

# **OIL & SWarf** **INDUSTRIAL** **VACUUMS**



# WHY USE AN INDUSTRIAL VACUUM?

Industrial manufacturing processes that involve metal cutting produce residual swarf mixed with cutting oil or lubricants that are commonly collected into tanks. Using an industrial vacuum for separating cutting oil and swarf is a practical and efficient solution for managing this material, allowing easy separation and collection for recycling or safe disposal. This helps to maintain a clean and safe work environment, improve machinery efficiency, and reduce the overall environmental impact of industrial manufacturing processes.

Hydraulic oils

Clean lubricants

Mud and swarf



## CLEAN AND REUSE



Recovery and reuse of clean lubricants, coolants and cutting oil



Saving on oil purchase and chips disposal costs



Maintenance time reduction and avoid downtimes

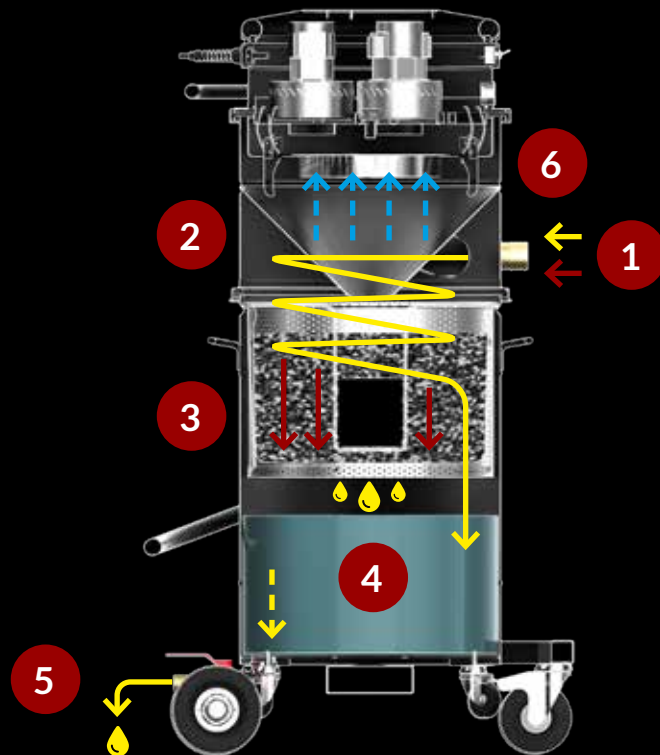


# WORKING PRINCIPLE

## WITH BIN

1. The oil and the swarf get sucked into the inlet.
2. The mixture travels around the cyclone in a circular motion.
3. The swarf gets separated from the oil with a metal basket and a PPL filter with 150  $\mu$  efficiency.
4. The clean oil gets collected in the 100 Lt metal bin.
5. The oil can easily be discharged to be collected and reused.
6. The air passes through an oil proof filter that traps the oil mist and protects the motors.

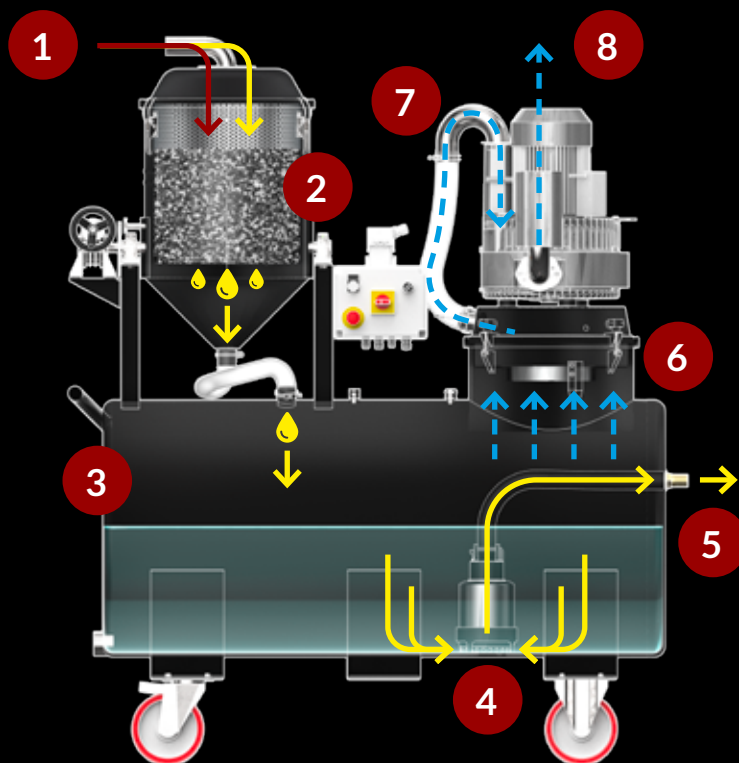
● Swarf ● Lubricant ● Air



## WITH TANK

1. The oil and the swarf get sucked into the inlet.
2. The swarf gets separated from the oil in the metal basket.
3. The Oil it's collected into the vacuum tank.
4. The submerged pump blows out the oil.
5. The oil goes out of the tank to be collected and reused.
6. The air passes through an oil proof filter that protects the motorhead from oil mists.
7. The filtered air gets to the side channel blower.
8. The air is blown out clean in the environment.

● Swarf ● Lubricant ● Air





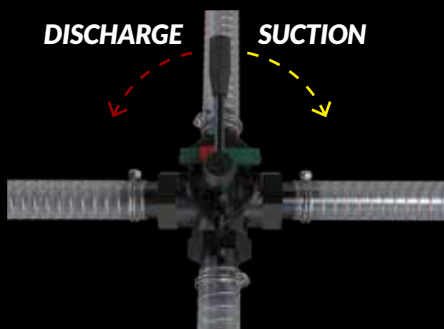
# HOW TO CHOOSE DISCHARGE SYSTEMS FOR LIQUIDS

**SIMULTANEOUS  
SUCTION AND  
DISCHARGE!**



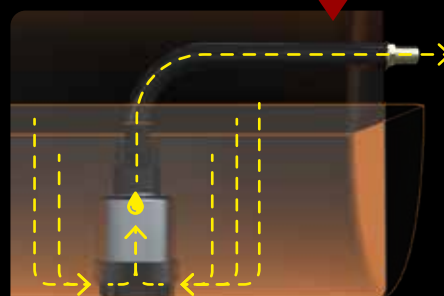
## GRAVITY

The liquid is discharged by means of a manual ball valve placed at the bottom of the container.



## REVERSE FLOW

A practical lever, installed on the rear part of the vacuum cleaner, allows to rapidly select between vacuuming or discharging operation mode. The reverse flow system uses the exhaust air from the turbine, ensuring the efficiency and speed of the operation.



## SUBMERGED PUMP

The vacuum cleaner is equipped with a submerged pump in order to empty the tank. The pump's level sensor automatically interrupts intake upon reaching maximum capacity. In the same way, the level sensor instructs the machine to interrupt discharge operations once minimum level is reached.

# DISCHARGE SYSTEMS FOR SOLIDS



## MANUAL

A metal basket is installed inside the vacuum container, retaining all the swarf and letting the collected oil fall. Thanks to the 2 handles it's easy to lift and empty the metal basket manually or by means of web slings.



## HOPPER

Above the vacuum's tank is installed a tiltable hopper. A metal basket, paired with a PPL filter, is placed inside the hopper. The two act as a sieve, separating any solid particle eventually present from the vacuumed liquid and allowing a comfortable and safe discharge of the swarf.

# VACUUM UNITS



## SINGLEPHASE MOTOR

Generate high vacuum performances, conceived for non-continuous use. Each motor is managed by an independent switch, allowing the operator to control suction performances.

- Powerful and highly reliable
- Long lasting life, up to 1300 hours



## SIDE CHANNEL BLOWER

The suction unit is a side channel blower with direct coupling between motor and impeller. The side channel blower is equipped with a safety valve to guarantee continued work in complete safety, without any maintenance.

- Continuous duty 24h and 7 days per week
- No need of maintenance

# FILTERS



## OIL PROOF CARTRIDGE

A filter designed to prevent the suction unit from being damaged by oil or other liquids that are being sucked up.



## METAL BASKET WITH PPL FILTER

A PPL filter with a 150μ efficiency and a metal basket separate even the smallest solid particles, making the filtered liquid suitable for reuse. The PPL filter can be washed and reused easily.

## EVERY VACUUM IS UNIQUE

Every Depureco vacuum has unique features to better suit your needs for your business. Choose the best combination to build your perfect Depureco Industrial Vacuum for the metalworking industry!



### TANK CAPACITY

Choosing the right size tank size will fit your maintenance needs



### OIL FILTRATION EFFICIENCY

To recover the largest quantity of oil possible



### POWER SUPPLY

To perfectly adapt the product to your industry



### DISCHARGE TYPE

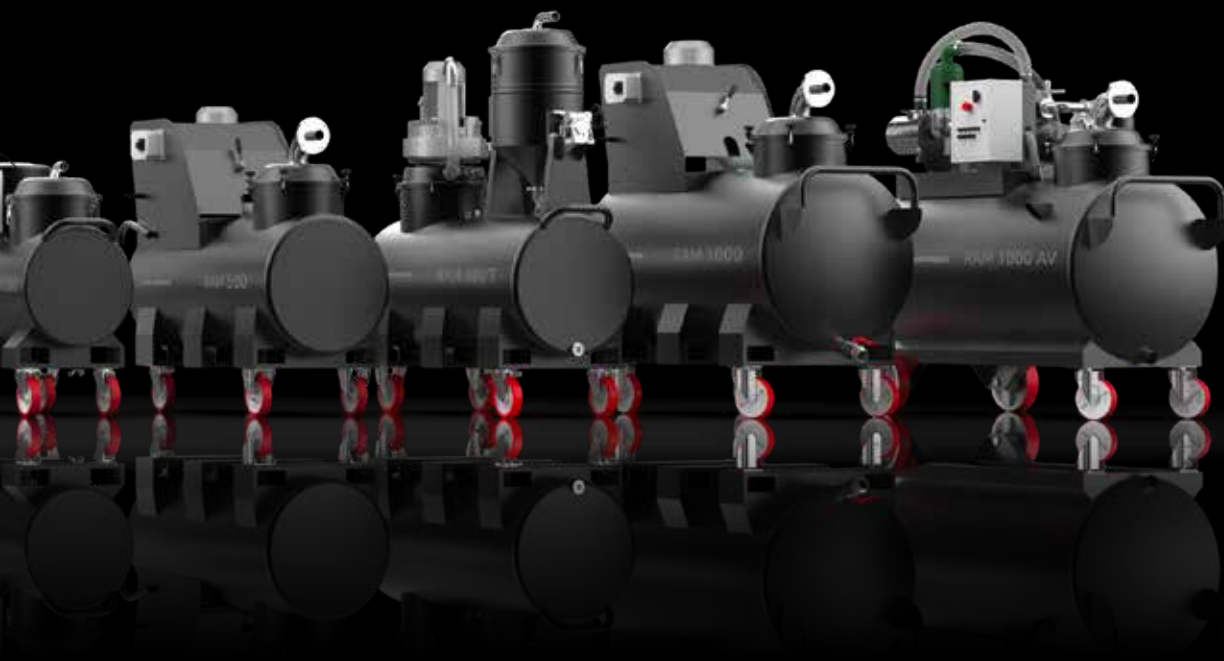
To fit your disposal or recycling needs

# OIL & SWARF

## OVERVIEW



	M 70 OIL	M 100 OIL	CLEAN OIL	FROG	RAM 250
MANUAL	Standard	Standard			
REVERSE FLOW			Standard	Standard	
PUMP FOR CONTINUOUS DISCHARGE	Optional			Optional	Standard
LIQUID CAPACITY	70 Lt	100 Lt	100 Lt	130 Lt	250 Lt
SOLID CAPACITY	40 Lt	50 Lt	50 Lt	40 Lt	70 Lt



RAM 280	RAM 280 MP	RAM 500	RAM 500 T	RAM 1000	RAM 1000 AV
■		■		■	■
□	■	□	■	□	
280 Lt	280 Lt	500 Lt	500 Lt	1000 Lt	1000 Lt
40 Lt	40 Lt	40 Lt	40 Lt	40 Lt	40 Lt

# M 70 OIL



Power: 2,6 kW



Liquid capacity: 70 Lt  
Solid capacity: 40 Lt



Suction time: 70 Lt/18 sec  
Discharge time: 70 Lt/20 sec



Dimensions: mm 650 X 450 X 1205 h



2 By-Pass motors



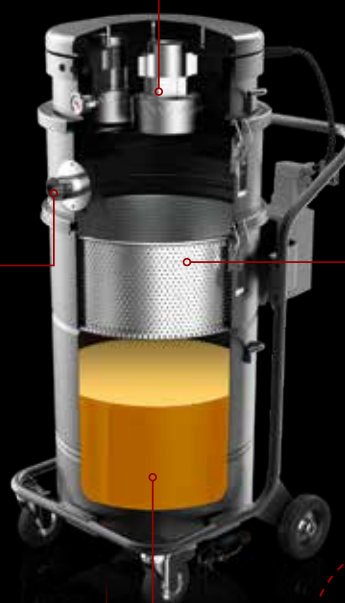
P12355: Oil Kit PRO Ø50



P09679: PPL Filter (150 µ)  
+ Metal separation basket



Manual discharge  
by gravity



PUMP: Immersion  
discharge pump



- Optional -

Code: A454/A454 P

# M 100 OIL



Power: 3,9 kW



Liquid capacity: 100 Lt  
Solid capacity: 50 Lt



Suction time: 100 Lt/26 sec



Dimensions: mm 700 X 450 X 1400 h



Scan the QR-Code  
to watch the video



P12475: Oil proof  
cartridge



3 By-Pass motors



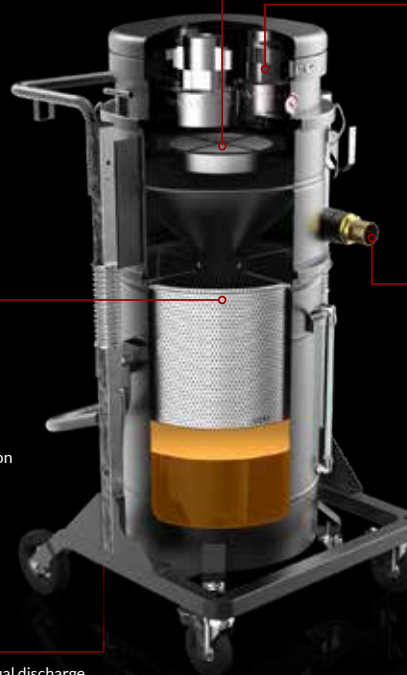
P09679: PPL Filter (150 µ)  
+ Metal separation basket  
+ Floating system to automatically stop suction



Tangential inlet with cyclone



Manual discharge  
by gravity



P12355: Oil Kit PRO Ø50

- Recommended -

Code: A455



# CLEAN OIL T/M

Code: **A450/A452**



Power: 2,2/3 kW



Liquid capacity: 100 Lt  
Solid capacity: 50 Lt



Suction time: 100 Lt/26 sec  
Discharge time: 100 Lt/92 sec



Dimensions: mm 840 X 710 X 1620 h



Scan the QR-Code  
to watch the video



Reverse Flow  
Discharge system



Side channel blower



**P12475:** Oil proof  
cartridge



Tangential inlet with cyclone



**P09679:** PPL Filter (150 µ)  
+ Metal separation basket  
+ Floating system to automatically stop suction



**P12355:** Oil Kit PRO Ø50

# FROG

Code: **A386**



Power: 2,6 kW



Liquid capacity: 130 Lt  
Solid capacity: 40 Lt



Suction time: 130 Lt/30 sec  
Discharge time: 130 Lt/50 sec



Dimensions: mm 700 X 1180 X 1320 h



Reverse Flow  
Discharge system



**P12352:** Oil Kit Ø50



**P09679:** PPL Filter (150 µ)  
+ Metal separation basket



2 By-Pass motors



**PUMP:** Immersion  
discharge pump

# RAM OIL 250 T/S



Power: 3/5,5 kW



Liquid capacity: 250 Lt  
Solid capacity: 70 Lt



Suction time: 250 Lt/52 sec  
Discharge time: 250 Lt/100 sec



Dimensions: mm 850 X 1550 X 1780 h

Code: **A404/405**



Tiltable discharging hopper



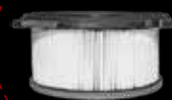
**P09679**: PPL Filter (150 µ)  
+ Metal separation basket



Side channel blower



**P12352**: Oil Kit Ø50



**P12475**: Oil proof cartridge



Discharge pump

# RAM OIL 280



Power: 2,2 kW



Liquid capacity: 280 Lt  
Solid capacity: 40 Lt



Suction time: 280 Lt/80 sec  
Discharge time: 280 Lt/80 sec



Dimensions: mm 700 X 1450 X 1400 h



Scan the QR-Code  
to watch the video



Reverse Flow  
Discharge system



Side channel blower



**P12352**: Oil Kit Ø50



**P09679**: PPL Filter (150 µ)  
+ Metal separation basket



**BIS**: Inspection door



**PUMP**: Immersion  
discharge pump

# RAM OIL 280 MP

Code: **A374**



Power: 3,9 kW



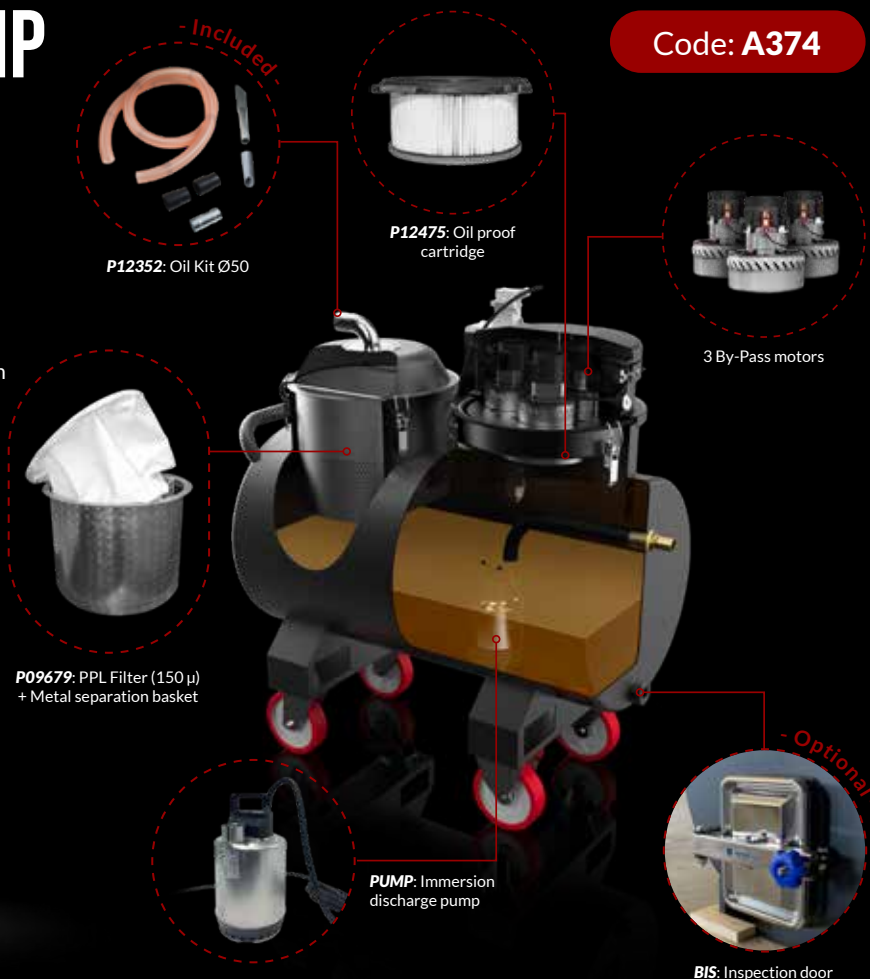
Liquid capacity: 280 Lt  
Solid capacity: 40 Lt



Suction time: 280 Lt/60 sec  
Discharge time: 280 Lt/60 sec



Dimensions: mm 700 X 1450 X 1400 h



# RAM OIL 500

Code: **A378-001**



Power: 4,3 kW



Liquid capacity: 500 Lt  
Solid capacity: 40 Lt



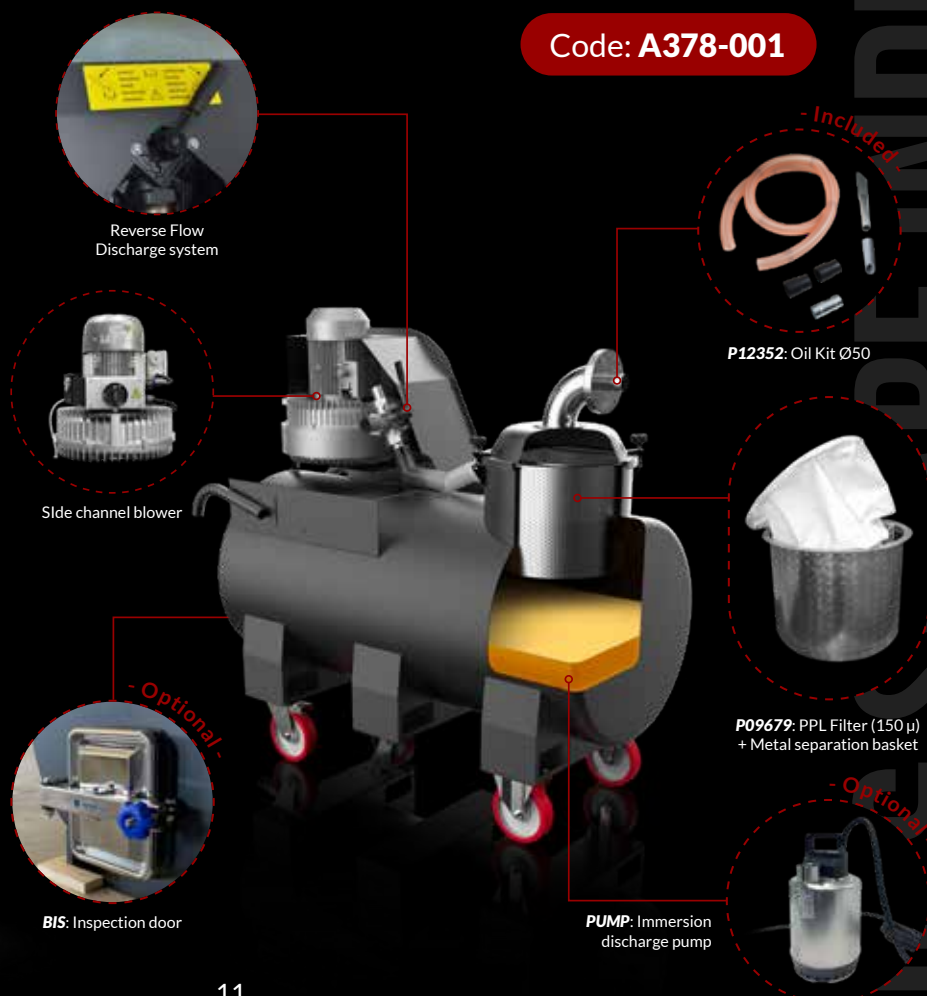
Suction time: 500 Lt/120 sec  
Discharge time: 500 Lt/120 sec



Dimensions: mm 600 X 1510 X 1891 h







Scan the QR-Code  
to watch the video





# RAM OIL T 500/T 555

Code: **A378-003/A381**

-  Power: 4,3/5,5 kW
-  Liquid capacity: 500 Lt  
Solid capacity: 70 Lt
-  Suction time: 500 Lt/120 sec  
Discharge time: 500 Lt/120 sec
-  Dimensions: mm 600 X 1510 X 1780 h



Scan the QR-Code  
to watch the video



**P09679:** PPL Filter (150 µ)  
+ Metal separation basket



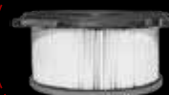
**BIS:** Inspection door



Tiltable discharging  
hopper



Slide channel blower







**P12475:** Oil proof  
cartridge

**PUMP:** Immersion  
discharge pump



# RAM OIL 1000

Code: **A379**

-  Power: 5,5 kW
-  Liquid capacity: 1000 Lt  
Solid capacity: 40 Lt
-  Suction time: 1000 Lt/200 sec  
Discharge time: 1000 Lt/200 sec
-  Dimensions: mm 950 X 1850 X 1891 h



Scan the QR-Code  
to watch the video



Slide channel blower



**BIS:** Inspection door

Reverse Flow  
Discharge system



**P09679:** PPL Filter (150 µ)  
+ Metal separation basket



**P12352:** Oil Kit Ø50

**PUMP:** Immersion  
discharge pump





# RAM OIL 1000 AV

Code: A379-001



Power: 5,5 kW



Liquid capacity: 1000 Lt  
Solid capacity: 40 Lt



Suction time: 1000 Lt/220 sec  
Discharge time: 1000 Lt/240 sec



Dimensions: mm 940 X 1650 X 1880 h



Reverse Flow  
Discharge system



- Included -

P12352: Oil Kit Ø50



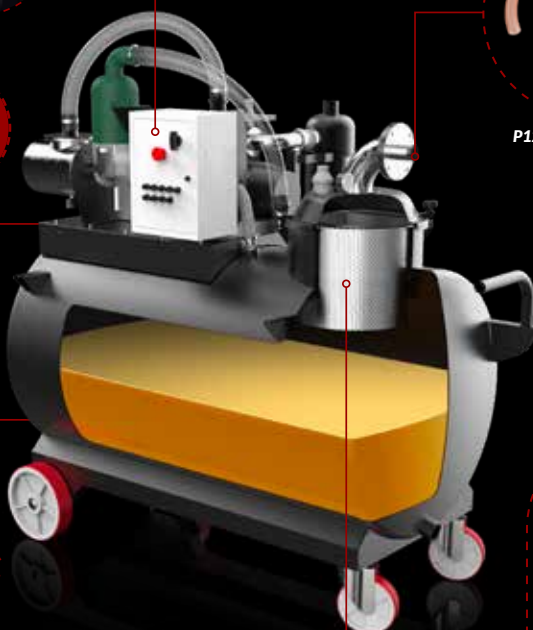
800  
mBar

High Vacuum Pump with  
800 mBar depression



- Optional -

BIS: Inspection door



P09679: PPL Filter (150 µ)  
+ Metal separation basket



# TECHNICAL DATA



Technical data	Units	M 70 Oil / P	M 100 Oil	Clean Oil T / M	Frog Oil	Ram 250 T / S
Code		A454   A454 P	A455	A450   A452	A386	A404   A405
Motor type		2   By-Pass	3   By-Pass	Side Channel Blower	2   By-Pass	Side Channel blower
Power	kW - HP	2,6 - 3,5	3,9 - 5,2	3 - 4 / 2,2 - 3	2,6 - 3,5	3 - 4 / 5,5 - 7,5
Voltage   Frequency	V   Hz	240   50-60	230   50/60	400   50-60	240   50-60	400   50-60
IP   Insulation class		---	---	55   F	---	55   F
Maximum vacuum	mBar	250	250	320	250	290 / 510
Vacuum in continuous run	mBar	---	---	250 / 180	---	260 / 440
Maximum air flow	m³/h	380	570	350	380	320 / 330
Suction time	L/sec	70/18	100/26	100/26	130/30	250/50
Dumping time	L/sec	70/20	---	100/92	130/50	250/100
Suction inlet	Ø mm	50	50	50	50	50
Noise level - (EN ISO 3744)	dB (A)	70	72	78 / 74	70	72
Liquid capacity	Lt	70	100	100	130	250
Solid capacity	Lt	40	50	50	40	70
Dimensions	mm	700 X 450 X 1440 h	700 X 450 X 1440 h	840 X 710 X 1620 h	700 X 1180 X 1320 h	850 X 1550 X 1780 h
Weight	Kg	90	90	110	95	240
Primary discharge type		Gravity	Gravity	Reverse flow	Reverse flow	Discharge pump
Optional discharge type		Discharge pump	---	---	Discharge pump	---
<b>Primary filter</b>						
Type		Oil Proof cartridge	Oil Proof cartridge	Oil Proof cartridge	---	Oil Proof cartridge
<b>Secondary Filter</b>						
Type		PPL Filter	PPL Filter	PPL Filter	PPL Filter	PPL Filter

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Pag.9

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<b>Ram 280</b>	<b>Ram 280 MP</b>	<b>Ram 500</b>	<b>Ram 500 T / 555 T</b>	<b>Ram 1000</b>	<b>Ram 1000 AV</b>
A375	A374	A378-001	A378-003   A381	A379	A379-001
Side Channel Blower	3   By-Pass	Side Channel Blower	Side Channel Blower	Side Channel blower	Rotary vane pump
2,2 - 3	3,9 - 5,2	4,3 - 5,8	4,3 - 5,8 / 5,5 - 7,5	5,5 - 7,5	5,5 - 7,5
400   50-60	230   50-60	400   50-60	400   50-60	400   50-60	400   50-60
55   F	---	55   F	55   F	55   F	55   F
280	250	420	420 / 480	480	900
220	---	360	360 / 420	420	800
220	570	320	320	320	300
280/80	280/63	500/120	500/120	1000/200	1000/220
280/80	280/60	500/120	500/120	1000/200	1000/240
50	50	50	50	50	50
72	72	72	72 / 76	76	82
280	280	500	500	1000	1000
40	40	40	70	40	40
700 X 1450 X 1400 h	700 X 1450 X 1400 h	600 X 1510 X 1780 h	600 X 1510 X 1780 h	950 X 1850 X 1891 h	940 X 1650 X 1880 h
220	135	220	320 / 350	250	460
Reverse flow	Discharge pump	Reverse flow	Discharge pump	Reverse flow	Reverse flow
Discharge pump	---	Discharge pump	---	Discharge pump	---
---	Oil Proof cartridge	---	Oil Proof cartridge	Oil Proof cartridge	---
PPL Filter	PPL Filter	PPL Filter	PPL Filter	PPL Filter	PPL Filter

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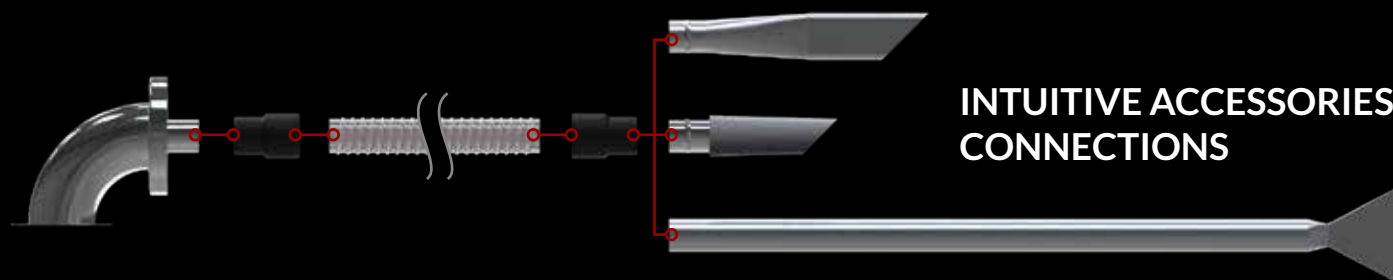
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# ACCESSORIES



INTUITIVE ACCESSORIES  
CONNECTIONS

## ACCESSORIES KIT



**P12352**

50 mm

Oil & Swarf  
KIT Ø50



**P12355**

50 mm

Oil & Swarf  
KIT PRO Ø50

## CONNECTIONS



**P09214**

50 mm

Rubber sleeve for  
hoses

## FINAL ACCESSORIES



**P11933/50**

50 mm

Reinforced abrasion  
proof hose



**P00329**

50 mm

Scraping suction pipe



**P00301**

50 mm

Flat pipe



**P10410**

50 mm

Oil proof rubber  
scraper



**P00308**

50 mm

Oil proof rubber  
conic nozzle



**P00649**

50 mm

"S" Handgrip for floor  
brush



**P00783**

50 mm

Extension pipe  
with handle



**P01038**

50 mm

Floor squedgee with  
rubber strips



# OPTIONALS



**P09679**

PPL filter  
150 $\mu$  efficiency



**P09678**

TNT disposable filter



**P12475**

Oil proof cartridge



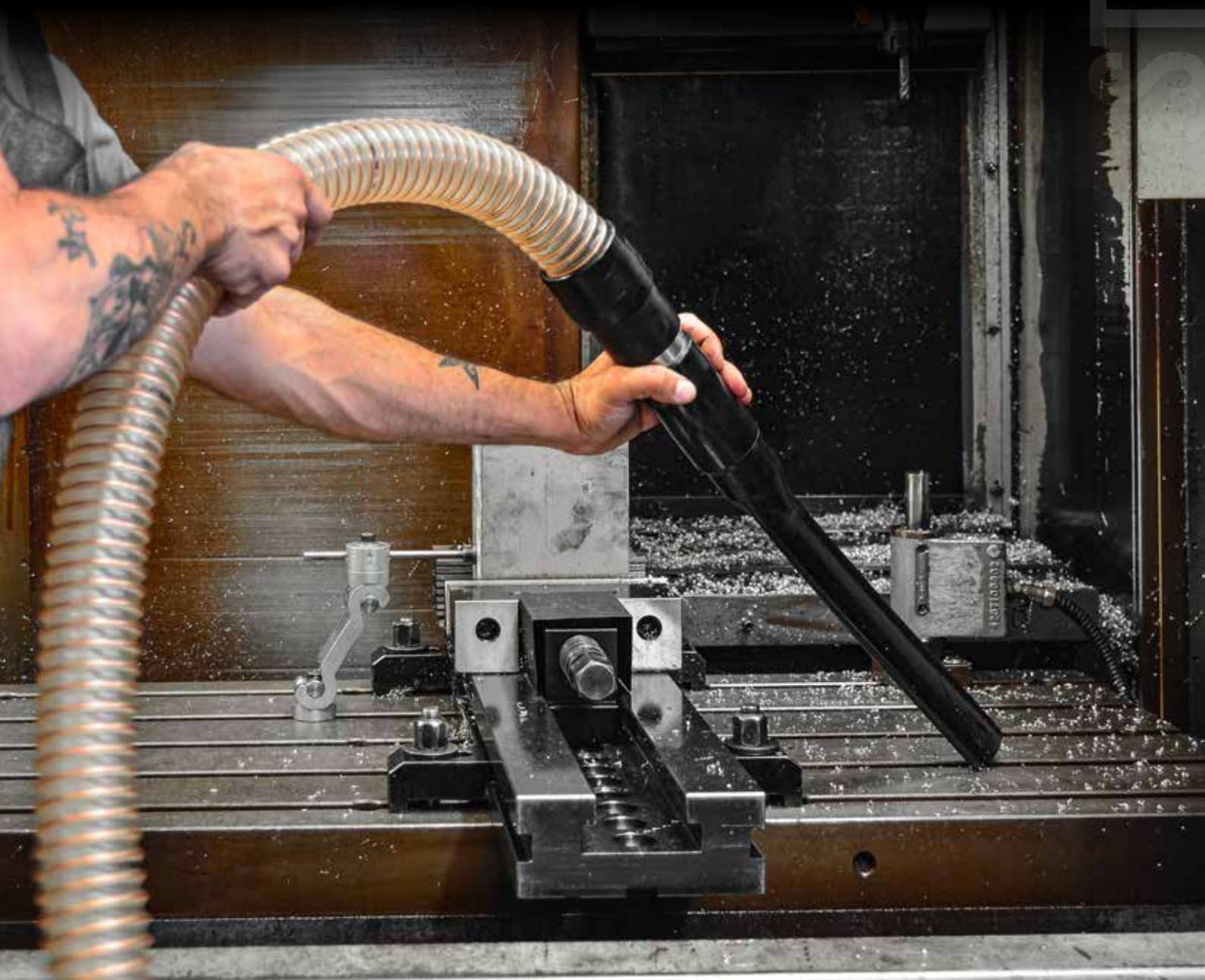
**PUMP**

Continuous  
discharge pump



**BIS**

Inspection door



# DEPURECO SOLUTIONS FOR METALWORKING INDUSTRY

An isometric illustration of a metalworking factory floor. The scene is divided into several functional areas by low white walls. In the upper right, there are three large industrial vacuum units with orange accents, each with a worker in blue overalls nearby. Below these, a worker in a red shirt is operating a machine. In the center, there are several large, white industrial vacuum units with black control panels and windows. A worker in a red shirt is standing next to one of them. To the left, a worker in a black suit is standing next to a smaller vacuum unit. In the lower right, a car is being sandblasted, with a worker in blue overalls operating the equipment. A worker in a white lab coat is also visible near the car. The floor is grey, and the walls are white. Red lines connect the text blocks to specific areas of the illustration.

## ADDITIVE MANUFACTURING

Industrial Vacuum Systems essential for post-processing operations and maintenance, ensuring high-quality production and reducing the risk of equipment damage.

## CNC ROOM

Industrial vacuum systems for CNC machinery applications, providing efficient and reliable removal of oil, coolant and oil mists to maintain optimal operating and environment conditions, extending the lifespan of the equipment.

## SANDBLASTING

Solutions providing efficient recovery of sand or steel grit, improving safety and effectiveness of the processes.



## METALWORKING

Highly efficient, large collection and cost-effective solutions for keeping workspaces clean and safe.

## WAREHOUSE

Versatile and effective solutions for general cleaning or overhead applications offer powerful suction and filtration capabilities to maintain clean and safe workspaces.

## WELDING

Solutions to effectively capture and remove hazardous welding fumes and particulates, promoting a safer and healthier work environment.

## INDUSTRIAL PAINTING

Vacuum solutions providing effective removal of overspray, dust, and debris, resulting in high-quality finishes and reduced contamination, ensuring a safe and healthy work environment.



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