RUPES®

DUST EXTRACTION SYSTEMS

SAFETY
EFFICIENCY
RELIABILITY

These are the main characteristics RUPES takes into consideration when designing and building the full range of dust extraction systems. The result is the possibility to offer solutions for every requirement: **from small extraction systems to large industrial applications with a 1.5 kW to 15 kW range** of power ratings.

THE ADVANTAGES
OF THE EXTRACTION SYSTEMS

ENERGY SAVING

High efficiency extraction systems generate considerable energy savings in large industrial environments, assuring cost reduction throughout the production cycle. RUPES unique design of a double-pump with an inverter system creates significant energy savings in small, medium or large facilities.

HEALTH PROTECTION

A dust extraction system is the best choice for working professionally and safely. Dust extraction systems help provide a clean and healthful work environment.
Dust generated during the sanding process can be extremely harmful to the technicians.
An extraction system fitted with high-efficiency filters can almost totally eliminate the presence of airborne sanding residue.

COST REDUCTION

Power tools used in conjunction with central vacuum systems last considerably longer than those used in non-vacuum environments. A cleaner workplace results in lower maintenance costs on power tools of any kind. Abrasives last up to 40% longer when used with central-vacuum tools. Cleaner abrasives cut more efficiently, reducing the production cycle time and creating a higher quality finish that eliminates costly rework.

HIGH PERFORMANCE

RUPES technology offers the customer the opportunity to achieve dust-control solutions while maximizing cost savings on energy, tools and abrasives. Our goal is to always achieve maximum dust-control efficiency while reducing time, material and energy costs.

LESS MAINTENANCE

Power tools used in conjunction with an efficient central vacuum require considerably less maintenance and reduce labor and downtime costs associated with repair.

LONGER TOOL LIFE

Power tools operating in an environment that has reduced airborne contamination have much longer life than tools that work in dirty conditions. Further, dust that infiltrates the tool and comes into contact with its mechanical parts can change the tolerance of those parts and reduce the effectiveness of the tool.

CENTRALIZED DUST EXTRACTION SYSTEMS

RUPES TURBINES

The RUPES range is the result of continuous research and development of innovative solutions and advanced technologies to meet the operator's needs.
The RUPES line of turbines consists of a full range of extraction sources: from 1.5 kW to 15 kW.

HIGH EFFICIENCY FILTERS

PTFE filtering materials and Rotor-Jet cleaning system.

CONTROL PANEL

Multi-purpose control panel and filter status monitoring system.

EXTREMELY POWERFULL AND QUIET

High extraction capabilities and use of efficient acoustic insulation materials.

ENERGY SAVING

Availability of complete solutions with one or more extraction sources and INVERTER systems to reduce energy consumption.

FUNCTIONAL DESIGN

Designed for easy and quick installation and to make routine maintenance operations simpler.

PTFE FILTERS

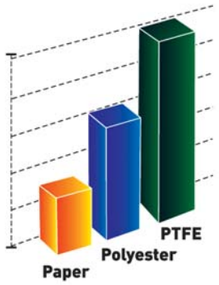
High quality materials - A cartridge filter made of a PTFE membrane is installed on every turbine. The high technological quality of the filtering material guarantees optimum extraction efficiency and performance in a number of applications.

Larger filtering surface - The pleated structure of the filter allows a high filtering surface (up to 8 m^2) to be distributed over a single cartridge of small diameter (only 320 mm).

ENDURANCE

The PTFE membrane increases the endurance of the cartridge filter. The resistance of the material to compressed air jet cleaning cycles ensures that filtering performance remains the same over time.

Lifetime and Strenght

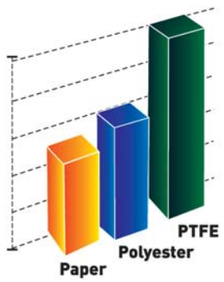


MAXIMUM HEALTH PROTECTION DUE TO ULTRA-HIGH EFFICIENCY CLASS "M" PTFE FILTERS

PTFE filters are able to filter up to 99.9%, even when the dust is very fine with a size of 0.3µm.

Variety of applications - The special structure of the PTFE filters reduces the risk of clogging. This makes the system especially versatile and effective in a variety of sanding applications, including plastic, metal, wood, composite, etc.
The large filtering surface, designed specifically for the power of the turbine system, ensures the best filtration efficiency possible.

Maximum Efficiency



STANDARD FILTER

ANTISTATIC FILTER

HEALTH PROTECTION

Class "M" PTFE filters with filtering surface up to 8m²

HIGH EFFICIENCY + LARGE SURFACE = CLEAN AIR

***Based on the standard EN 60335-2-69, use of hearing protection systems is required beyond this threshold.**

CYCLONIC FILTRATION SYSTEM

An efficient cyclonic system is the first step for excellent filtration. In the Rupes system, rotational motion and gravity are used to separate dust from air flow, without the use of filters.

A tangential inlet and a metal plated that surrounds the filter cartridge protect the filter and force dust particles to decelerate. As the dust particles slow, gravity forces them to fall into the capture area of the container.

The cyclonic system can filter up to 80% of the dust load, reducing stress on the PTFE filter cartridge and actually improving the already highly effective PTFE filter's efficiency.

The cyclonic system can filter until 80% of dust load

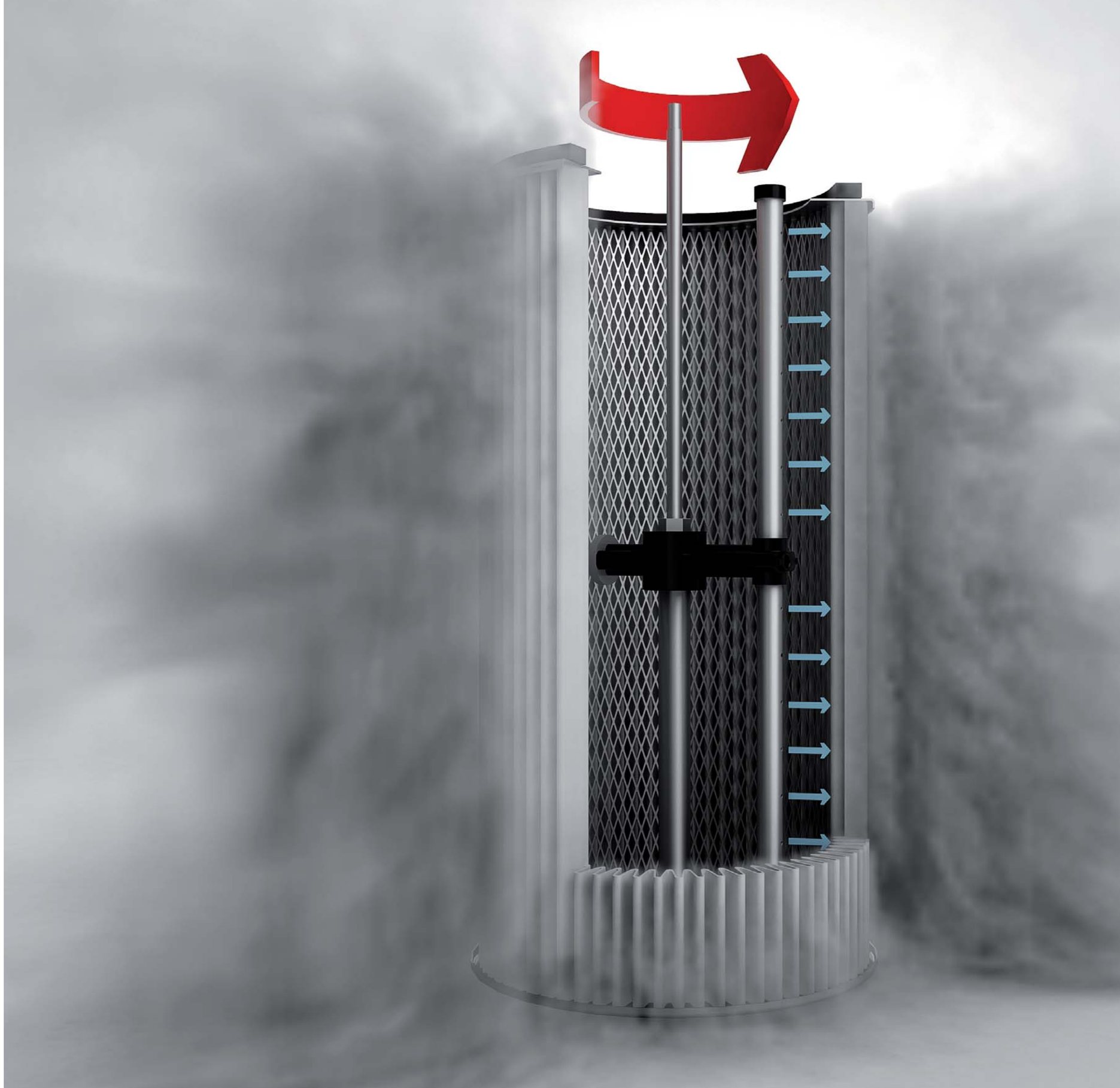
HIGH EFFICIENCY

ROTOR-JET SYSTEM

The Rupes Rotor-Jet System is a rotary, compressed air cleaning system. A controlled rotary compressed air jet coming from inside the cartridge filter removes dust from the filtering surface.
Running an automatic cleaning cycle while the turbine is in operation ensures that the filtration element is cleaned and that extraction stays at the highest level over time.

High efficiency filter cleaning system

HIGH PERFORMANCE



CONTROL PANEL

An innovative system that monitors the filter status in real time gives the user an indication of the filtering efficiency and extraction performance of the turbine.

An easy to read LED gauge provides information on:
- how clean the cartridge filter is;
- the efficiency of the automatic filter cleaning system;
- the extraction efficiency of the entire turbine.

With this information, if there are problems the user can take measures in advance to restore or improve the maximum filtering efficiency condition and in this way eliminate any costs for maintenance work on the turbine.

POWER

DISPLAY

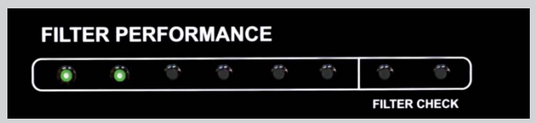
MENU DISPLAY

FILTER CLEANING

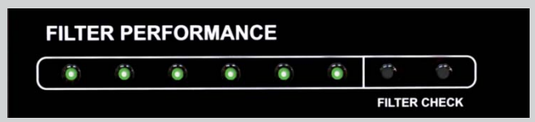
FILTER PERFORMANCE

FILTER STATUS CONTROL

The innovative control panel with built-in display provides all the information necessary for turbine operation and a handy tool that helps with maintenance operations (e.g. "FILTER CLEANING" button).



FILTER OK



WARNING LEVEL

FILTER CHECK

PERFORMANCE

Thanks to their high vacuum and delivery values, RUPES suction pumps ensure that top performance is maintained, even in the longest and most complex installations.

HIGH PERFORMANCE

SAFETY AND RELIABILITY

The high degree of reliability of the new RUPES turbines is achieved by installing protection and safety devices. The preventive intervention of these devices cuts the risk of failures or repair work for the entire service life of the turbine.

Using suction pumps with side channel technology guarantees great reliability and a long lifetime, up to 20,000 hours maintenance-free.

Up to 20.000 hours maintenance-free

LESS MAINTENANCE

Power range from 1.5 kW to 15 kW for all types of requirements

FUNCTIONAL DESIGN

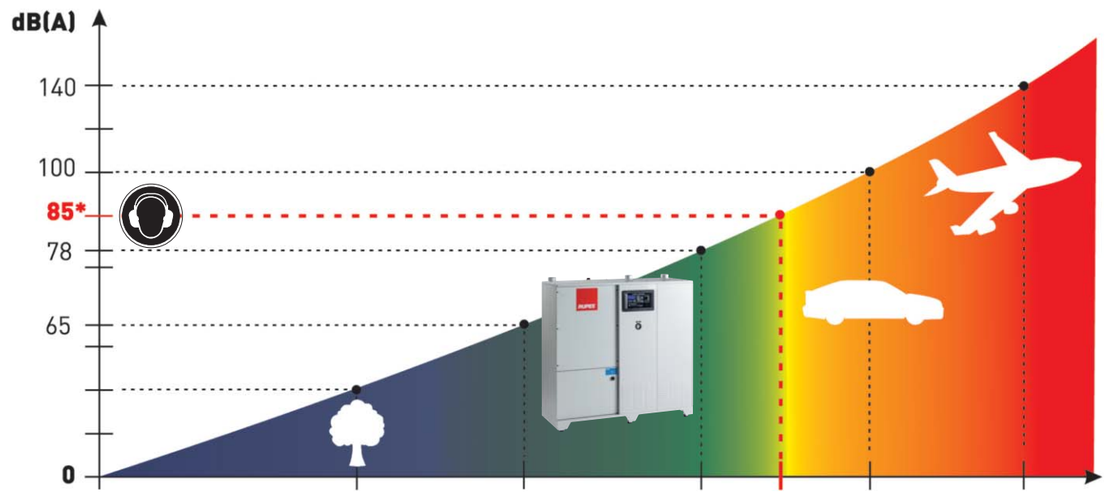
Automatic filter drum lifting - The automatic system that lifts the filtering element when the front panel is opening allows the dust container to be easily removed. The amount of dust and the emptying of the container are controlled very quickly.

Simple installation - The new design makes installation and positioning of the turbine simple and quick. The base is designed to make handling with pallet trucks and forklifts easy.

EXTREMELY POWERFUL AND QUIET

The use of acoustic insulation materials and devices for reducing noise guarantees a quieter workplace and a safer, more comfortable working environment.

NOISE DIAGRAM



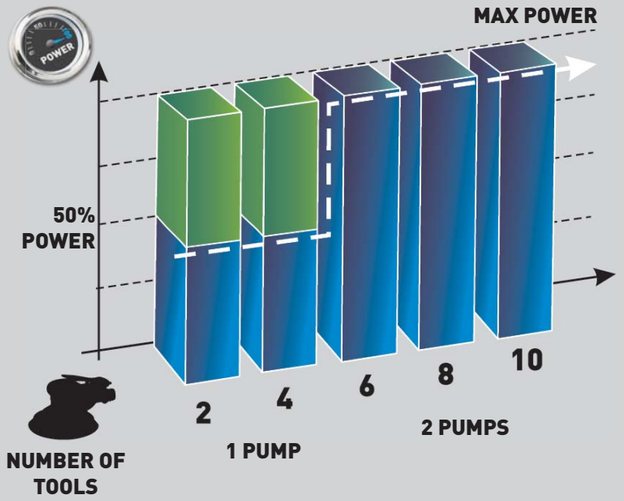
The values shown are stated in dB(A).
***Based on the standard EN 60704-3, use of hearing protection systems is required beyond this threshold.**

ENERGY SAVING

It is important to have correct management of energy consumption and of the power rating of the extraction source.
The RUPES double-pump turbine solutions with INVERTER SYSTEM answers the need to achieve energy saving and high performance for both small systems and large industrial applications

DOUBLE-PUMP TURBINES

Ideal solution for centralized extraction systems that demand excellent extraction performance and energy efficiency **to keep investment costs to a minimum.** The double-pump turbine models are available in a number of power levels: from 3+3 kW to 5.5 + 5.5 kW.



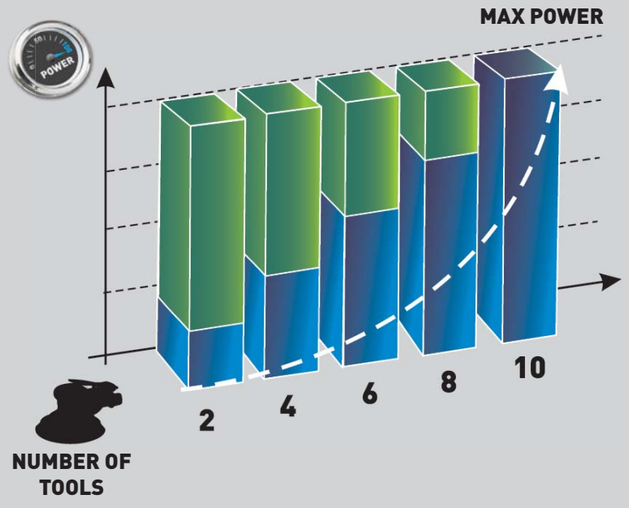
ENERGY SAVED

ENERGY DELIVERED

ENERGY SAVING

TURBINES WITH INVERTER SYSTEM

The inverter system is the Ideal solution for centralized extraction systems that demand maximum extraction performance and energy efficiency.
The turbine with INVERTER SYSTEM is available in a number of power levels: from 5.5 kW to 15 kW.



HIGH PERFORMANCE

ATEX EXTRACTION SYSTEMS

The RUPES line of ATEX extraction turbines is great for extracting potentially explosive dust generated by sanding processes in zones classified 22 (according to Directive 99/9/EC).
Confirmation to the ATEX standard (94/9/EC) and its high levels of safety allow the use of the Rupes ATEX system in many industrial sectors (bodywork, shipbuilding and carpentry) to extract fine dust generated during sanding and similar processes.
The harmful dust is extracted and collected inside the **ATEX turbines**, which are designed to provide a high level of protection from the risk of explosion inside the workplace.

ANTISTATIC FILTER MADE OF PTFE (CLASS M ACCORDING TO THE STANDARD EN 60335-2-69)

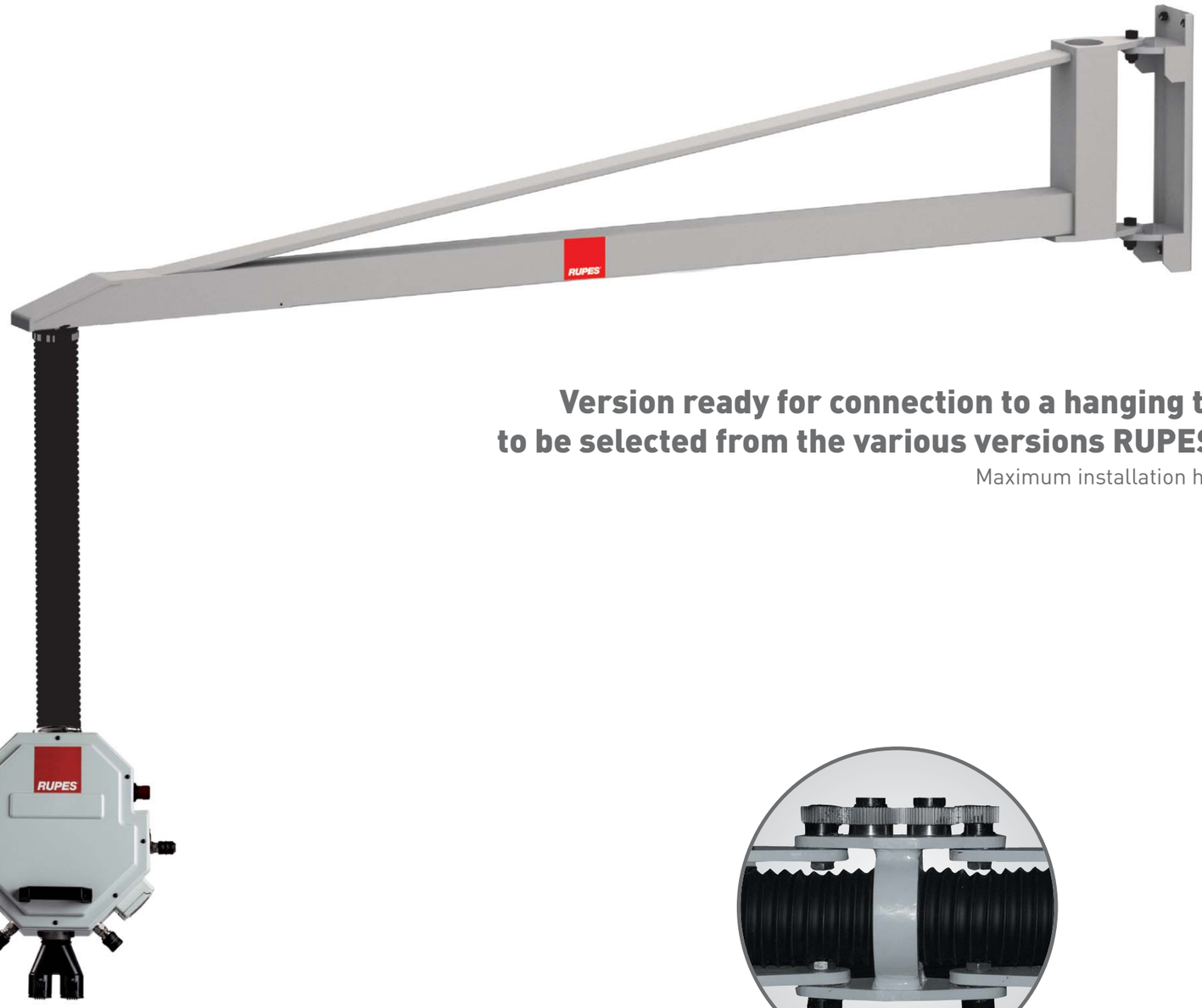
ATEX EXTRACTION PUMP FOR USE IN ZONE 22

TERMINALS

SWING ARMS

These systems are ideal for all sanding and paint preparation applications. The terminals remove the typical obstacles of cables or hoses on the floor, creating a much safer and more efficient workplace.

The Swing Arms are available in 3 mete and 6 meter versions and come with a centrally articulated joint complete with a double gear to achieve more precise and fluid movement.



Version ready for connection to a hanging terminal to be selected from the various versions RUPES offers.

Maximum installation height: 4.5 m.

Central articulated joint with double gear pair.

Version with built-in terminal to supply energy, compressed air and suction over a large work area.

Maximum installation height: 2 m.

MULTIFUNCTIONAL TERMINALS

Service terminals for 1 or 2 operators set up to supply energy, compressed air and suction for using tools at the workplace.

FLUSH-MOUNTED MULTIFUNCTIONAL TERMINALS

Flush-mounted terminals are recommended for work areas where space needs to be optimized. These units have the ability to be mounted on a wall through the use of an additional support.

MANUAL EXTRACTION CLOSURE

TERMINAL FOR 1 OPERATOR

TERMINAL FOR 2 OPERATORS

WALL-MOUNTED MULTIFUNCTIONAL TERMINALS

These units are prepared for direct installation on a wall so that internal work area is increased. The units supply power directly to the tools being used

MULTIFUNCTIONAL TERMINALS

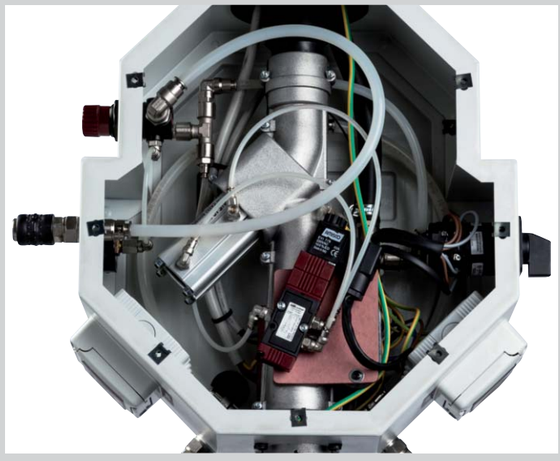
Ready for hanging or installing on arms, positioned near the work station to give the operator support during machining operations.

STARTING

The terminals offer a full range of operations that meet all remote extraction management requirements. Options available include both switch activated and tool activated systems.
The automatic (tool-activated) control system is a perfect example of Rupes commitment to energy reduction and maximum efficiency during the production process.

Extraction control

	TERMINAL VERSION		
	Manual	Auto	Cut-Off
Manual extraction starting	•	•	•
Automatic extraction starting		•	•
Automatic extraction starting with Cut-Off system			•



CUT-OFF SYSTEM

The Cut-Off system is used to maximise the output of centralized systems so as to improve extraction on the singular tools connected to it. Special valves automatically close the flow of suction for those tools that are temporarily disabled even though they are connected to the system. In this way the capacity of the extraction unit is divided up only between those tools that are actually working.
This ensures that maximum extraction is always available on the single active work stations.

JUNCTION BOX, PIPES AND FITTINGS

The purpose of the junction box is to connect the turbines to the service and control panels so that electricity, compressed air and suction are properly supplied.

The extraction line is modular and can be easily adapted to any type of work area to create a "tailor-made" solution. A wide range of accessories, including pipes and fittings, are available to assist in the adaptation process.

RUPES

NEW RUPES TURBINES LINE

	SINGLE PUMP			DOUBLE PUMP			INVERTER		
MODEL	**HE201**	**HE501**	**HE901**	**HE1101**	**HE1401**	**HE1501**	**HE901i**	**HE1301i**	**HE1801i**
DESCRIPTION	Turbine •	Turbine •	Turbine •	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
POWER **kW**	2,2	3	5,5	3+3	4+4	5,5+5,5	5,5	7,5	15
HP	3	4	7,5	4+4	5,5+5,5	7,5+7,5	7,5	10	20
ELECTRIC SUPPLY	380V 3ph	380V 3ph	380V 3ph	380V 3ph	380V 3ph	380V 3ph	380V 3ph	380V 3ph	380V 3ph
NUMBER OF TOOLS	2	3/4	5/6	6	7	10	7	9	12
TECHNOLOGY	Single pump	Single pump	Single pump	Double pump	Double pump	Double pump	Inverter	Inverter	Inverter
ENERGY SAVING LEVEL	●	●	●	●●	●●	●●	●●●	●●●	●●●

• ATEX Zone 22 version available

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