6½, 8½	500–5,000	60–400	GHM-NRstUHVW
MI809	M443	6%	500–5,000	60–400	GHM-NRstUHVW
M09		3%	500–5,000	60–400	GHM-NRstUHVW
M1609		8½, 8¾	500–5,000	60–400	GHM-NRstUHVW
M20		6%, 6¾	500–4,500	60–400	GHM-NRstUHVW
M413		7%	500–4,000	60–400	GHM-NRstUmVW
M511		4½	500–4,500	60–400	GHM-NRstUHVW
M711		5%	500–4,500	60–400	GHM-NRstUHVW
M809		6, 6½, 6¾	500–5,000	60–400	GHM-NRstUHVW
MA32		6%	500–4,000	60–400	GHM-NRstUmVW
MA613		6%	500–4,000	60–400	GHM-NRstUmVW
MA813		6	500–4,000	60–400	GHM-NRstUmVW
MAS1613		8¾	500–4,000	60–400	GHM-NRstUmVW
MAS1Z513		8¾	500–4,000	60–400	GHM-NRstUmVW
MAS1Z613		8¾	500–4,000	60–400	GHM-NRstUmVW
MD611		6%	500–4,500	60–400	GHM-NRstUHVW
MD613		6%, 8½	500–4,000	60–400	GHM-NRstUmVW
MD713		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW
MD813		8½, 12¼	500–4,000	60–400	GHM-NRstUmVW
MDCRI713		8½	500–4,000	60–400	GHM-NRstUmVW
MDI313		6½, 8½	500–4,000	60–400	GHM-NRstUmVW
MDI413		4¾, 6, 6½, 6¾, 6¾, 7¾	500–4,000	60–400	GHM-NRstUmVW
MDI511		6½, 6¾	500–4,500	60–400	GHM-NRstUHVW
MDI609		6, 6%	500–5,000	60–400	GHM-NRstUHVW
MDI611		6, 6½, 6½, 8½, 8¾	500–4,500	60–400	GHM-NRstUHVW
MDI811		6½	500–4,500	60–400	GHM-NRstUHVW
MDI2513		6%	500–4,000	60–400	GHM-NRstUmVW
MDI2611		6%	500–4,000	60–400	GHM-NRstUHVW
MDI2613		6, 8¾	500–4,000	60–400	GHM-NRstUHVW
MDI2713		8½	500–4,000	60–400	GHM-NRstUmVW
MDS713		6%	500–4,000	60–400	GHM-NRstUmVW
MDS1413		6%, 6¾, 7%	500–4,000	60–400	GHM-NRstUmVW
MDS1509		5%, 6	500–5,000	60–400	GHM-NRstUHVW
MDS1513		6, 6¾, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
MDS1711		8½	500–4,500	60–400	GHM-NRstUHVW
MDS1713		5¾, 5½, 6, 7¾, 8½, 8¾, 8¾, 8¾	500–4,000	60–400	GHM-NRstUmVW
MDS1811		6½	500–4,500	60–400	GHM-NRstUHVW
MDS1913		8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
MDSIR613		8¾	500–4,000	60–400	GHM-NRstUmVW
MDSIR713		6%, 6¾, 8½	500–4,000	60–400	GHM-NRstUmVW
MDSIR813		8½	500–4,000	60–400	GHM-NRstUmVW
MDSIZ513		8½	500–4,000	60–400	GHM-NRstUmVW
MDSIZ613		5½, 6, 7¾	500–4,000	60–400	GHM-NRstUmVW
MDSIZ713		5½, 8½	500–4,000	60–400	GHM-NRstUmVW
MDSIZ811		6½	500–4,500	60–400	GHM-NRstUHVW
MDSIZ813		12¼	500–4,000	60–400	GHM-NRstUmVW
MDSIZ913		8¾	500–4,000	60–400	GHM-NRstUmVW
MDSXI613		8½	500–4,000	60–400	GHM-NRstUmVW
MDSXI713		8½	500–4,000	60–400	GHM-NRstUmVW
MDSXI813		8½	500–4,000	60–400	GHM-NRstUmVW
MDSXI-Z713		8½	500–4,000	60–400	GHM-NRstUmVW
MDX613		6%	500–4,000	60–400	GHM-NRstUmVW
MDXI713		8½	500–4,000	60–400	GHM-NRstUmVW
MI413		6½	500–4,000	60–400	GHM-NRstUmVW
MI609		4%	500–5,000	60–400	GHM-NRstUHVW
MI811		6	500–4,500	60–400	GHM-NRstUHVW
MI909		4%	500–5,000	60–400	GHM-NRstUHVW
MIZ613		7%	500–4,000	60–400	GHM-NRstUmVW
MIZ913		8½	500–4,000	60–400	GHM-NRstUmVW
MR613		5%	500–4,000	60–400	GHM-NRstUmVW
MS413		6%	500–4,000	60–400	GHM-NRstUmVW
MS613		12¼	500–4,000	60–400	GHM-NRstUmVW
MS713		12¼	500–4,000	60–400	GHM-NRstUmVW
MSDI713		6½	500–4,000	60–400	GHM-NRstUmVW
MSI1013		12	500–4,000	60–400	GHM-NRstUmVW
MSI413		6, 6¾	500–4,000	60–400	GHM-NRstUmVW
MSI611		6%	500–4,500	60–400	GHM-NRstUHVW
MSI811		6½	500–4,500	60–400	GHM-NRstUHVW
MSI913		8¾	500–4,000	60–400	GHM-NRstUmVW
MSIR513		6%	500–4,000	60–400	GHM-NRstUmVW
MSIR613		6½, 6¾	500–4,000	60–400	GHM-NRstUmVW
MSIR713		6%	500–4,000	60–400	GHM-NRstUmVW
MSIZ413		6¾	500–4,000	60–400	GHM-NRstUmVW
MSIZ513		6%, 6¾	500–4,000	60–400	GHM-NRstUmVW
MSIZ613		6%, 6¾, 7%	500–4,000	60–400	GHM-NRstUmVW
MSIZ713		8½	500–4,000	60–400	GHM-NRstUmVW
MSIZ813		8½	500–4,000	60–400	GHM-NRstUmVW
MST913		5%	500–4,000	60–400	GHM-NRstUmVW
MSXI613		8½	500–4,000	60–400	GHM-NRstUmVW
MSXI2616		8½	500–4,000	60–400	GHM-NRstUmVW
MSZ713		5%	500–4,000	60–400	GHM-NRstUmVW
MZ713		5%	500–4,000	60–400	GHM-NRstUmVW
S413		3¾	500–4,000	60–400	GHM-NRstUmVW
S613		17½	500–4,000	60–400	GHM-NRstUmVW
SDAI513		8½	500–4,000	60–400	GHM-NRstUmVW
SDI313		8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
SDI413		6¾, 7¾, 8½, 8¾	500–4,000	60–400	GHM-NRstUmVW
SDI511		6¾	500–4,500	60–400	GHM-NRstUHVW
SDI513		6, 6½, 6¾, 6½, 6¾, 7¾, 8½, 8¾, 8¾	500–4,000	60–400	GHM-NRstUmVW
SDI611		6, 6¼, 6½, 6¾, 7¾, 8½, 8¾, 9¾	500–4,500	60–400	GHM-NRstUHVW

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage	
SDI613		8½, 8¾, 17½	500–4,000	60–400	GHM-NRStUmVW	MD919MC	M623	8½, 12¼, 16	1,000–4,000	50–400	UH G H M RST W V N	SP919	S422	9¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	
SDI711		6, 6¼, 6½, 6¾	500–4,500	60–400	GHM-NRStUHVW	MP013	M432	8½, 12	500–3,000	50–400	UH G H M RST W V N	SP919C	S422	9¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	
SDI713		6½, 6¾, 7¾, 8½, 8¾	500–4,000	60–400	GHM-NRStUmVW	MP013C	M432	8½, 12	500–3,000	50–400	UH G H M RST W V N	SP919M	S422	9¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	
SDIZ513		6¼, 8½	500–4,000	60–400	GHM-NRStUmVW	MP013M	M432	8½, 12	500–3,000	50–400	UH G H M RST W V N	SP919MC	S422	9¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	
SDIZ611		8¾	500–4,500	60–400	GHM-NRStUHVW	MP013MC	M432	8½, 12	500–3,000	50–400	UH G H M RST W V N	Uterra U513M	M123	5½, 6, 6½, 6¾, 6¾, 7¾, 8¾, 9½	500–4,000	Variable	BCDEFGSU	
SDSI713		8½	500–4,000	60–400	GHM-NRStUmVW	MP213	M432	12, 12¼	500–3,000	50–400	UH G H M RST W V N		M124	6½, 6¾, 7¾, 8¾, 8¾, 9½				
SDXIZ513		8½	500–4,000	60–400	GHM-NRStUmVW	MP213C	M434	8½	500–3,000	50–400	UH G H M RST W V N		M132					
SI513		6¼, 6¾, 7¾	500–4,000	60–400	GHM-NRStUmVW	MP213C	M432	12, 12¼	500–3,000	50–400	UH G H M RST W V N		M133					
SI613		8¾	500–4,000	60–400	GHM-NRStUmVW	MP213C	M434	8½	500–3,000	50–400	UH G H M RST W V N		M134					
SI913		16	500–4,000	60–400	GHM-NRStUmVW	MP213M	M432	12, 12¼	500–3,000	50–400	UH G H M RST W V N		M222					
SI913		16	500–4,000	60–400	GHM-NRStUmVW	MP213M	M434	8½	500–3,000	50–400	UH G H M RST W V N		M223					
SI913		16	500–4,000	60–400	GHM-NRStUmVW	MP213MC	M432	12, 12¼	500–3,000	50–400	UH G H M RST W V N		M224					
SIZ913		16	500–4,000	60–400	GHM-NRStUmVW	MP213MC	M434	8½	500–3,000	50–400	UH G H M RST W V N		M233					
SST1213		12¼	500–4,000	60–400	GHM-NRStUmVW	MP809	M442	6½, 8¾	500–2,500	50–400	UH G H M RST W V N		M234					
SST913		6, 8½	500–4,000	60–400	GHM-NRStUmVW	MP809C	M442	6½, 8¾	500–2,500	50–400	UH G H M RST W V N	M323						
TBR5613		6, 7¾, 8½, 8¾	500–4,000	60–400	GHM-NRStUmVW	MP809M	M442	6½, 8¾	500–2,500	50–400	UH G H M RST W V N	M422						
VIS613		8¾	500–4,000	60–400	GHM-NRStUmVW	MP809MC	M442	6½, 8¾	500–2,500	50–400	UH G H M RST W V N	M423						
Tercol																		
MD013	M432	8½	1,000–4,000	50–400	UH G H M RST W V N	MP809MC	M442	6½, 8¾	500–2,500	50–400	UH G H M RST W V N	U519M	M123	6¼, 7¾, 8¾, 8¾, 9½, 9½, 12¼	500–4,000	Variable	BCDEFGSU	
MD013C	M432	8½	1,000–4,000	50–400	UH G H M RST W V N	MP909	M443	8¾	500–2,500	50–400	UH G H M RST W V N		M132					
MD013M	M432	8½	1,000–4,000	50–400	UH G H M RST W V N	MP909C	M443	8¾	500–2,500	50–400	UH G H M RST W V N		M223					
MD013MC	M432	8½	1,000–4,000	50–400	UH G H M RST W V N	MP909M	M443	8¾	500–2,500	50–400	UH G H M RST W V N	U609M	M142	4¾, 4¾, 6¾	500–4,000	Variable	BCDEFGSU	
MD213	M432	12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP909MC	M443	8¾	500–2,500	50–400	UH G H M RST W V N	U611M	M133	4¾, 4¾, 6¾, 6¾	500–4,000	Variable	BCDEFGSU	
MD213C	M432	12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP913	M432	5½, 6, 6½, 6½, 8¾, 8¾, 12¼	500–3,000	50–400	UH G H M RST W V N		M233					
MD213M	M432	12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP913C	M432	5½, 6, 6½, 6½, 8¾, 8¾, 12¼	500–3,000	50–400	UH G H M RST W V N	U613M	M133	4¾, 4¾, 5¾, 6, 6½, 6¾, 6¾, 7¾, 7¾, 8¾, 8¾, 9½, 12¼	500–4,000	Variable	BCDEFGSU	
MD213MC	M432	12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP913M	M432	5½, 6, 6½, 6½, 8¾, 8¾, 12¼	500–3,000	50–400	UH G H M RST W V N		M234					
MD219	M422	12¼, 14¾	1,000–4,000	50–400	UH G H M RST W V N	MP916	M422	12	500–3,000	50–400	UH G H M RST W V N		M332					
MD219C	M422	12¼, 14¾	1,000–4,000	50–400	UH G H M RST W V N	MP916C	M422	12	500–3,000	50–400	UH G H M RST W V N		M333					
MD219M	M422	12¼, 14¾	1,000–4,000	50–400	UH G H M RST W V N	MP916M	M422	12	500–3,000	50–400	UH G H M RST W V N	U616M	M123	6¼, 6¼, 6¾, 7¾, 7¾, 8¾, 8¾, 9½, 9½, 10¾, 11, 12, 12¼, 13¾, 14¾	500–4,000	Variable	BCDEFGSU	
MD219MC	M422	12¼, 14¾	1,000–4,000	50–400	UH G H M RST W V N	MP916MC	M422	12	500–3,000	50–400	UH G H M RST W V N		M222					
MD813	M432	5½, 6, 6¼, 6½, 7¾, 8¾, 8¾, 8¾, 9½, 9¾	500–4,000	50–400	UH G H M RST W V N	MP919	M422	6, 6½, 8½, 12, 12¼, 16	500–3,000	50–400	UH G H M RST W V N		M323					
MD813	M332	6, 8½, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP919C	M422	6, 6½, 8½, 12, 12¼, 16	500–3,000	50–400	UH G H M RST W V N		M324					
MD813C	M432	5½, 6, 6¼, 6½, 7¾, 8¾, 8¾, 8¾, 9½, 9¾	500–4,000	50–400	UH G H M RST W V N	MP919M	M422	6, 6½, 8½, 12, 12¼, 16	500–3,000	50–400	UH G H M RST W V N	U619M	M123	7¾, 8¾, 8¾, 10¾, 11, 12¼, 13¾	500–4,000	Variable	BCDEFGSU	
MD813C	M332	6, 8½, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MP919MC	M422	6, 6½, 8½, 12, 12¼, 16	500–3,000	50–400	UH G H M RST W V N		M224					
MD813M	M432	5½, 6, 6¼, 6½, 7¾, 8¾, 8¾, 8¾, 9½, 9¾	500–4,000	50–400	UH G H M RST W V N	MR813	M433	7¾, 8½, 8¾	500–4,000	50–400	UH G H M RST W V N		M322					
MD813M	M332	6, 8½, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MR813C	M433	7¾, 8½, 8¾	500–4,000	50–400	UH G H M RST W V N		M323					
MD813MC	M432	5½, 6, 6¼, 6½, 7¾, 8¾, 8¾, 8¾, 9½, 9¾	500–4,000	50–400	UH G H M RST W V N	MR813M	M433	7¾, 8½, 8¾	500–4,000	50–400	UH G H M RST W V N		M324					
MD813MC	M332	6, 8½, 12¼	1,000–4,000	50–400	UH G H M RST W V N	MR813MC	M433	7¾, 8½, 8¾	500–4,000	50–400	UH G H M RST W V N	U709M	M443	6¾	500–4,000	Variable	BCDEFGSU	
MD816	M422	8¾, 8¾, 12¼	500–4,000	50–400	UH G H M RST W V N	SD819	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N	U711M	M223	5½, 6¾, 6¾	500–4,000	Variable	BCDEFGSU	
MD816C	M422	8¾, 8¾, 12¼	500–4,000	50–400	UH G H M RST W V N	SD819C	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N		M232					
MD816M	M422	8¾, 8¾, 12¼	500–4,000	50–400	UH G H M RST W V N	SD819M	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N	U713M	M223	5½, 6, 6½, 6½, 6¾, 6¾, 7¾, 8¾, 8¾, 8¾, 12¼	500–4,000	Variable	BCDEFGSU	
MD816MC	M422	8¾, 8¾, 12¼	500–4,000	50–400	UH G H M RST W V N	SD819MC	S422	8½, 12¼, 16, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N		M234					
MD819	M422	5½, 5½, 6, 8¾, 8½, 9¾	1,000–4,000	50–400	UH G H M RST W V N	SP219	S422	12¼, 14¾, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N		M243					
MD819C	M422	5½, 5½, 6, 8¾, 8½, 9¾	1,000–4,000	50–400	UH G H M RST W V N	SP219C	S422	12¼, 14¾, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N		M333					
MD819M	M422	5½, 5½, 6, 8¾, 8½, 9¾	1,000–4,000	50–400	UH G H M RST W V N	SP219M	S422	12¼, 14¾, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N		M334					
MD819MC	M422	5½, 5½, 6, 8¾, 8½, 9¾	1,000–4,000	50–400	UH G H M RST W V N	SP219MC	S422	12¼, 14¾, 17½, 22	1,000–4,000	50–400	UH G H M RST W V N	U716M	M223	7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 16	500–4,000	Variable	BCDEFGSU	
MD919	M623	8½, 12¼, 16	1,000–4,000	50–400	UH G H M RST W V N	SP913	S432	8¾, 8¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N		M423					
MD919C	M623	8½, 12¼, 16	1,000–4,000	50–400	UH G H M RST W V N	SP913C	S432	8¾, 8¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	U719M	M323	12¼	500–4,000	Variable	BCDEFGSU	
MD919M	M623	8½, 12¼, 16	1,000–4,000	50–400	UH G H M RST W V N	SP913M	S432	8¾, 8¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N	U809M	M342	6¾, 6¾, 7¾, 8¾, 8¾	500–4,000	Variable	BCDEFGSU	
						SP913MC	S432	8¾, 8¾, 12, 12¼	1,000–4,000	50–400	UH G H M RST W V N		M443					

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
U811M	M333, M424, M433, M443	6½, 7½, 8½, 8¾	500–4,000	Variable	BCDEFGSU
U813M	M233, M333, M423, M433, M434	6, 6½, 6¾, 7½, 8½, 9½, 10½, 11, 12¼	500–4,000	Variable	BCDEFGSU
U816M	M323, M423, M434	8½, 8¾, 9½, 9¾, 12¼, 17½	500–4,000	Variable	BCDEFGSU
U909M	M442, M443	6½, 6¾	500–4,000	Variable	BCDEFGSU
U913M	M433, M434	8¾, 9¾	500–4,000	Variable	BCDEFGSU
U916M	M323	7.875	500–4,000	Variable	BCDEFGSU
U513S	S132, S232, S233, S332, S432	4½, 6½, 6¾, 6¾, 7½, 8½, 8¾, 8¾, 9½, 9¾, 10½, 12¼, 12¾	500–4,000	Variable	BCDEFGSU
U516S	S122, S123, S222, S223, S322, S323, S422	6½, 6¾, 7½, 8½, 8¾, 11, 12¼, 13¾, 14¾	500–4,000	Variable	BCDEFGSU
U519S	S122, S123, S222, S223, S323, S422	7½, 8½, 8¾, 9½, 12¼, 17½	500–4,000	Variable	BCDEFGSU
U611S	S132, S133, S232	4¾, 6, 6½, 6¾, 7½, 8½, 8¾	500–4,000	Variable	BCDEFGSU
U613S	S131, S132, S232, S233, S332, S432	6½, 6¾, 6¾, 6¾, 7½, 8½, 8¾	500–4,000	Variable	BCDEFGSU
U616S	S122, S222, S223, S322, S323, S422, S423, S424	7½, 8½, 8¾, 9½, 11, 12¼, 14¾, 17½	500–4,000	Variable	BCDEFGSU
U619S	S122, S222, S223, S322	8½, 9½, 12¼	500–4,000	Variable	BCDEFGSU
U711S	S232	6½, 6¾	500–4,000	Variable	BCDEFGSU
U716S	S424	8.5	500–4,000	Variable	BCDEFGSU
U816S	S422	16	500–4,000	Variable	BCDEFGSU
Varel					
R809	M443	4½, 5½, 5¾, 5¾, 6, 6¾, 8½, 12¼	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
R909	M443	5¾, 5¾, 6, 6¾, 6¾, 8½	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
R813	M433	5½, 5¾, 6, 6¾, 6¾, 6¾, 7½, 7¾, 8½, 8½, 8¾, 9½, 9¾, 10½, 11½, 12¼	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
R913	M433	4½, 4¾, 5½, 6, 6¾, 6¾, 6¾, 8½, 12, 12¼, 17½	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
R816	M423	7½, 12¼	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
R916	M423	7½, 8½, 8¾, 16, 17½	1,000–3,500	50–400	BGTP-DG1G2G3L-HNXXR
Bi-center PDC drill bits					
Smith Bits					
QDS7313	S333	8½, 9½, 11, 12¼, 20	200–3,500	60–400	GHM-NRstUmVW
QDS7309	S422	6½, 7	500–4,000	60–400	GHM-NRstUHVW
OHWSD-1513		8½	200–3,500	60–400	GHM-NRstUmVW
QDM4213		7, 7½	200–3,500	60–400	GHM-NRstUmVW
QDM7309		6½	500–4,000	60–400	GHM-NRstUHVW
QDM7313		9½, 12¼	200–3,500	60–400	GHM-NRstUmVW
QDM7413		9, 9½	200–3,500	60–400	GHM-NRstUmVW
QDMI4209		4¾	500–4,000	60–400	GHM-NRstUHVW
QDMI4213		7½	200–3,500	60–400	GHM-NRstUmVW
Halliburton					
QDMI5313		10¾	200–3,500	60–400	GHM-NRstUmVW
QDMS-7413		9	200–3,500	60–400	GHM-NRstUmVW
QDS3209		5%	500–4,000	60–400	GHM-NRstUHVW
QDS4213		7	200–3,500	60–400	GHM-NRstUmVW
QDS5213		14¾, 17½	200–3,500	60–400	GHM-NRstUmVW
QDS6309		7½, 9½	500–4,000	60–400	GHM-NRstUHVW
QDS6313		7, 17½	200–3,500	60–400	GHM-NRstUmVW
QDS7213		14¾	200–3,500	60–400	GHM-NRstUmVW
QDSI7313		9¾, 12¼	200–3,500	60–400	GHM-NRstUmVW
QDSSI-7313		12¼	200–3,500	60–400	GHM-NRstUmVW
SHOI513		7½	200–3,500	60–400	GHM-NUMVW
PDC coring bits					
Bit-Tech					
CP-440BUP	M232	7½, 8½, 8¾	300–2,000	50–300	AFGMVW
CP-440BUP	M242	6, 6½	300–2,000	50–300	AFGMVW
ReedHycalog Bits					
CCP911	S232, S233, S332, S432	6, 6½, 6¾, 6¾, 6¾, 6¾, 6¾, 8½	300–2,000	50–150	GUI
CEP911	S433	8½	300–2,000	50–150	GUI
IEP911		3½	300–2,000	50–150	GUI
Surface set diamond coring bits					
Bit-Tech					
CN-404P	M812	6, 6½, 7½, 8¾	750–2,500	60–120	AGKM
CN-404RSP	M812	6½, 7½, 8½, 8¾	750–2,500	60–120	AGKM
CN-424BLP	M842	6½, 6¾	750–2,500	60–120	AGMR
CN-54-R	M-811	4½ x 17½, 5½ x 2½, 6½ x 2½, 6 x 2½, 6½ x 2½, 6½ x 3½, 6½ x 3½, 6½ x 3½, 7½ x 4, 8½ x 4, 8½ x 4	300–3,500	50–140	GMRUh
TSP-54-R	M-591	4½ x 17½, 5½ x 2½, 6½ x 2½, 6 x 2½, 6½ x 2½, 6½ x 3½, 6½ x 3½, 6½ x 3½, 7½ x 4, 8½ x 4, 8½ x 4	300–3,500	50–140	GMRUh
Halliburton					
CT103	M623	6–12¼	250–3,500	110–150	I
CT303HS	M623	6–12¼	250–3,500	110–150	I
CT403	M624	6–12¼	250–3,500	110–150	I
Surface set diamond bits					
Bit-Tech					
DN-304P	M813	4½–4¾, 5½–6½	1,000–3,000	60–1,000	Custom
DN-424P	M812	1¾, 1¾, 2½, 2½, 2½, 3¾, 4¾, 4¾, 6¾, 6¾, 6¾, 6¾	1,000–3,000	60–1,000	ADGHMUR
Halliburton					
TB26	M711	5½	300–3,000	80–1,000	MN
TB26/ TB26I	M712	3¾–12	300–3,000	80–1,000	IMN
TB26	M713	9¾	300–3,000	80–1,000	IMN
Smith Bits					
DST12	M711	3¾, 5¾, 6, 6¾, 6¾, 6¾, 7½, 8½, 8¾	400–4,000	60–2,000	GHD-MNKNUHVW
Varel					
N300	M714	3½, 17½	400–2,500	50–1,000	BDTGU
Impregnated diamond bits					
Halliburton					
iQ508/ iQ510/ iQ516/ TF508/ TF510/ iQ308/ iQ310/ iQ316/ M843	M843	5¼–16	300–3,000	80–1,600	MNR Impregnated
iQ316/ iQ512/ iQ520/ TF410	M843	5¼–16	300–3,000	80–1,600	MNR Impregnated
Smith Bits					
KH813	M433	8½, 11½, 12¼	400–4,000	60–2,000	GHMNUHVW
K503					
M842		4½, 5½, 6, 6½, 6½, 8½, 8½, 10½, 12¼	400–4,000	60–2,000	GHMNUHVW
K505	M842	3¾, 5½, 6, 6½, 6¾, 7½, 8½, 12, 14¾, 17½	400–4,000	60–2,000	GHMNUHVW
K507	M842	6, 8½, 8½, 8½, 8¾, 12¼, 12¾	400–4,000	60–2,000	GHMNUHVW
K703	M842	4½, 5½, 6, 6½, 8½, 8½	400–4,000	60–2,000	GHMNUHVW
K705	M842	3¾, 3¾, 6, 6½, 6½, 6¾, 7¾, 8¾, 8½, 8½, 9½, 10½, 12¼, 12¾	400–4,000	60–2,000	GHMNUHVW
K707	M842	8½, 8½, 14¾	400–4,000	60–2,000	GHMNUHVW
K515		6½	400–4,000	60–2,000	GHMNUHVW
K517		8½	400–4,000	60–2,000	GHMNUHVW
K605		6½, 6¾	400–4,000	60–2,000	GHMNUHVW
K607		8½	400–4,000	60–2,000	GHMNUHVW
K715		6½, 8½, 8¾	400–4,000	60–2,000	GHMNUHVW
KC507		6	400–4,000	60–2,000	GHMNUHVW
KCR505		6½, 6¾	400–4,000	60–2,000	GHMNUHVW
KCR507		8½	400–4,000	60–2,000	GHMNUHVW
KGR48		3¾	400–4,000	60–2,000	GHMNUHVW
KGR50		5¾	400–4,000	60–2,000	GHMNUHVW
KH609		4½, 4¾	400–4,000	60–2,000	GHMNUHVW
KH613		5½, 5¾, 6½	400–4,000	60–2,000	GHMNUHVW
KH713		6, 6½, 8½, 8½	400–4,000	60–2,000	GHMNUHVW
KH716		8½, 12¼	400–4,000	60–2,000	GHMNUHVW
KH173		6½	400–4,000	60–2,000	GHMNUHVW
KH181		8½, 10½	400–4,000	60–2,000	GHMNUHVW
KH1913		8½, 12¼	400–4,000	60–2,000	GHMNUHVW
KZ505		6, 6½	400–4,000	60–2,000	GHMNUHVW
KZ507		8½, 8½	400–4,000	60–2,000	GHMNUHVW
Impregnated diamond coring bits					
Halliburton					
CI3124C	M844	5½–6½	250–2,500	50–70	Fimpregnated
CI3146C	M843	8½–8¾	250–3,500	50–70	Fimpregnated
CI3206C	M843	12¼	250–4,000	50–70	Fimpregnated
Varel					
CI1613	M842	8½, 12¼	500–2,500	50–1,000	G
CI1213	M842	5½, 6	500–2,500	50–1,000	G
Hammer bits					
Smith Bits					
H1006D	HAMM	6, 6½, 6¾, 6¾	250–500	40–20	AWP
H1206	HAMM	8½, 8¾	250–500	40–20	AP
H1206D	HAMM	8½, 8¾	250–500	40–20	AWP
H1209	HAMM	8½, 9½, 9¾, 9¾, 9¾, 12¼, 12¾	300–700	40–20	AP
H1209D	HAMM	7½, 8½, 8½, 8¾, 8¾, 11	300–700	40–20	AWP
H1411D	HAMM	12, 12¼, 12¾	300–700	40–20	AWP
H1509	HAMM	8½, 10½, 11, 12, ¼, 12¾	300–600	40–20	AP
H1512	HAMM	8¾, 8¾, 12¾	400–650	40–20	AP
H1809	HAMM	17½	400–600	40–20	AWP
H1809D	HAMM	17½	400–600	40–20	AWP
H1812	HAMM	14½, 14¾, 15	300–600	40–20	AP
Extremely Hard Steel tooth roller cone bits					
Varel					
DT6	236S	4½, 4¾, 4¾, 4¾	2,000–5,000	300–50	SMW
Insert roller cone bits					
Baker Hughes					
STX-99	837	6½	2,000–5,300	140–70	MY
VG-90	837	12¼	2,900–7,300	95–50	BGMV
VG-90G	837	12¼	2,900–7,300	95–50	BGMV
Halliburton					
Q93/QH93	817	7½–9¾	4,000–7,500	35–140	GMW
XT99	835	14¾	4,000–7,500	35–140	GMW
Q91/ QH91/ QH99/ Q99	837	6½–12¼	4,000–7,500	35–140	GMW
Kingdream					
HF827GHY	827	8½	3,000–7,000	200–40	GHLY
HF827GY	827	7½, 8½	3,000–7,000	200–40	GHLY
HF837GY	837	7½	3,000–7,000	200–40	GHLY
ReedHycalog Bits					
HP83	837	10½	3,500–6,500	60–35	Z
R80	817	8½	3,500–6,500	90–35	ZW
R85	817	7½	3,500–6,500	90–35	ZW
R90	837	6½, 6½, 7½, 8½, 9½, 12¼	3,500–6,500	60–35	Z

Manufacturer, Bit name/model number	IADC code	Size range, in.	Recommended WOB, lb/in. diameter	Recommended rotary speed, rpm	Special features/usage
Smith Bits					
F80Y	817Y	8½, 8¾	3,000–7,000	110–50	Y
FH80Y	817Y	12¼	3,000–7,000	110–50	Y
GF80LY	817Y	8½	3,000–7,000	280–50	BGHMY
GF80Y	817Y	8½	3,000–7,000	280–50	BGHMWY
F90Y	837Y	10½, 12¼	3,000–7,000	110–50	Y
FH90Y	837Y	8½, 8¾	4,000–7,000	110–50	Y
XR90Y	837Y	6¾	2,000–6,000	270–40	HMV
TIX-TSK					
A90	832Y	6¾, 7¾, 15	2,500–5,000	50–30	AY
A90	832Y	9, 9¾, 9¾, 11, 12¼	3,000–6,000	50–30	AY
X90G	837Y	8½, 12¼	3,000–6,500	60–40	GY
Varel					
HE85	837Z	8¾	2,500–7,000	300–50	MW
HE95	837Z	8¾, 8¾	2,500–7,000	300–50	MW
PDC drill bits					
Smith Bits					
MDI711	M333	6¼, 6½, 6¾	500–4,500	60–400	GHM-NRstUHVW
MI711	M333	6	500–4,500	60–400	GHM-NRstUHVW
MSI711	M433	5½, 5¾, 5¾, 6, 6¼, 6¼	500–4,500	60–400	GHM-NRstUHVW
M609	M442	3¾, 3¾, 3¾, 3¾, 4¼, 4¼, 4¾	500–5,000	60–400	GHM-NRstUHVW
M909	M442	4¼, 4¼, 4¾, 6, 6½, 8½	500–5,000	60–400	GHM-NRstUHVW
MI809	M443	6¾	500–5,000	60–400	GHM-NRstUHVW
M09	3¾	3¾	500–5,000	60–400	GHM-NRstUHVW
M1609	8½, 8¾	8½, 8¾	500–5,000	60–400	GHM-NRstUHVW
M20	6¼, 6¾	6¼, 6¾	500–4,500	60–400	GHM-NRstUHVW
M511	4½	4½	500–4,500	60–400	GHM-NRstUHVW
M711	5¾	5¾	500–4,500	60–400	GHM-NRstUHVW
M809	6, 6¼, 6¾	6, 6¼, 6¾	500–5,000	60–400	GHM-NRstUHVW
MD611	6¾	6¾	500–4,500	60–400	GHM-NRstUHVW
MDI511	6¼, 6¾	6¼, 6¾	500–4,500	60–400	GHM-NRstUHVW
MDI609	6, 6¼	6, 6¼	500–5,000	60–400	GHM-NRstUHVW
MDI611	6, 6¼, 6½, 8½, 8¾	6, 6¼, 6½, 8½, 8¾	500–4,500	60–400	GHM-NRstUHVW
MDI811	6½	6½	500–4,500	60–400	GHM-NRstUHVW
MDIZ611	6¾	6¾	500–4,000	60–400	GHM-NRstUHVW
MDSI509	5¾, 6	5¾, 6	500–5,000	60–400	GHM-NRstUHVW
MDSI711	8½	8½	500–4,500	60–400	GHM-NRstUHVW
MDSI811	6½	6½	500–4,500	60–400	GHM-NRstUHVW
MDSIZ811	6½	6½	500–4,500	60–400	GHM-NRstUHVW
MI609	4¾	4¾	500–5,000	60–400	GHM-NRstUHVW
MI811	6	6	500–4,500	60–400	GHM-NRstUHVW
MI909	4¾	4¾	500–5,000	60–400	GHM-NRstUHVW
MSI611	6¾	6¾	500–4,500	60–400	GHM-NRstUHVW
MSI811	6½	6½	500–4,500	60–400	GHM-NRstUHVW
SDI511	6¾	6¾	500–4,500	60–400	GHM-NRstUHVW
SDI611	6, 6¼, 6½, 6¾, 7¾, 8½, 8¾, 9¾	6, 6¼, 6½, 6¾, 7¾, 8½, 8¾, 9¾	500–4,500	60–400	GHM-NRstUHVW
SDI711	6, 6¼, 6½, 6¾	6, 6¼, 6½, 6¾	500–4,500	60–400	GHM-NRstUHVW
SDIZ611	8¾	8¾	500–4,500	60–400	GHM-NRstUHVW
Uferra					
U609M	M443	4¾, 4¾, 6	500–4,000	Variable	BCDEFGSU
U611M	M332, M333	4¾, 4¾, 6, 6¾, 6¾	500–4,000	Variable	BCDEFGSU
U613M	M332, M333, M334, M432, M433, M434	6¼, 6¼, 6¾, 7¾, 8½, 8¾, 9¾, 12¼, 14¼	500–4,000	Variable	BCDEFGSU
U616M	M323, M324, M422, M423, M424, M432, M433	6¼, 7¾, 8¾, 8¾, 8¾, 9¾, 9¾, 10¾, 11, 12, 12¼, 13¾, 14¼	500–4,000	Variable	BCDEFGSU
U709M					
U711M	M443	6½	500–4,000	Variable	BCDEFGSU
U713M	M333, M334, M423, M424, M432, M433, M434	6¼, 7¾, 8¾, 8¾, 8¾, 12¼, 14¼	500–4,000	Variable	BCDEFGSU
U716M					
U716M	M323, M324, M423, M424, M432, M433	7¾, 8¾, 8¾, 8¾, 9¾, 10¾, 12, 12¼, 16, 16	500–4,000	Variable	BCDEFGSU
U809M					
U809M	M342, M443	6¼, 6¾, 7¾, 8¾, 8¾	500–4,000	Variable	BCDEFGSU
U811M					
U811M	M333, M424, M432, M433	6¼, 7¾, 8¾, 8¾, 8¾	500–4,000	Variable	BCDEFGSU
U813M					
U813M	M233, M333, M423, M432, M433, M434	6, 6¼, 6¾, 7¾, 8¾, 8¾, 9¾, 10¾, 11, 12¼	500–4,000	Variable	BCDEFGSU
U816M					
U816M	M323, M423, M424	8¾, 8¾, 9¾, 9¾, 12¼, 17¾	500–4,000	Variable	BCDEFGSU
U909M					
U909M	M442, M443	6½, 6¾, 6¾	500–4,000	Variable	BCDEFGSU
U913M					
U913M	M433, M434	8¾, 9¾, 9¾	500–4,000	Variable	BCDEFGSU
U916M					
U916M	M323	7¾	500–4,000	Variable	BCDEFGSU
U613S					
U613S	S332, S432	6¼, 6¼, 6¾, 6¾, 7¾, 8¾, 8¾, 8¾	500–4,000	Variable	BCDEFGSU
U616S					
U616S	S323, S422, S423, S424	7¾, 8¾, 8¾, 9¾, 11, 12¼, 14¼, 17¾	500–4,000	Variable	BCDEFGSU
U716S					
U716S	S424	8¾	500–4,000	Variable	BCDEFGSU
U816S					
U816S	S422	16	500–4,000	Variable	BCDEFGSU
Varel					
R909	M433	5¾, 5¾, 6, 6¾, 6¾, 8½	1,000–3,500	50–400	BGTP-DG1G2G3L-HNUR
R913					
R913	M433	4½, 4¾, 5¾, 6, 6¾, 6¾, 6¾, 8¾, 12, 12¼, 17¾	1,000–3,500	50–400	BGTP-DG1G2G3L-HNUR
R1013					
R1013	M433	17¾	1,000–3,500	50–400	BGTP-DG1G2G3L-HNUR
PDC Bi-Center drill bits					
Smith Bits					
QDS7309	S422	6½, 7	500–4,000	60–400	GHM-NRstUHVW
QDM7309	6½	6½	500–4,000	60–400	GHM-NRstUHVW
QDM4209	4¾	4¾	500–4,000	60–400	GHM-NRstUHVW
QDS3209	5¾	5¾	500–4,000	60–400	GHM-NRstUHVW
QDS6309	7¾, 9¾	7¾, 9¾	500–4,000	60–400	GHM-NRstUHVW
PDC coring bits					
ReedHycalog Bits					
CCP1008	M232	8½	300–2,000	50–149	GUI
Surface set diamond coring bits					
Bit-Tech					
CN-405RSP	M812	6¼, 7¾, 8¾, 8¾	1,000–3,000	60–90	AGKUHw
CN-425BLP	M842	6¼, 6¾	1,000–3,000	60–90	AGRUHw
Varel					
CB600	6, 8¾	6, 8¾	500–2,500	50–1,000	DG
Surface set diamond bits					
Bit-Tech					
DN405RSP	M812	3½–8¾	1,000–4,000	60–120	Custom
Drill Master, Inc.					
MD246	M843	6–18½	500–4,000	500–75	MNDRUW
Smith Bits					
DST12	M711	3¾, 5¾, 6, 6¾, 6¾, 6¾, 7¾, 8½, 8¾	400–4,000	60–2,000	GHD-MNKUHw
Varel					
N500	M814	3¾, 17¾	400–2,500	50–1,000	BTDGU
Impregnated diamond bits					
Drill Master, Inc.					
MI810	M841	6–18½	500–3,500	700–150	MNRUhm-impregnated
Halliburton					
iQ608/iQ610/iQ612/iQ616/iQ708/iQ712/TF608/TF708/iQ716/TF610/TF616/iQ608	M843	4½–12¼	300–3,000	80–1,600	MNR Impregnated
ReedHycalog Bits					
DD3540	M843	5, 5½, 6, 8½, 12¼, 12¾, 13¾	300–3,000	80–1,200	MNRIm-impregnated
DD3560	M843	5½, 6, 6¾, 6¾, 8½, 12¼	300–3,000	80–1,200	MNRIm-impregnated
DD4540	M843	5½, 6¾, 7¾, 8¾, 858, 8¾	300–3,000	80–1,200	MNRIm-impregnated
DD4560	M843	6½, 6¾, 8¾, 8¾, 9¾, 9¾, 10¾, 14¼, 16	300–3,000	80–1,200	MNRIm-impregnated
DD5540	M843	6	300–3,000	80–1,200	MNRIm-impregnated
DD5560	M843	5¾	300–3,000	80–1,200	MNRIm-impregnated
Smith Bits					
K707	M842	8¾, 8¾, 14¾	400–4,000	60–2,000	GHMNUHVW
K515	6¾	6¾	400–4,000	60–2,000	GHMNUHVW
K517	8¾	8¾	400–4,000	60–2,000	GHMNUHVW
K605	6¾, 6¾	6¾, 6¾	400–4,000	60–2,000	GHMNUHVW
K607	8¾	8¾	400–4,000	60–2,000	GHMNUHVW
K715	6¾, 8½, 8¾	6¾, 8½, 8¾	400–4,000	60–2,000	GHMNUHVW
KC507	6	6	400–4,000	60–2,000	GHMNUHVW
KCR505	6¾, 6¾	6¾, 6¾	400–4,000	60–2,000	GHMNUHVW
KCR507	8½	8½	400–4,000	60–2,000	GHMNUHVW
KGR48	3¾	3¾	400–4,000	60–2,000	GHMNUHVW
KGR50	5¾	5¾	400–4,000	60–2,000	GHMNUHVW
KH609	4½, 4¾	4½, 4¾	400–4,000	60–2,000	GHMNUHVW
KH613	5½, 5¾, 6½	5½, 5¾, 6½	400–4,000	60–2,000	GHMNUHVW
KH713	6, 6¾, 8¾, 8½	6, 6¾, 8¾, 8½	400–4,000	60–2,000	GHMNUHVW
KH716	8½, 12¼	8½, 12¼	400–4,000	60–2,000	GHMNUHVW
KH173	6½	6½	400–4,000	60–2,000	GHMNUHVW
KH1813	8½, 10¾	8½, 10¾	400–4,000	60–2,000	GHMNUHVW
KH1913	8½, 12¼	8½, 12¼	400–4,000	60–2,000	GHMNUHVW
KZ505	6, 6¾	6, 6¾	400–4,000	60–2,000	GHMNUHVW
KZ507	8¾, 8¾	8¾, 8¾	400–4,000	60–2,000	GHMNUHVW
Tercel					
MS511	M843	4¾, 5¾, 5¾, 6, 8½, 12¼, 16	500–4,000	50–400	UH G H M RST W V N
MS511M	M843	4¾, 5¾, 5¾, 6, 8½, 12¼, 16	500–4,000	50–400	UH G H M RST W V N
MS512	M843	4¾, 5¾, 5¾, 6, 8½, 12¼, 16	1,000–4,000	150–1,400	UH G H M RST W V N
MS512M	M843	4¾, 5¾, 5¾, 6, 8½, 12¼, 16	1,000–4,000	150–1,400	UH G H M RST W V N
Varel					
VI613	M843	3¾, 3¾	400–4,000	60–2,000	Impregnated
VI913	M843	4¾, 4¾, 6¾, 6¾, 6¾	400–4,000	60–2,000	Impregnated
VI1213	M843	5½, 5¾, 6, 6¾, 6¾, 6¾	400–4,000	60–2,000	Impregnated
VI1613	M843	7¾, 8¾, 8¾, 9¾	400–4,000	60–2,000	Impregnated
Impregnated diamond coring bits					
Halliburton					
CI3124C	M844	5½–6½	250–2,500	50–70	Fimpregnated
CI3146C	M843	8¾–8¾	250–3,500	50–70	Fimpregnated
CI3206C	M843	12¼	250–4,000	50–70	Fimpregnated
Varel					
CI1613	M842	8½, 12¼	500–2,500	50–1,000	G
CI1213	M842	5¾, 6	500–2,500	50–1,000	G
Hybrid PDC/Impregnated diamond bits					
Varel					
VI+613	M232	5¾, 6¾, 8¾, 8¾, 8¾, 8¾	400–4,000	60–2,000	PDGUX
VI+713	M432	6¾, 8¾, 12¼, 13¾	400–4,000	60–2,000	PDGUX
VI+913	M432	8¾	400–4,000	60–2,000	PDGUX
Hammer bits					
Smith Bits					
H1809	HAMM	17½	400–600	40–20	AWP
H1809D	HAMM	17½	400–600	40–20	AWP
H1812	HAMM	14½, 14¾, 15	300–600	40–20	AP

ONE SYSTEM. ZERO PROBLEMS.

▼ SUBJECT: VOYAGER

Superior performance from advanced abrasion and impact resistant PDC cutters.

Torque and vibration control technology for smooth, predictable response.

Gauge configurations optimized for all PDM or RSS systems.

Advanced modeling to meet or exceed directional, ROP and section objectives.



▼ Technology. Quality. Responsiveness.

The Voyager™ series from Varel explores new depths of performance and control. The product of Varel's advanced SPOT-DN™ bit design and GeoScience™ analytics, Voyager employs advanced directional control, dynamic stability and maximum ROP — it all adds up to a better bottom line. Call now to put every bit of our expertise to work for you.

For more information, visit varelintl.com or call 800.827.3526



VAREL
INTERNATIONAL
OIL AND GAS