

Straight Rail System – STP

PLYMOVENT®
INTELLIGENT PROCESS VENTILATION™

The solution for moving or stationary vehicle applications

- The straight rail profile is a modular vehicle exhaust extraction system. This concept was developed for the automotive and truck manufacturing industry, but has found a new home in many other automotive workshops, due to its flexible and clean design.

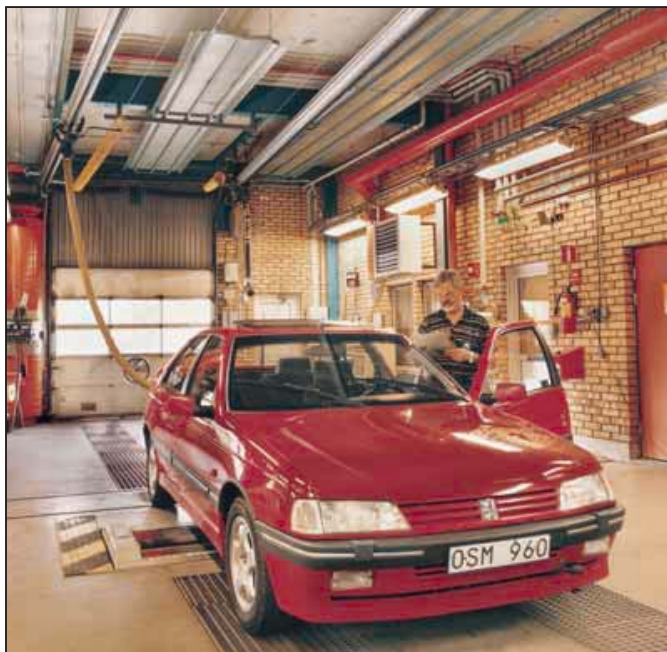


The STP can be mounted with the rail running parallel with the vehicle, which allows you to have full exhaust extraction from entrance door to exit door. This protects your workshop and its occupants from exhaust when operating vehicles. It can also be mounted along service bays for attaching to vehicles that are in stationary workstations.

In both cases, you can build a system that meets your requirements today and can be added on to in the future, when your needs grow. With an STP system you will never leave your investment behind.

Features and Benefits

- Modular design
- Solid one piece aluminium profile
- Compact space design
- Unlimited exhaust profile length
- Automatic release from vehicle
- Power operated hose return
- Teflon impregnated seals



Visit us on internet at: www.PacAir.net

Straight Rail System – STP

How to select an STP rail for your workshop

The first thing to decide is the mounting length and direction the vehicle will travel or park in your workshop.

Moving vehicle

If your vehicle will drive through your shop, you measure the distance from entrance to exit door and select an STP rail package from the chart below that is equal to the shop length.

Example; entrance to exit is 9 m/29.5 ft = STP-9.

Stationary workstations

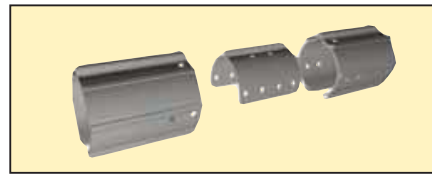
If you are looking for an STP rail to service a line of stationary work bays, you measure the line of work bays from one end to the other.

Example; If you have a total of six work bays that are 4 m/13.1 ft wide you will need a rail that is 24 m/78.7 ft long or STP-24.

If you need assistance calculating your requirements, contact us via internet at www.plymovent.com



Aluminium profile.
Available in standard lengths;
5.8 m/19.0 ft (RR-5,8), 3.0 m/9.8 ft
(RR-3,0) or order per meter (RR-X).



Rail splice, RRS



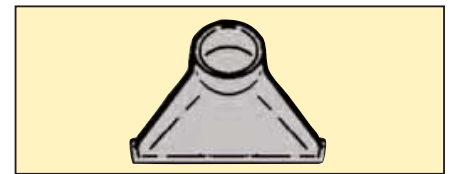
Low friction rubber seal, RRRS-X



Closed end stop, RRBC



Duct connection end stop,
Ø 160 mm/6.3", RRCE-160



Duct connection, Ø 200 mm/8",
RRDC-200

TECHNICAL DATA

Straight rail system consists of;

Prod. no.	Aluminium profile	Rail splice RRS	Low friction rubber seal RRRS-X	Closed end stops RRBC	Duct connection end stop, Ø 160 mm/6.3" RRCE-160	Duct connection Ø 200 mm/8" RRDC-200	Rec. no. of suspensions
STP-6	5.8 m/19.0 ft	–	12 m/39.4 ft	1 pc	1 pc	–	2 pcs
STP-9	8.8 m/28.9 ft	1 pc	18 m/59.0 ft	1 pc	1 pc	–	3 pcs
STP-12	11.6 m/38.0 ft	1 pc	24 m/78.7 ft	1 pc	1 pc	–	3 pcs
STP-15	14.6 m/47.9 ft	2 pcs	30 m/98.4 ft	2 pc	–	1 pc	4 pcs
STP-18	17.4 m/57.1 ft	2 pcs	36 m/118.1 ft	2 pc	–	1 pc	4 pcs
STP-21	20.4 m/66.9 ft	3 pcs	42 m/137.8 ft	2 pc	–	1 pc	5 pcs
STP-24	23.2 m/76.1 ft	3 pcs	48 m/157.4 ft	2 pc	–	1 pc	5 pcs
STP-27	26.2 m/85.9 ft	4 pcs	54 m/177.1 ft	2 pc	–	1 pc	6 pcs
STP-30	29.0 m/95.1 ft	4 pcs	60 m/196.8 ft	2 pc	–	2 pcs	6 pcs

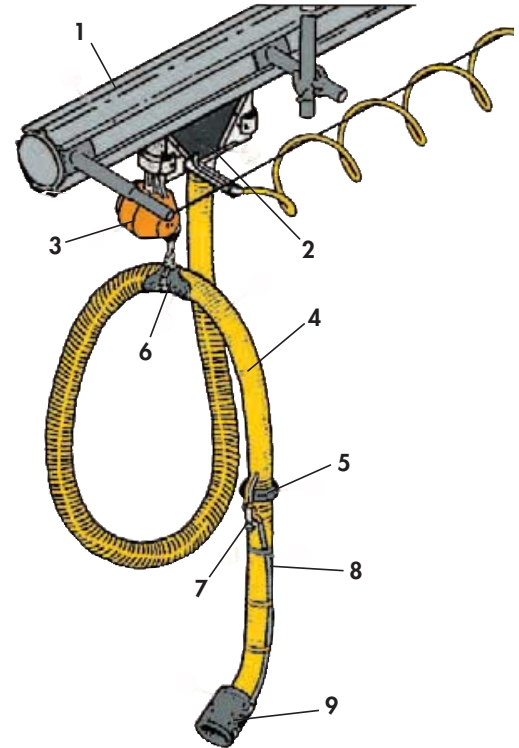
PlymoVent reserves the right to make design and technical changes.

Straight Rail System

Internal crabs

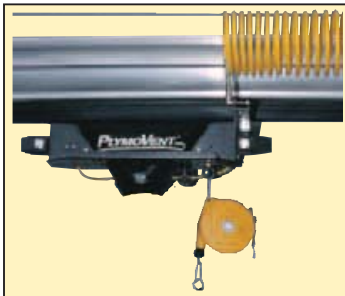
PlymoVent offers three styles of exhaust suction crabs for the straight rail profile system.

The crab is designed to travel in the STP profile and open the sealing lips at only the point where the exhaust crab is located at the time. After the crab passes, the sealing lips will close behind the crab. This creates air suction only at the point where the exhaust hose is located. Below are the exhaust crabs that fit your system, hose diameter and nozzle pipe.



1. Round Rail profile
2. Internal crab
3. Balancer
4. Exhaust hose
5. Safety disconnect coupling
6. Suspension saddle
7. Fill and deflation valve
8. Airline hose to Grabber®
9. Grabber® nozzle

TECHNICAL DATA



Automatic disconnect for Grabber® nozzles

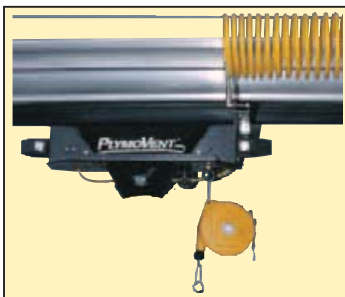
ICCA-style crab with balancer is designed to work with a sealed type exhaust nozzle, which is disconnected automatically by a pneumatic uncoupling valve mounted on the crab assembly.

• HPA-hose package

• GVSA – Grabber® Vertical Stacker

Prod. no.	Hose connection
ICCA-75	Ø 75 mm/3"
ICCA-100	Ø 100 mm/4"

Prod. no.	Hose connection
ICCA-125	Ø 125 mm/5"
ICCA-150	Ø 150 mm/6"



Manual disconnect for Grabber® nozzles

ICCM-style crab with balancer is designed to work with a sealed type exhaust nozzle, which is disconnected manually by the service technician.

• HPM-hose package

• GN – Grabber®

• GVSM – Grabber® Vertical Stacker

Prod. no.	Hose connection
ICCM-75	Ø 75 mm/3"
ICCM-100	Ø 100 mm/4"

Prod. no.	Hose connection
ICCM-125	Ø 125 mm/5"
ICCM-150	Ø 150 mm/6"



Manual disconnect nozzle

IC-style crab with balancer is designed to work with an opened exhaust nozzle, which is disconnected manually by the service technician.

• REN

• REC

• REG

• MEN

• VSC

Prod. no.	Hose connection
IC-75	Ø 75 mm/3"
IC-100	Ø 100 mm/4"

Prod. no.	Hose connection
IC-125	Ø 125 mm/5"
IC-150	Ø 150 mm/6"

Straight Rail System

Round Rail Top Suspension (RRTS)

The RRTS modular mounting system has been pre-engineered to meet the needs of the mechanical installer and the structural design. This bolt-together design cuts hours off installation labor time and exceed building code requirements for strength and stability.

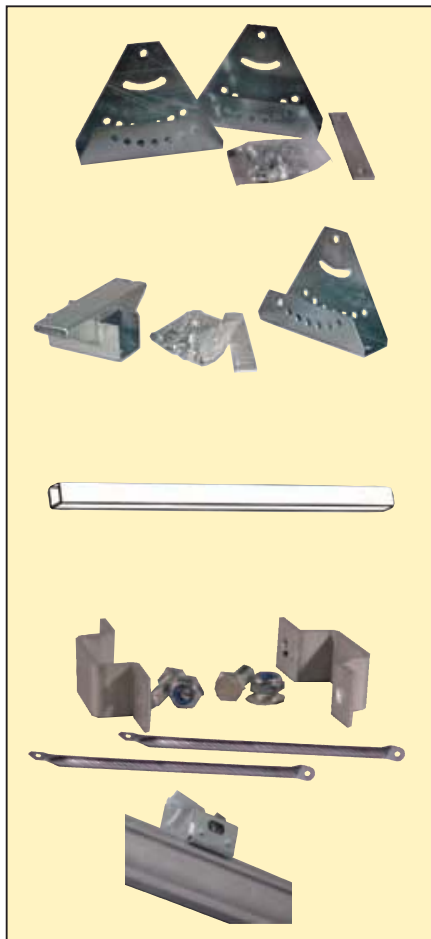


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TECHNICAL DATA

Suspension system with SBT suspensions, RRTS



The **SBT-MKV** is for mounting the SBT-SL support leg profile to the ceiling of your workshop. The suspension plate is adjustable for angled ceilings to adjust the pitch to vertical. SBT-MKV come in sets to mount one support length.

The **SBT-MKH** is for mounting the SBT-SL support leg profile to the wall of your workshop. The horizontal slide plate will allow adjustment away from or closer to the wall. SBT-MKH comes in sets for mounting one support suspension.

The **SBT-SL** is an aluminium profile, extremely strong but light-weight for easy mounting. The profile comes in 5.8 m/19 ft and is cut to fit your application. The SBT-SL are sold by the piece or in packs of 24 pcs for large jobs.

The **SBT-SBK** is designed to work with the SBT-SL profile to eliminate side movement of support legs. The SBT-SBK comes in three lengths to handle any ceiling height or angle. (SBT-SBKS = 430 mm/17", SBT-SBKM = 710 mm/28", SBT-SBKL = 1830 mm/72")

The **RRTS** is designed to clamp to the top of the STP rail profile and mate with the SBT-MKV or SBT-MKH mounting kits. The RRTS will slide the full length of the rail to line up with ceiling or wall beams.

Mounting tools for rubber seal



TECHNICAL DATA

The TRS-RR and the TRS-00 are used to install the continuous rubber seal to the bottom of the STP rail profile.

Prod. no.	Description
TRS-RR	Rubber Seal Tool, crank model
TRS-00	Rubber Seal Tool, simple model "pizza cutter"

Straight Rail System

Hose package for Grabber® nozzles with automatic or manual release – the choice is yours.

There are two styles of Grabber® hose packages to choose from. Please choose one of the following:

Automatic release

The HPA hose package is designed to work with the ICCA-style crab assembly. The trip valve on the ICCA-crab will auto-release the Grabber® when the moving vehicle passes the trip-plate mounted on the straight rail upon reaching the exit door. The manual fill and deflation valve mounted to the hose allows the service technician to manually fill or deflate the Grabber®.

Manual release

The HPM hose package is designed to work with the ICCM-style crab assembly. The HPM-hose package comes with a barrel type slide valve which allows the operator to manually fill and release the Grabber® from the vehicle. However, with this option you do not have the auto-release function. You can purchase a standard up-grade kit at any time.



TECHNICAL DATA

Hose package – for automatic disconnection

Prod. no.	Diam. Hose Connection mm/inch	Diam. Grabber mm/inch
HPA-75-6-100	75/3	100/4.0
HPA-75-6-120	75/3	120/4.7
HPA-100-6-120	100/4	120/4.7
HPA-100-6-160	100/4	160/6.3
HPA-125-6-160	125/5	160/6.3
HPA-150-6-160	150/6	160/6.3

Hose package – for manual disconnection

Prod. no.	Diam. Hose Connection mm/inch	Diam. Grabber mm/inch
HPM-75-6-100	75/3	100/4.0
HPM-75-6-120	75/3	120/4.7
HPM-100-6-120	100/4	120/4.7
HPM-100-6-160	100/4	160/6.3
HPM-125-6-160	125/5	160/6.3
HPM-150-6-160	150/6	160/6.3

Air supply



Prod. no: Description

CA-10	Coiled airline, L = 10 m/32.8 ft
CA-16	Coiled airline, L = 16 m/52.5 ft
CA-25	Coiled airline, L = 25 m/82.0 ft
CA-31	Coiled airline, L = 31 m/101.7 ft
CA-40	Coiled airline, L = 40 m/131.2 ft

Prod. no: Description

W-11	Cable, L = 10 m/3.8 ft
W-17	Cable, L = 16 m/52.5 ft
W-26	Cable, L = 25 m/82.0 ft
W-32	Cable, L = 31 m/101.7 ft
W-40	Cable, L = 40 m/131.2 ft

Order same length as for the coiled air line.

Prod. no: Description

STR-MZ	Coiled airline storage magazine.
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Order one magazine per coiled airline.

Prod. no: Description

	End shock
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