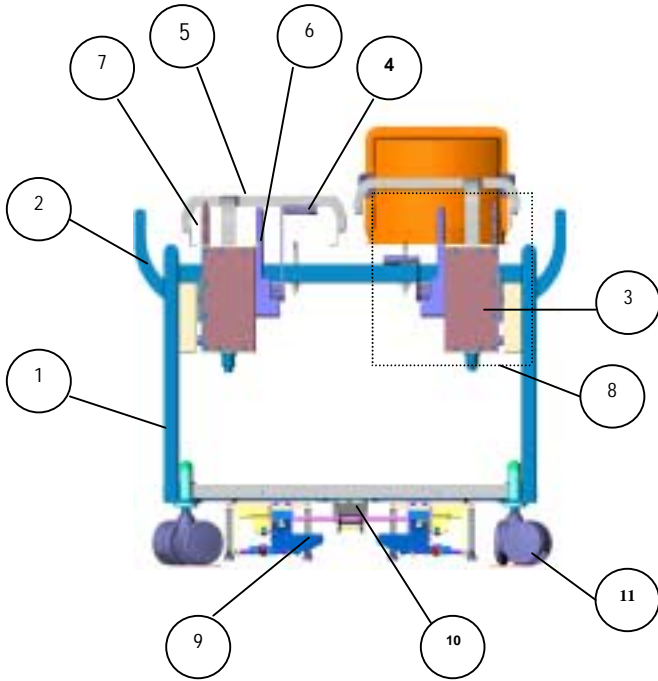


System Specifications Vehicle Configuration



Vehicle type:	Side-by-Side FOUN Layout Dual Independent Docking and Transfer Mechanisms
Vehicle Weight:	100 Kg * 89 Kg "light weight" also available
Length:	1.255 m
Depth:	0.610 m
Height:	1.260m
Gripper type:	Passive, Conveyor Rail Gripper
Safety Systems:	S2/CE Compatible

Performance

Payload:	Two 300mm FOUNs
Docking Cycle Time:	5 sec
Transfer Cycle Time:	8 sec
UnDock Cycle Time:	2 sec
FOUP Exchange Time:	32 Seconds

ITEM #	DESCRIPTION
1	CART
2	PUSH HANDLES
3	Z-BOX
4	Z-LEVER
5	TRANSFER GRIPPER
6	DOCKING HANDLE
7	X-HANDLE
8	TRANSFER MECHANISMS
9	DOCKING PEDAL
10	RELEASE PEDAL
11	WHEELS/CASTORS

Facility Requirements

Electrical Power:	None
Floor Loading:	Vehicle 100 Kg
Loadports:	SEMI E15.1-0999/ E64-0698
Docking Flange:	SEMI E83-0699

PGV Operation:

1. Push PGV Along Bay, Stopping Close to Process Tool Loadport
2. Move to Rear of PGV to Perform Dock and Loading Operations:
 - 2.1 Depress Foot Pedal To Extend Docking Mechanism
 - 2.2 Push Vehicle toward Loadport, Aided by Alignment Marks Until Docking Mechanisms Latches onto the Docking Bar
 - 2.3 Swing Cam Arm Through 90° to Lift FOUN
 - 2.4 Push FOUN Carriage, Extending FOUN Over Loadport KC
 - 2.5 Release Cam Arm 90° Lowering FOUN Onto Loadport KC
 - 2.6 Pull FOUN Carriage Back Over PGV Platform
3. Depress Release Foot Pedal to Undock From Loadport



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IDC Ergoloader PGV



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Automation



Overview

IDC's 300mm Person Guided Vehicle, the Ergoloader, is designed to facilitate the manual intrabay transfer of 300mm FOUPs between stockers and process tools within a bay. It is an ergonomically correct device that allows operators to safely handle 300mm FOUPs that typically weigh up to 8 Kg each. The PGV can easily interface with any process tool that conforms to the SEMI E15.1 loadport standard, and is equipped with a SEMI E83 compatible PGV docking flange. Typically applications for PGV loading within a fab include: Metrology Steps, Engineering/Hot Lots, Intrabay AMHS back-up (Hoist Fail-over), and Low Throughput Manual Bays.

Features:

"Side-by Side" Design With Two FOUP Carriers Held at 900mm Height Minimizes Operator Work Exertion

Dual Independent Ergonomic Loading Devices with Cam Actuated and Dampened Z Motion for Efficient and Safe FOUP Transfer

Operator May Push Vehicle from Either End for a Narrow Travel Profile in the Bay

Easy Nose-In Docking from Rear of Vehicle with Self-Aligning and Latching Docking Mechanism

Vibration Absorbing Suspension with Free Castor Wheels and "Zero" Turning Radius for Easy and Safe Transport

Class 1 Cleanroom Compatible Design with Electro-Polished Stainless Steel Surfaces Provide Easy Cleaning



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