



# Keep Your Cool **Depend On Us**

Chiller Products & Information Guide



**Demand Quality – Insist on MP Systems**

## Some Signs that Your Customer Would Profit if They Used a Coolant Chiller:

### 1. **Machine tool takes a long time to stabilize.**

Is the machine operator required to check parts frequently and make frequent offset changes during “warm up” in the morning or after the machine has been out of production for a shift change, lunch break, etc.?

If this is the case, the offset changes are probably all made in the same direction and will level off after a predictable period of time (when the warm up period is complete and the machine has stabilized).

### 2. **A machining process requires frequent interruptions, after which offset changes must be made to maintain part size.**

Some machining processes are fussy, requiring periodic stops to change tooling, clear away chips from the tooling, etc.

If offset changes not associated with tool wear are required after these stoppages it is probable that the machine tool has cooled down enough during the stoppage to effect part size. Using a coolant chiller to keep the machine tool operating close to ambient temperature will help prevent size changes during stoppages.

### 3. **Customer is making long cycle time parts from high value blanks.**

Customer is machining high value forgings or castings and cannot afford to make a scrap part.

Use of a coolant chiller to match coolant temperature to ambient temperature will help stabilize the machining environment and reduce the risk of error.

### 4. **Customer is making parts where the making of scrap or non-compliant parts leads to a logistical or paperwork nightmare.**

MP Systems has developed an easy-to-use chiller test kit to help customers identify machine tools and processes which would benefit from the use of a coolant chiller. MP Systems provides complimentary test kits upon request.

MP Systems Coolant Chillers may be installed and serviced by the end user or by your local machine tool outlet.



# STAND ALONE CHILLER

## Standard Features:

- 36,000 BTU chiller
- +/- 1 degree
- Includes supply pump and filtration
- Ambient and set point live temperature monitoring
- PLC messages displayed
- Standard filtration prevents heat exchanger clogging
- Adjustable auto shutdown feature
- No need to replace compressor over its lifetime
- No need to add refrigerant
- 2 year parts warranty

Installation kits are not included for stand alone chillers. Please contact MP Systems for details.

Model: CS36



Dimensions: 38.5"L x 25.5"W x 40.25"H  
Shipping: 610 lbs

# MOUNTED CHILLER

Mounts to R Series Systems

## Standard Features:

- 36,000 BTU chiller
- +/- 1 degree
- Includes installation kit, mounts to R series HP systems
- Includes supply pump and filtration
- Ambient and set point live temperature monitoring
- PLC messages displayed
- Standard filtration prevents heat exchanger clogging
- Adjustable auto shutdown feature
- No need to replace compressor over its lifetime
- No need to add refrigerant
- 2 year parts warranty

Installation kits are included with the mounted chiller/HP system.

Model: RC36



Dimensions (mounted on 70 gallon reservoir):  
43"L x 38"W x 66"H

Shipping:  
1000 lbs (R8 model) | 1300 lbs (RT model)\*

Dimensions (chiller only):  
38.5"L x 25.5"W x 20"H

Shipping: 300 lbs

\*For water soluble coolants only.

## Coolant Chillers are an Often Overlooked Way to Enhance Productivity in Many Machine Shops

When used, they are most often set to maintain coolant temperature within a degree or so of ambient temperature so that the coolant, machine tool and work piece remain at the same temperature, minimizing the effects of thermal expansion.

*To illustrate, a piece of aluminum of 12" Overall Length (OAL) will grow .0075" with a 50 degree rise in temperature. Similarly, a 12" OAL piece of carbon steel will grow .0038" with a 50 degree rise in temperature.*

To counteract the effects of thermal growth in the machine tool, some higher end machines are equipped with sensors and software to compensate for thermal changes. Many machine tools, however, are not equipped this way and will "grow" as they warm up or "shrink" when not in use. Additionally, thermal compensation within the machine tool will not compensate for the growth that can occur in large work pieces with long cycle times.

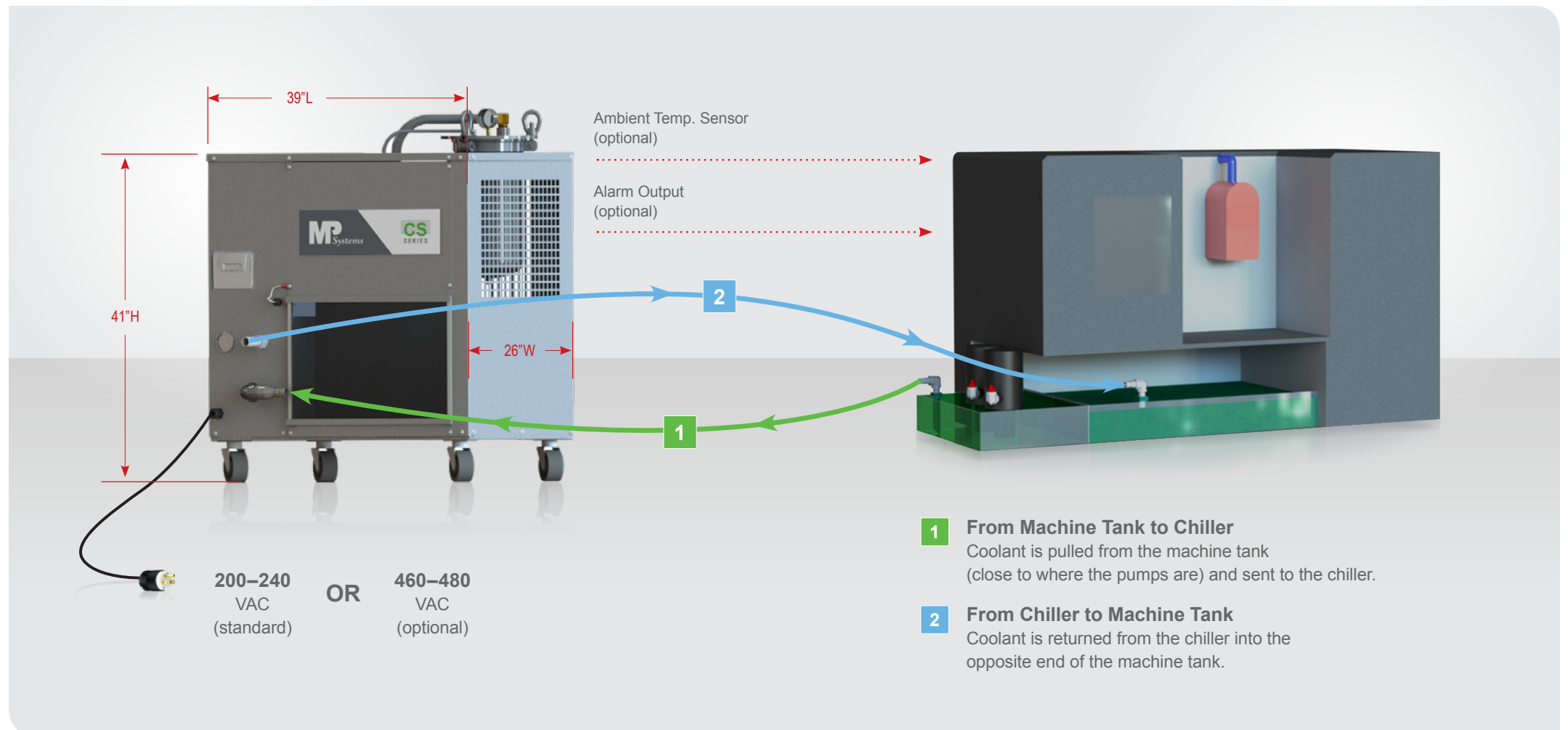
## EASY INSTALLATION

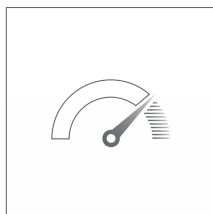
### Required:

- 3 Phase Power, 8 KVA
- (2) Hoses and (2) pipes to plumb Machine Tank to Chiller (MP Systems provides)

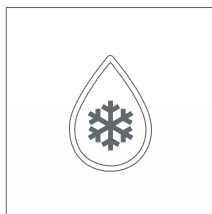
### Optional:

- Remote mounted ambient temperature sensor
- Alarm output to machine tool controller
- Chiller Run Signal

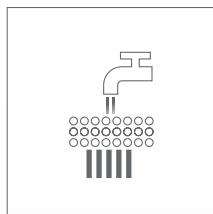




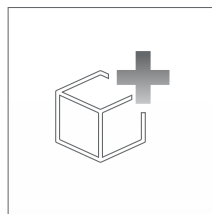
Coolant Systems



Chillers



Filtration



Accessories

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MP Systems designs rugged, dependable high pressure coolant systems and accessories for the machine tool world. MP Systems completely understands the stress points in machining. Our products are designed to minimize machine tool downtime and maximize tool life.

**We offer solutions that allow our customers to optimize the most sophisticated machine tools available.**



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