



FASTEST[®]



ZEROMAX[™]

Zero Leak Access Port System
for Refrigerant Systems using
Process Tubes

fastestinc.com/zeromax





FASTEST[®]

Global Leader in Industrial Sealing Connection Technology

HVAC-R | Vehicle Systems | Compressed Gas | Medical Life Science | Aerospace

At FasTest, our mission is to reduce our customer's manufacturing costs, improve safety and lower the environmental impact from refrigerant emissions.

As an industry leader of Sealing and Connection Technologies, FasTest offers standard products for most ports/threads/tubes, and a dedicated team of Custom Design Experts to engineer optimized solutions for demanding applications. Connect fast, seal reliably, test safely.



BROAD OFFERING

Extensive standard and Custom Engineered Solutions.



INTELLIGENT TOOLS

Sensing & data generation tools that support process automation.



APPLICATION EXPERTS

Optimized solutions, tailored to your unique needs.



GLOBAL SUPPORT

Global distribution network provides local, responsive support.



SUPERIOR QUALITY

ISO 9001 Certified; Robust tools improve the quality of your product.

HVAC-R OEM ACCESS PORT SYSTEMS

ZEROMAX[™]

Easy Access for Small Systems using Processing "Stub" Tubes



PORTMAX[™]

Rapid Evacuation of Large Capacity Systems



COREMAX[®]

Faster Processing of Systems Using Schrader Type Valves



ZEROMAX™

Patent Pending
Access Port Technology

Simplify Refrigerant System Processing

Environmentally Friendly

Eliminate refrigerant emissions into the atmosphere.

Reliable Sealing

100% Leak-Free, hermetic metal-to-metal seal design.

System Access

Easily rework/service equipment and recover refrigerant at end-of-life.

Eliminate leaky & clumsy pierce style puncture/saddle valves & single-use crimp style service caps.

Repeatability

ZeroMax™ can be opened/resealed multiple times, even under pressure.

High Flow

Full flow design provides maximum processing speed.

Compatibility

Use with current and "Next-Gen" A2L/A3 flammable refrigerants.

A Total Solution - Designed to work in all processing steps:

Leak/Burst Test > Evacuation > Charging > Run Test > Rework > Field Service

SMALL CAPACITY REFRIGERATION SYSTEMS



PTAC/VTAC & HEAT PUMPS



COMMERCIAL SELF-CONTAINED DISPLAY UNITS



HIGH-END REFRIGERATORS

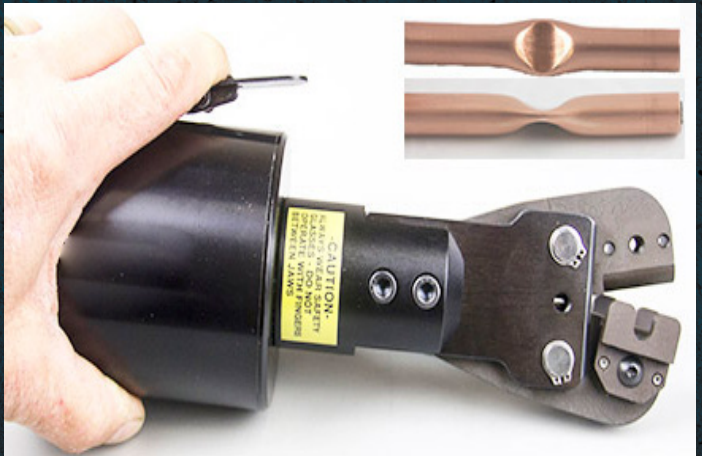
SPLIT SYSTEMS



REFRIGERATION COMPRESSORS



ANYWHERE A PROCESS "STUB" TUBE IS USED



ZEROMAX™ SYSTEM

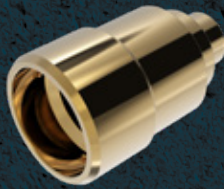
The NEW ZeroMax™ System eliminates the need for Process “Stub” Tubes or crimp type capping systems and their associated crimping & welding equipment. OEM's and Service Technicians now have an easy, repeatable system access for rework, service, and end-of-life refrigerant recovery - that doesn't leak.

ZeroMax™ assures a hermetic, **Zero-Leakage** seal by incorporating FasTest's patent pending Access Port technology and **Maximizes Accessibility**.

High Flow Access Port



Processing Tools



- Safer processing of flammable (A2 & A3) refrigerants
- Cost reducing elimination of Process/Stub Tubes and the pinch & weld operation
- Accessibility while providing a hermetic metal to metal seal
- Increased product quality
- Complete Processing Tool System is easy to use and optimizes manufacturing efficiency
- Zero refrigerant emissions when processing
- Use with FasTest Evacuation Cart to optimize evacuation

Industry's Fastest Evacuation System

High Flow Access Port



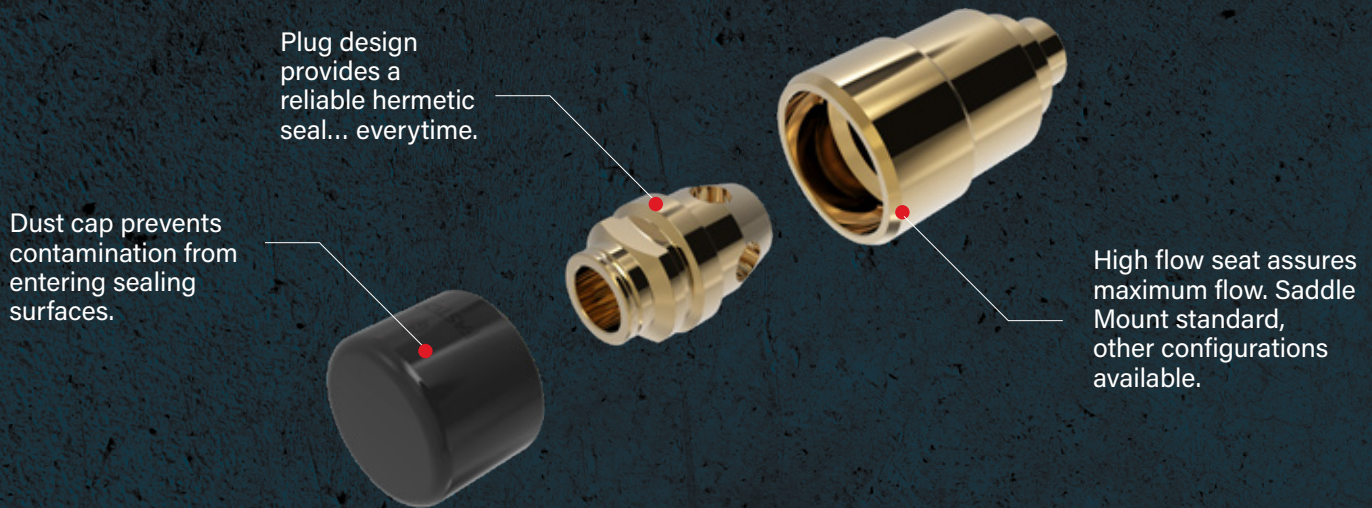
Processing Tools



Evacuation Cart



Zero Refrigerant Emissions Maximum Accessibility



Leak/Proof Test



Quick Filling

Pressurize & empty system quickly.

Evacuation



Fast Evacuation

Flow path yields maximum flow.

Charge



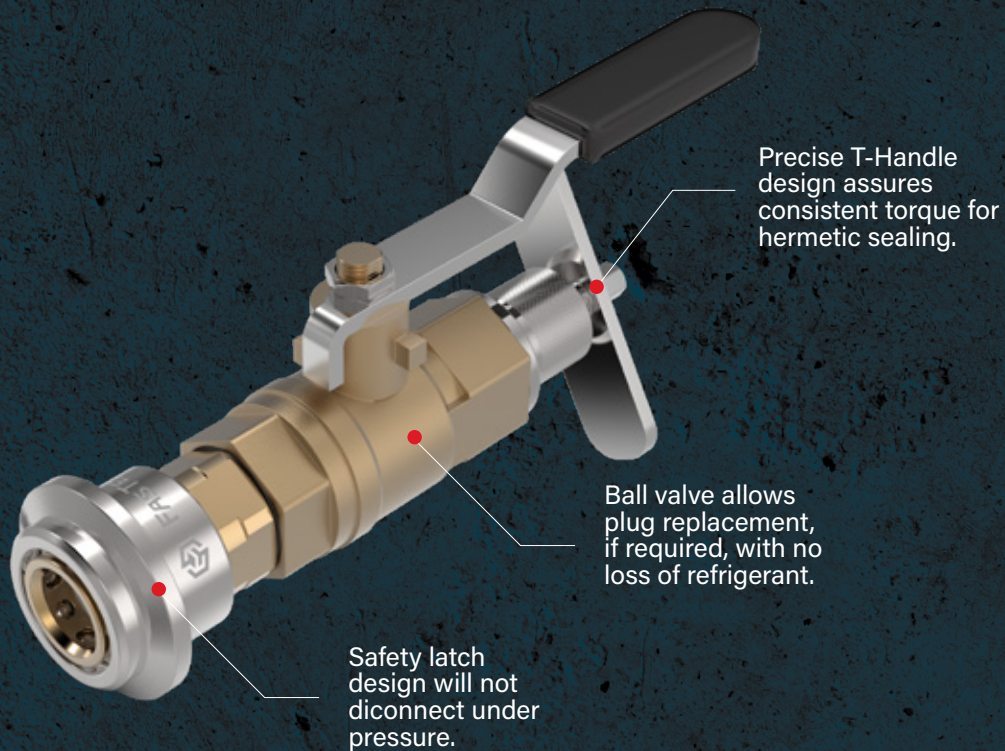
Safe Charging

Charge Tool latch will not accidentally disconnect when under pressure.

FIELD SERVICE TOOL

All-In-One Tool for Installation and Service Technicians

Gain access to the refrigerant system for servicing. Designed to provide installation & service technicians with a single tool that can be used to perform multiple tasks - refrigerant reclaim, leak test, evacuation, charge and replace a ZeroMax™ Access Port Plug.



All-In-One Tool

- Recover Refrigerant
- Perform Leak Test
- Evacuate System
- Charge System
- Replace Access Port Plug

EVACUATION CART

Optimized for ZeroMax™

Reducing evacuation time requires both a high flow access port/connector system AND a properly designed evacuation system... a TOTAL SOLUTION. FasTest's new turn-key Evacuation Cart is optimized for the ZeroMax™ system - the fastest evacuation possible, at the lowest cost.

Smart Features:

- Track evacuations and perform vacuum decay tests in real-time.
- Record evacuation and export to PDF or CSV file.
- Self diagnostic leak check capability to verify proper operation.
- Analyze data to facilitate ongoing process improvement.
- Take your evacuation process to the next level with a digital wireless vacuum gauge and powerful app.

Large Diameter, High Flow/Conductance Vacuum Hoses

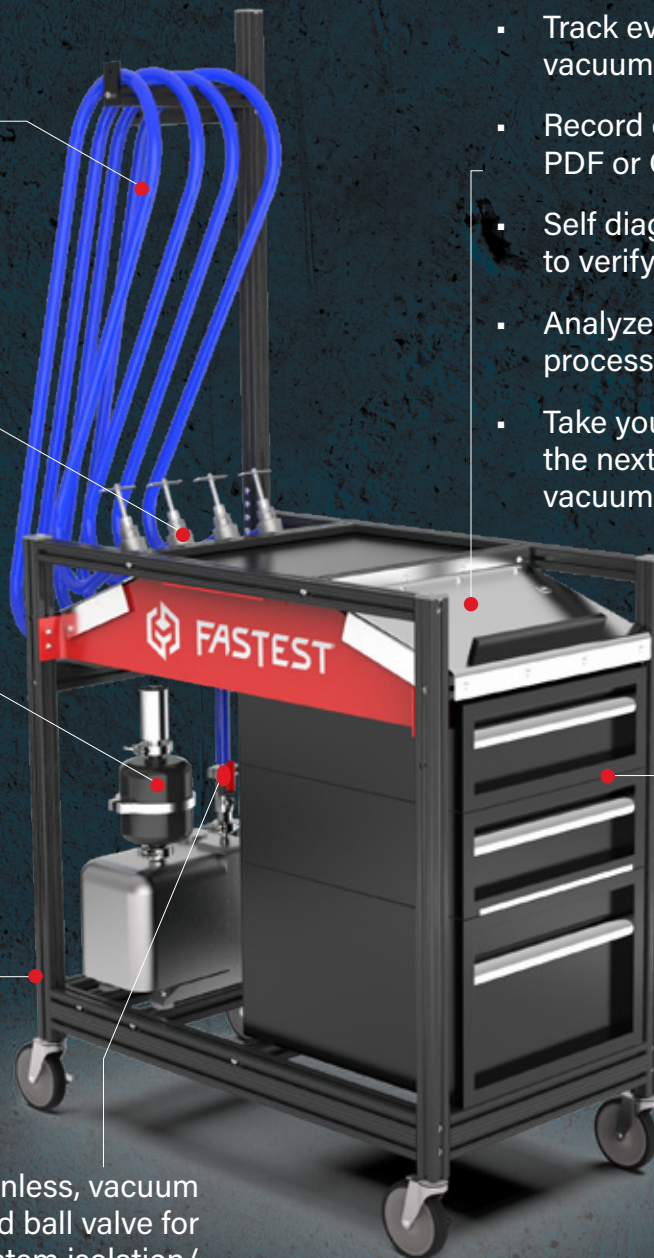
An optimized system of matched components that will result in the fastest evacuation time possible.

Industrial grade 2-Stage vacuum pump includes gas ballast and oil mist filter.

Easily maneuverable cart features large industrial grade lockable casters.

Stainless, vacuum rated ball valve for system isolation/vacuum decay test.

Lockable cabinets for safely storing tools, hoses and other components.



ZeroMax™ Access Port

Compact Access Port System for Efficient Processing and Hermetic Sealing.



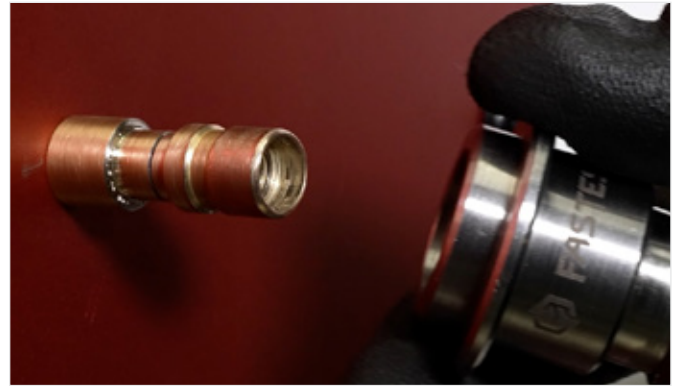
Dust Cap



Plug



Seat

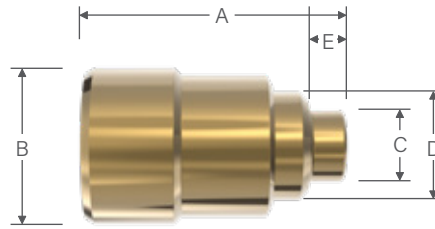


- 1 Patent pending Seat & Plug design.
- 2 Metal to metal hermetic sealing - no elastomers
- 3 Non-restrictive flow path
- 4 Multiple Seat mounting options

SPECIFICATIONS

Seat Styles	Saddle Mount standard, others available
Pressure Rating	700 psig (48.3 bar)
Leak Rating	Not measurable, hermetic
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 scfm (8.0 Nm ³ /hr)
Material	Brass, PVC Dust Cap
Tightening Torque	3 ft-lbs (4 N-m)

ZeroMax™ Access Port



Ordering Information			Dimensions				
Style	Size	Part Number	A*	B	C	D	E

ZeroMax™ Seats | Multiple Styles for User's Application

Saddle Mount	1/4"	CMHU08B01	0.89 (22.6)	0.54 (13.7)	0.25 (6.4) MIN HOLE	0.37 (9.5)	0.12 (3.1)
Thread Mount		Contact Factory			Contact Factory		
Stub Tube		Contact Factory			Contact Factory		
Panel Mount		Contact Factory			Contact Factory		

Dimensions: inch (mm)

*NOTE: Add 0.05" (1.2) to dimension "A" when dust cap is added (Full Assembly).



ZeroMax™ Plug | Mates with ZeroMax™ Seat

Part Number
CMC04



ZeroMax™ Dust Cap

Part Number
CMHU0801

ZeroMax™ Processing Tools

Leak Test Tool

PN: CMPT10



APPLICATION

Ball latching connector, valveless design to maximize flow. Connect to Seat at Leak Test station to pressurize and relieve testing gas.

- Ergonomic ball & sleeve action.
- Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

SPECIFICATIONS

Pressure	700 psig (48.3 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 SCFM (8.0 Nm ³ /hr)
Dimensions	1.5" (38 mm) Ø x 1.5" (38 mm) long
Material	Stainless Steel

Traveler

PN: CMPT40



APPLICATION

Ball latching connector with an internal valve. Load Plug into Traveler before connecting to the Seat at the Evacuation station. Traveler "Travels" down assembly line with Seat through the Charging process after which it is used to torque Plug into Seat and then removed from Seat.

- Ergonomic ball & sleeve action. Safety Latch system will not disconnect under pressure.
- Use Traveler hex to torque Plug into Seat.

SPECIFICATIONS

Pressure	700 psig (48.3 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 SCFM (8.0 Nm ³ /hr)
Dimensions	1.5" (38 mm) Ø x 2.4" (61 mm) long
Material	Stainless Steel

MBV Evacuation Tool

PN: CMPT20



APPLICATION

Ball latching connector with internal valve instantly seals vacuum when disconnected. Connect to Traveler at Evacuation station to evacuate system.

- Ergonomic ball & sleeve action.
- Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

SPECIFICATIONS

Pressure	20 micron (0.02 torr) to 700 psig (48.3 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 SCFM (8.0 Nm ³ /hr)
Dimensions	1.9" (48 mm) Ø x 1.5" (86 mm) long
Material	Stainless Steel

RQD Charge Tool

PN: CMPT30



APPLICATION

Ball latching connector with a lever operated internal valve allows easy connection to Traveler. Connect at Charge station to fill refrigerant into system. Activate refrigerant reclaim system prior to disconnecting RQD tool from Traveler to prevent refrigerant escape to atmosphere.

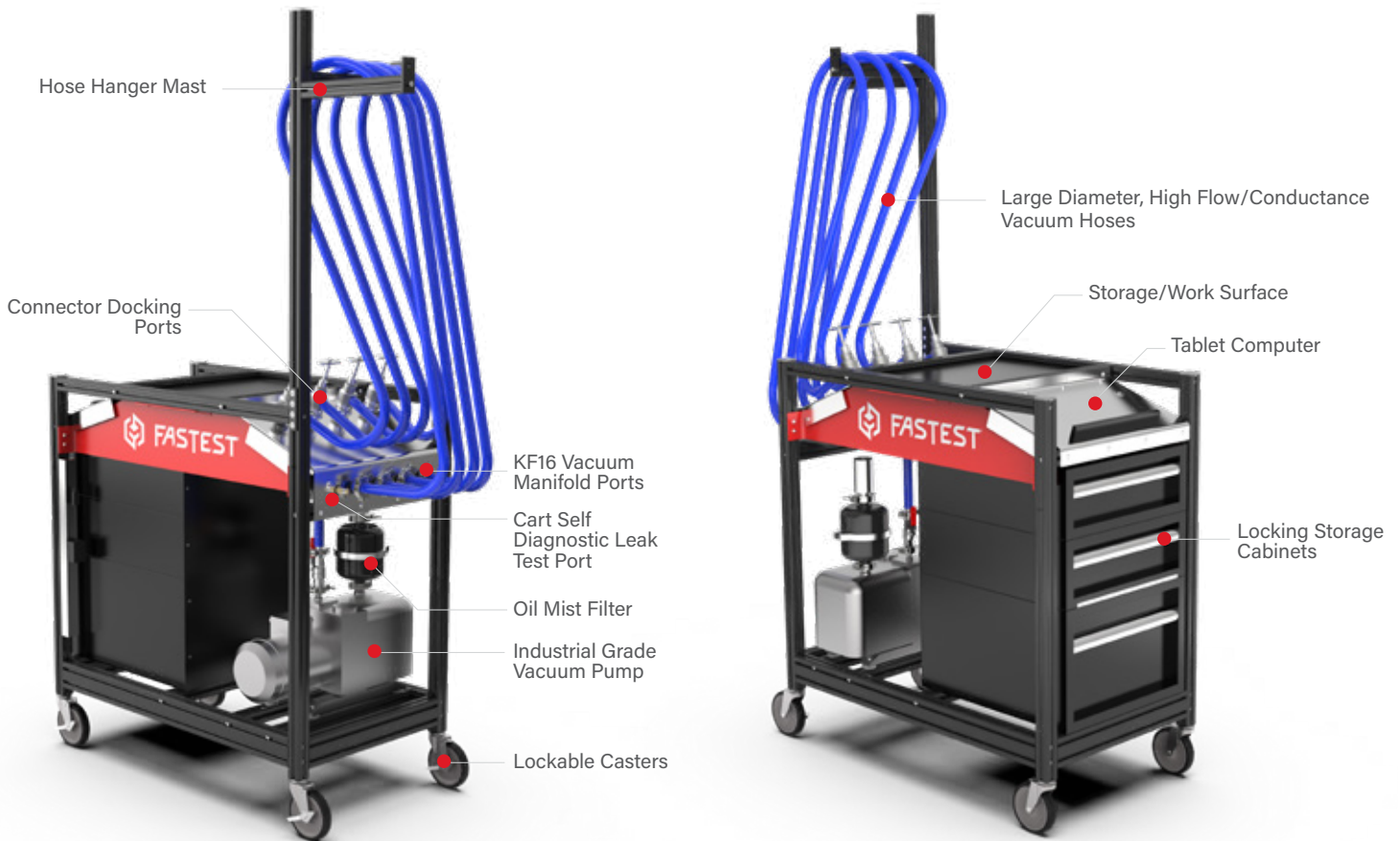
- Ergonomic ball & sleeve Action. Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

SPECIFICATIONS

Pressure	700 psig (48.3 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 SCFM (8.0 Nm ³ /hr)
Dimensions	1.95" (50 mm) Ø x 1.5" (119 mm) long (plus handle 7.68" (195 mm))
Material	Stainless Steel, Brass, Aluminum

Evacuation Cart Overview

A Total Evacuation Solution - Contact FasTest for ZeroMax™ Applications



The Evacuation Cart is a turn-key, optimized solution with real-time tracking and data capabilities directly from FasTest.

Designed to integrate with the ZeroMax™, PortMax™, and CoreMax®, and access port systems.

- OR -

Can be used with common refrigeration system access valves.

- Turn-key, integrated vacuum system of properly matched components.
- Set target vacuum, vacuum decay limits and monitor in real time. Store and download evacuation data records.
- Facilitates process improvement and optimization.
- Reduce evacuation time leading to improved production "Takt Time".
- Lockable storage cabinets safely store components when not in use. Full line of accessories to meet your needs.
- Mobile cart can be used in plant, at installation site and for service.
- Easy to use intuitive design and durable construction will provide years of reliable service.

Evacuation Cart Features

Packed with "Smart" features that streamline evacuation, record keeping and productivity.

The system is driven by a rugged, full-featured wireless vacuum gauge that is paired with an industry leading app. The system has unprecedented features that identify issues with moisture or leaks, and document the entire process with powerful reporting features not found in any other vacuum application.



Real time data monitoring.

Track & Display

Track and display the evacuation and vacuum decay test in real time.

Data Capture

Store data records for internal documentation, process validation, and customer documentation.

Process Optimization

Evaluate evacuation traces/data to recognize opportunities for improvement.

Highest accuracy & resolution available.



Wireless Connectivity

Gauge pairs with pre-installed app to accurately monitor and track evacuation and vacuum decay processes.

Automatic Notifications

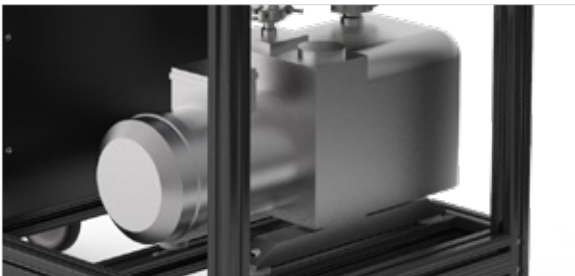
Automatic notifications of evacuation process with leak check feature. Export data as graphical PDF or CSV.

Evacuation Cart Features



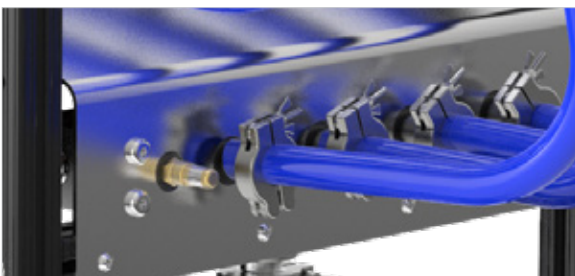
Multi-Purpose Docking Ports

- Rugged FasTest connectors and integral “Docking Ports” keep moisture and contamination out the system when not in use.
- Easily perform a system integrity leak test before beginning an evacuation to confirm that no leaks exist.



High Performance Vacuum Pump

- Industrial grade, two-stage rotary vane vacuum pump assures rapid evacuations and long service intervals.
- High quality isolation valve allows for vacuum decay test without disconnecting hoses or closing access ports/valves.



4-Port Manifold & System Test Port

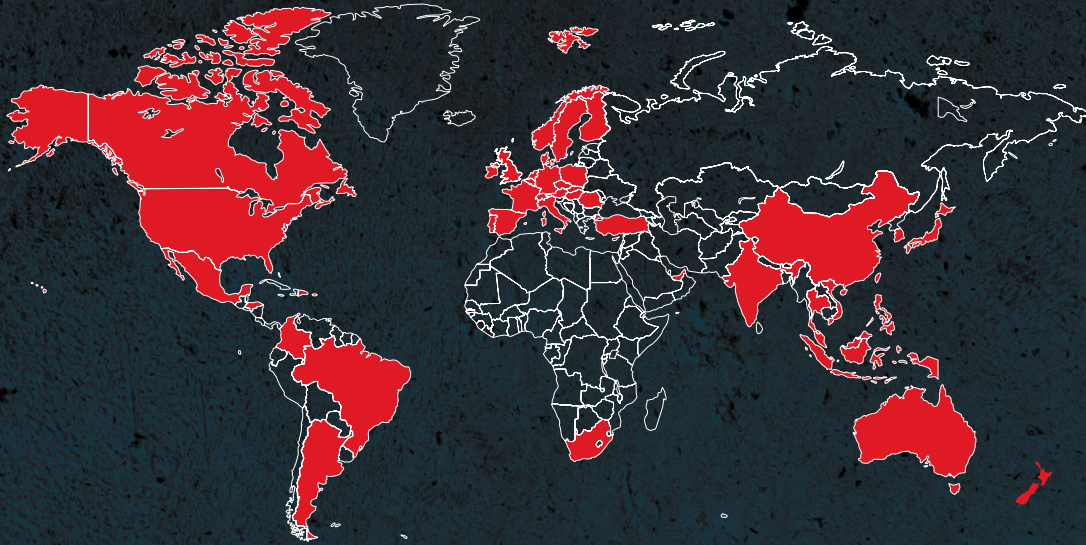
- Connect up to four individual hoses with industry standard KF vacuum fittings assure quick leak tight connections and rapid evacuations.
- Test port allows connection of vacuum gauge for system leak check.



Long Life & Easy to Use

- Rugged construction will provide years of reliable service.
- Ergonomic tablet computer location with USB port.
- Lockable storage cabinets to keep tools safe.
- Convenient work surfaces.

FASTEST GLOBAL DISTRIBUTION NETWORK



Interested in Learning More? Have Questions?

Contact Us.

fastsales@fastestinc.com

651.251.9741



Designed in the U.S.A.

Headquarters | USA

1646 Terrace Drive, Roseville, MN, 55113-1317

Phone: 651.645.6266 • Fax: +1.651.645.7390 • www.fastestinc.com

Shenzhen | China

Room#1013,1015, A9 Building, Tianrui Industrial Park

No.35 Fuyuan 1st Road, FuHai residential district,

Baoan Shenzhen, China 518103

(755) 27084905 • fastsalescn@fastestusa.cn