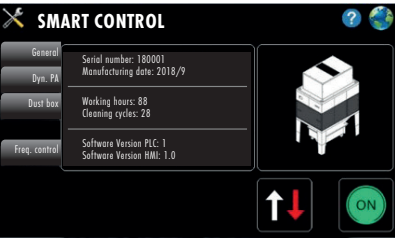


The central fume exhaust system - advantage

Intelligent control

The central extraction systems from HERR use Siemens™ PLC's together with software developed by HERR. All the important control functions and messages are shown on a 7" touch display. In order to prevent parameters being deleted or changed by mistake, important areas are password-protected. The convenient control unit makes operation easier and provides important information about maintenance and problem diagnosis.



Fan

The selection of a suitable fan not only saves energy it is important for the service life of the filter cartridges. As the filter ages, air resistance in the filter cartridge increases slightly but steadily. The fan must be able to cope with this. The best way is with a control unit through a frequency converter.

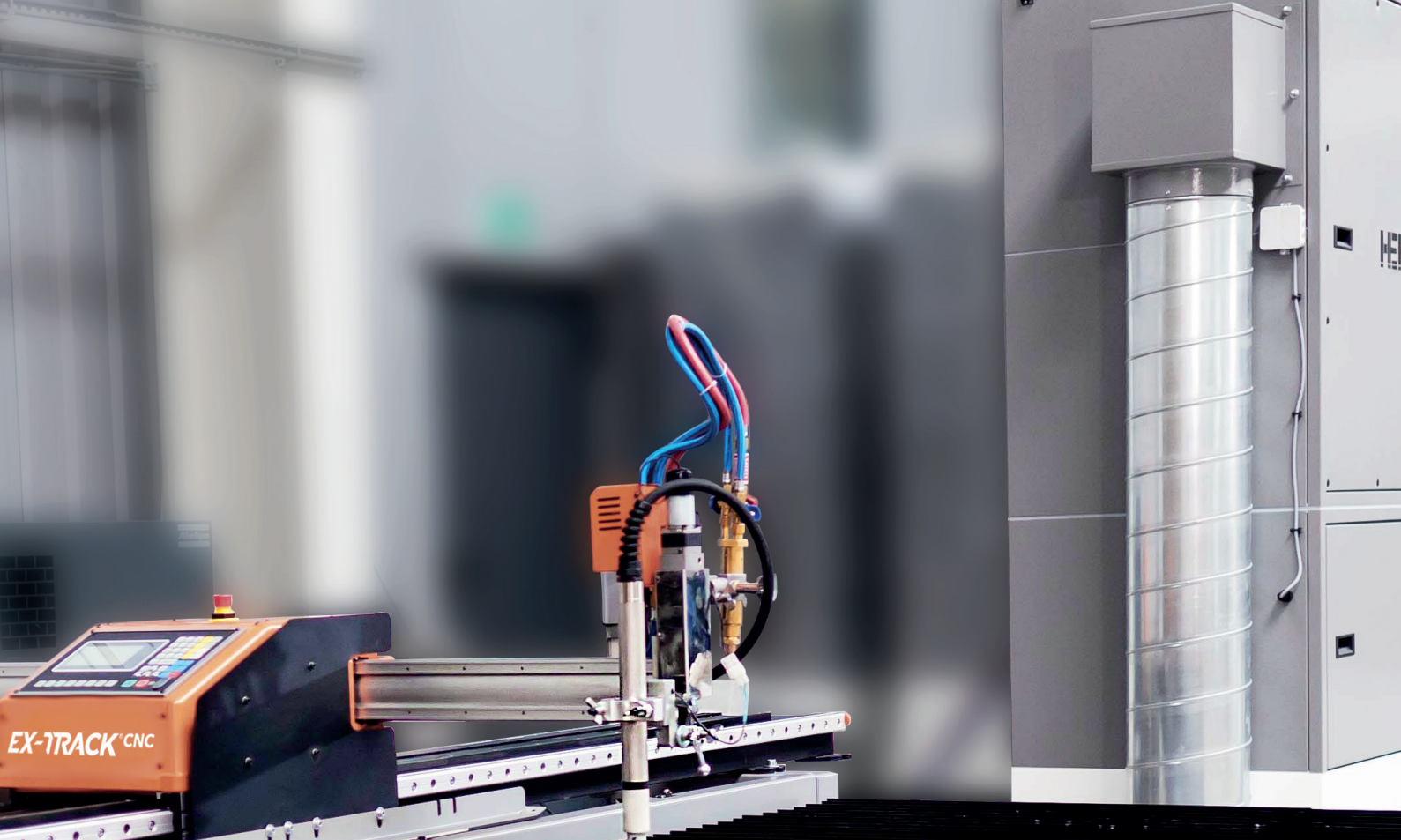


HISTec® filter cartridge

The filter material of HERR filter cartridges is pleated like the bellows of an accordion. The distance between the pleats is constant and is fixed by gluing into the cartridge base and cover. The pleating angle of the filter cartridges is less than 3°. Thus, the pleating angle offers an optimum filter area coupled with high airflow efficiency.

HiRoto® rotary backflush nozzle

HiRoto® H-type rotary backflush nozzle device is developed by HERR to improve the cleaning process. The membrane fold angle of the cartridge is less than 3° to maximize cleaning and air flow efficiency. However, to clean the dust inside of the angles is difficult. HERR (Patent No.: 200 720 073 660) HiRoto® H-type rotary nozzle backflushes compressed air in 360° and covers every corner of the filter cartridge. The device is composed of two 2 cm diameter parallel metal tubes with uniformly spaced air holes. The tubes are connected to a central axis. Compressed air is rapidly flushed to the H-type rotating nozzle to clean the filter cartridge completely. Benefit from this design - the service life increased 30 % and the energy consumption decrease 20 %.



Solution for portable cutting systems

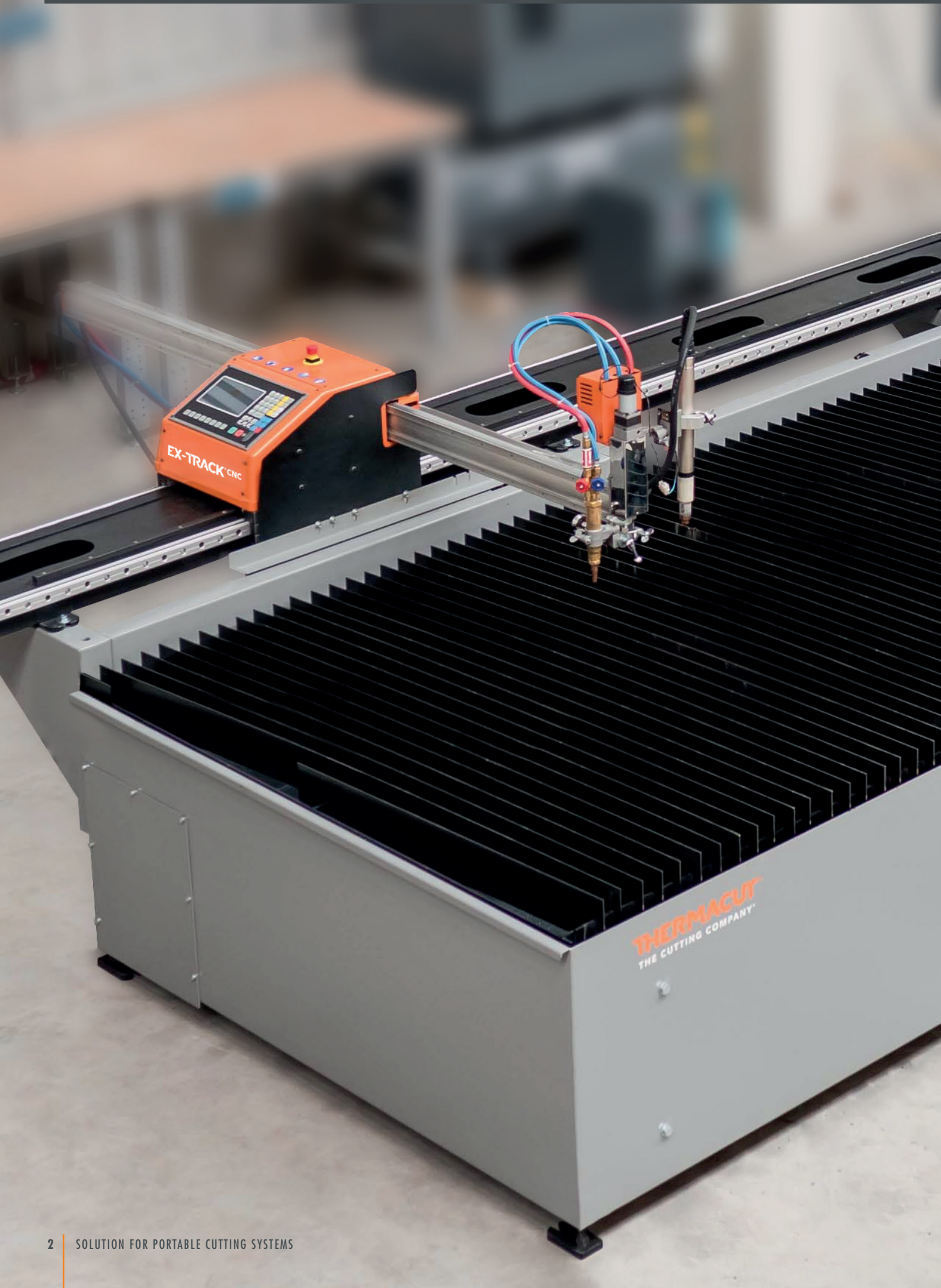
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- Series 880 filter system
- PorVent cutting table for portable cutting machines
- PorVent functionality
- Advantages & details

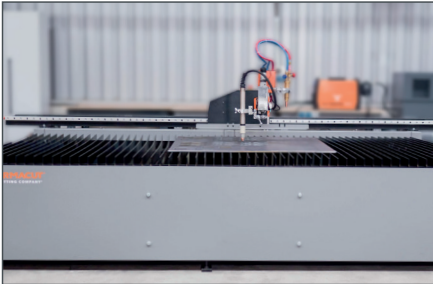


PorVent cutting table for portable devices

Beside the cutting machine, the cutting tool and the steel used for manufacturing, the cutting table is an important investment. The structure of the cutting table must be welldesigned and durable for achieving quality cutting by efficiently and effectively remove the dust and contaminated air from the cutting process. In order to offer the best plan to help the customer to solve their dust problem, the customized service of HERR PorVent table combination is also available. HERR combines cutting table and the exhaust system perfectly together to achieve the ultimate

goal - the protection of work force and increase productivity. HERR also offers a complete system which consists of cutting table, filter system, fan and pipes. Besides those merits, HERR cutting table is also easy to install and maintain, and energy efficient. HERR only uses quality components to manufacture the PorVent down draft cutting table. The tables fulfill all requirements of a functional cutting table. Due to the modular design, the PorVent tables are easy to transport, install and can even be expanded to adjust the increasing workload. The PorVent

down draft table uses long lasting components like copper pipes and two way air cylinders. The special designed exhaust channels and exhaust flaps can reduce the need for compressed air and fan power. This can lower your operation cost and increases productivity.



Functionality

The PorVent cutting table is available in cuttind area 1.5 x 3.0 m. The suction channel runs in longitudinal direction and can be connected to a pipe, which lead directly to the exhaust system.

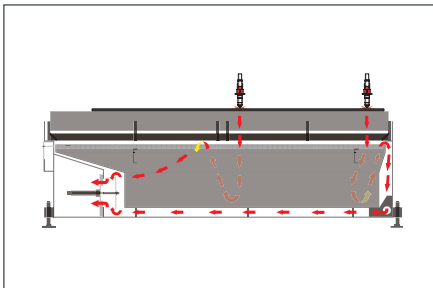
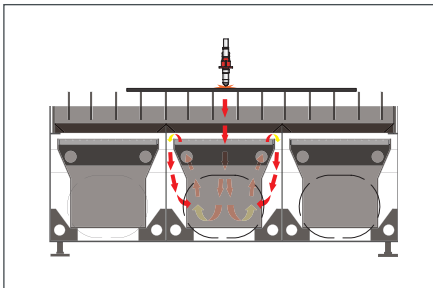
Each table module is separated into four 750 mm wide extraction sections. Each extraction section owns a separate exhaust flap. The dust is sucked from the extraction segment into the longitudinal channel into the exhaust system. Coarse dust and sparks are already separated from the finer dust inside the table.

This first separation reduces the possibility of filter fires drastically and increases the lifespan of the filter cartridges. PorVent cutting table open and close the air ducts by pneumatic cylinders. The cylinders are supplied with compressed air through heat-resistant copper pipes. Sparks, embers or hot dust particles from the cutting process does not

melt the pipes. Malfunction or loss of production time due to leakages can be avoided. The exhaust flaps are controlled in mechanically - a sledge is required for mechanical activation of the exhaust flaps.

During cutting, the hot slag is captured by the slag boxes. The slag boxes are equipped with integrated crane eyes and can easily be lifted for cleaning. The plate is placed on the cutting support which lies above the slag boxes for cutting.

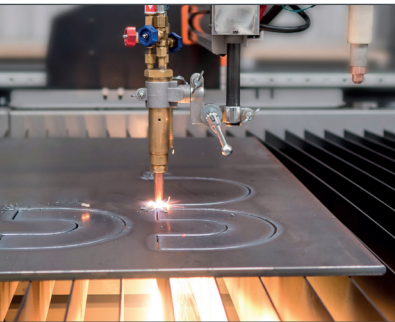
The standard cutting support is made out of 3 mm thick sheet metal slats with a base height of 100 mm. This slot thickness is suitable for plasma and oxy-fuel cutting. The slats can easily be taken out and be replaced. The table is adjustable in height from 650 mm to 750 mm. However, we recommend a maximum tolerance of the foundation of +/- 5 mm.



Series 880 filter system



The 880 series EXHAUST system is extremely compact and light. It is the first choice for handling smoke and dust generated by robot welding and lights plasma cutting applications. In combination with a HERR exhaust hood of portable cutting table it is one of the most economic exhaust systems in the market. The two filter cartridges are hosted in the upper segment of the exhaust system. This allows easy access for maintenance and cleaning of the dust collection box. The basic model of the 880 series uses two 10m² filter cartridges made of ePTFE laminated fabric. Plasma version use two cartridges each 20m². This guarantees a highly efficient filtration of the contaminated air. Compared with conventional cleaning procedures



via air pulse, the quiet (<75 dB) and efficient cleaning via the HiRoto® rotary nozzles is energy-efficient. HISTec® ePTFE filter cartridges do not only clean the air more thoroughly than regular filter cartridges, the service life also last longer.

Order numbers

Part Number	Description	Quantity
EX-0-714-004	Cutting table body, size 1,600 x 3,200 mm, 3 mm steel, 4 pneumatic operated exhaust flaps, requires 6 bar compressed air	1
	Cutting table support, steel, slot thickness 3 mm, distance approx. 50 mm	1
	Dustbox 2 mm, steel, 1,425 x 685 x 398 mm	4
	Holder for portable cutting machine, incl. Pneumatic valves for exhaust flap activation	1
	Portable cutting table connection kit, consisting of: air outlet Ø350 mm, blind cover, pressure reg	1
	Activation bar for portable cutting machines (EX-TRACK® CNC)	1
EX-0-710-001	Central extraction system, 3.000 m³/h, 1.5 kW CE Europe 3 x 400 V, 50 Hz, 40 m² filter area, 1,120 x 700 x 2,445 mm, 495 kg	1
EX-0-714-002	Circular duct, galvanized, Ø250 mm, 3 m, DIN EN 12237, DIN EN 1506	2
	Segmented and lockseamed bend, galv., 90°, Ø250 mm, with rubber seal	1
	Reducer, long, concentric, galvanized, Ø1: 355 mm, Ø2: 250 mm, ~18°	1
	Coupling connector for circular ducts, Ø250 mm, galv., with rubber seal	2
EX-0-711-001	Replacement filter cartridge ePTFE, 20 m²	1

Technical Specifications

Table size (W x L): 1.600 x 3.200 mm  
Height: 650 mm – 750 mm  
Extraction sections: 4 x 750 mm  
Weight: approx. 430 kg  
Thickness of the cutting ridges: 3 mm  
Opening of the extraction flaps: pneumatic  
Compressed air required: 5 – 6 bar, clean, oil-free

