

# HYDRAJET

HIGH PRESSURE COOLANT SYSTEMS

AEROSPACE • AUTOMOTIVE • MILITARY • OIL & GAS • MEDICAL • MOTORSPORT • CONNECTORS



YOUR TOTAL SOLUTION...

# HYDRAJET

HIGH PRESSURE COOLANT SYSTEMS



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# HYDRAJET

HIGH PRESSURE COOLANT SYSTEMS

## INTRODUCTION

Pumps & Equipment have been designing High Pressure Coolant systems (HPC) for 15 years, in that time the requirement for HPC has changed dramatically. Most machine tools are now fitted with HPC or can take it as an option and tooling companies are now designing purpose made tools to deliver HPC. With the increased demand to machine more exotic materials the need for HPC is ever increasing.

Pumps & Equipment has identified that supplying a High Pressure Coolant System is not enough.

A **TOTAL SOLUTION** is what makes Pumps & Equipment different from other companies offering HPC. We have combined our knowledge with tooling and lubricant companies

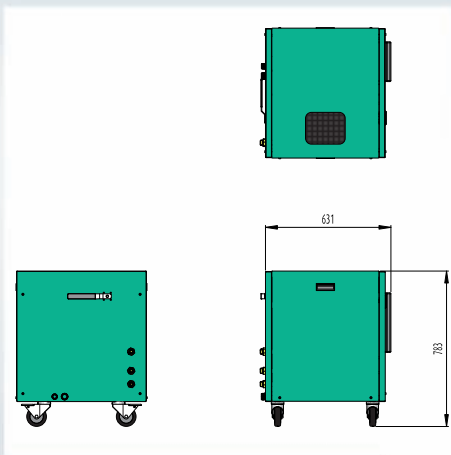
To offer the customer a **TOTAL SOLUTION**.

The pages that follow will give a brief outline of **HYDRAJET** HPC systems and the associated products that allows the High Pressure Coolant systems to be installed to most machine tools.



# HYDRAJET AP20-300

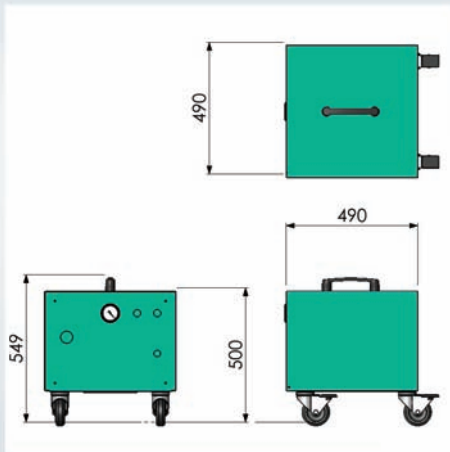
- » max pressure 20 bar 300 psi
- » max volume 20 ltrs
- » dual filters
- » filter block alarm
- » flow sensor
- » integral panel
- » castor mounted
- » paint finish to customers specification





# HYDRAJET MH1-300

- » max pressure 20 bar 300 psi
- » max volume 20 ltrs
- » 2 outlets
- » castor mounted
- » small footprint
- » paint finish to customers specification

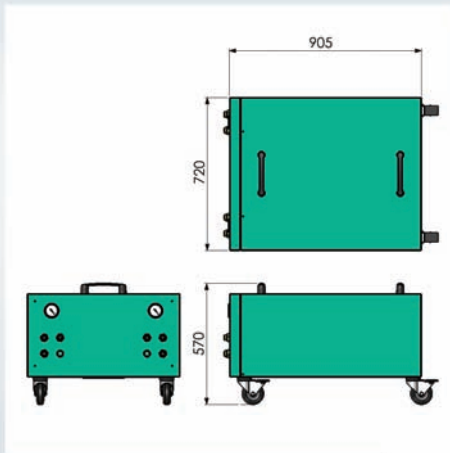


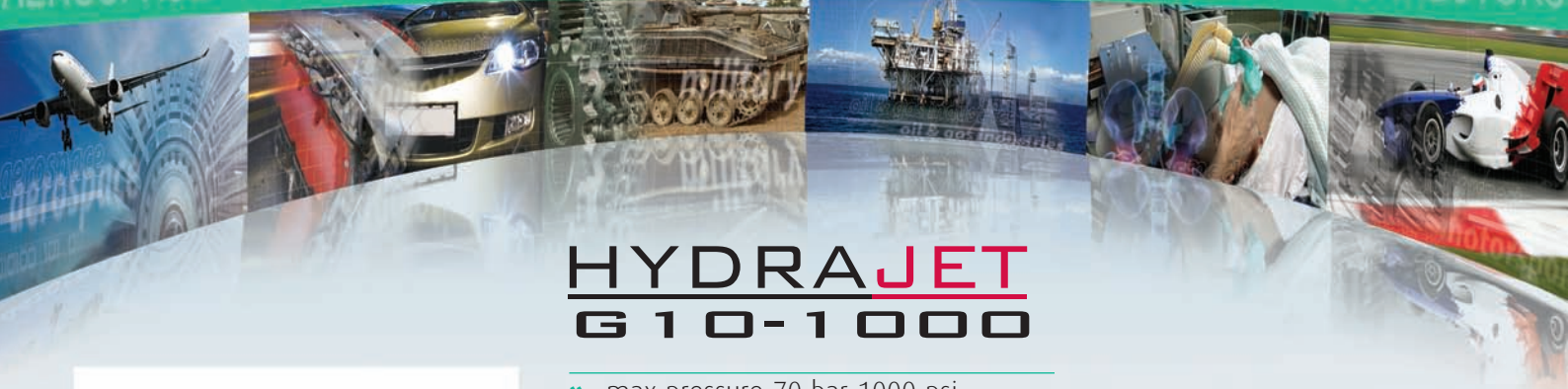




# HYDRAJET MH2-300

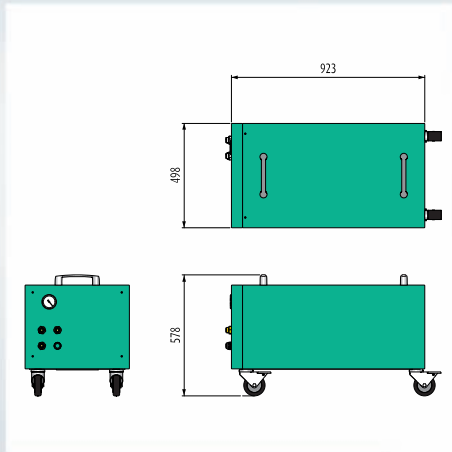
- » twin pumps
- » max pressure 20 bar each
- » max flow 20 ltrs each
- » both pumps run simultaneously
- » ideal for twin turret machines
- » paint finish to customers specification





# HYDRAJET G 10-1000

- » max pressure 70 bar 1000 psi
- » max volume 27 ltrs
- » castor mounted
- » paint finish to customers specification



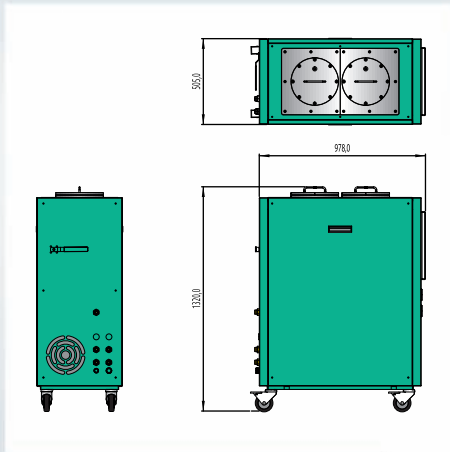


# HYDRAJET

## WPO3-1000

## WP10-1000

- » max pressure 70 bar
- » max volume 10 ltrs / 27 ltrs
- » twin filter
- » filter block alarm
- » flow sensor
- » integral panel
- » castor mounted
- » paint finish to customers specification



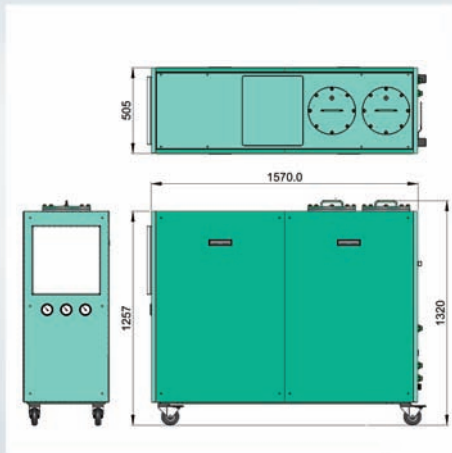
Note: image and footprint show a two filter option.





# HYDRAJET

## WPTT 10-1000

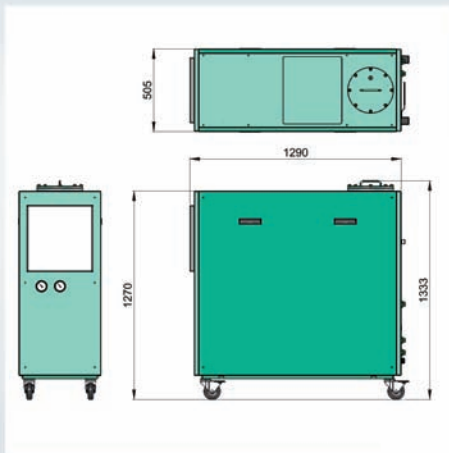


- » max pressure 70 bar
- » max volume 27 ltrs
- » twin filters
- » integral coolant tank
- » filter block alarm
- » flow sensor
- » integral panel
- » castor mounted
- » paint finish to customers specification
- » mist extraction option





## HYDRAJET GP20-2000

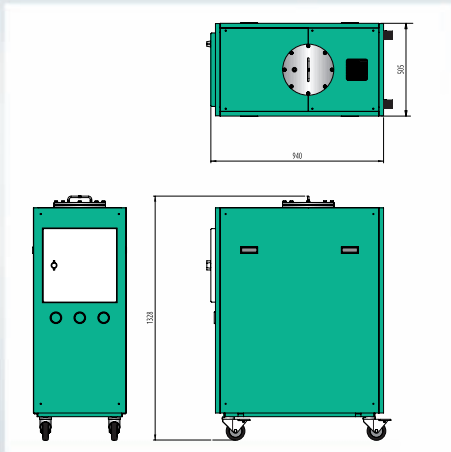


- » max pressure 140 bar
- » max volume 20 ltrs
- » single filter
- » 4 outlets – M code controlled
- » filter block alarm
- » integral tank
- » integral panel
- » integral lift pump
- » castor mounted
- » paint finish to customers specification





# HYDRAJET WPO4-2000

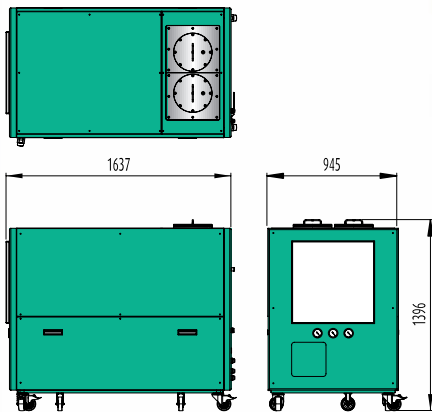


- » max pressure 140 bar
- » max volume 10 ltrs
- » single filters
- » 3 outlets – M code controlled
- » filter block alarm
- » flow sensor
- » integral panel
- » integral lift pump
- » castor mounted
- » paint finish to customers specification





# HYDRAJET SP25-2000



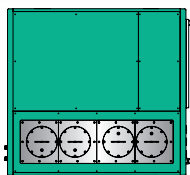
- » max pressure 140 bar 2000 psi
- » max flow 40 ltrs
- » dual filters
- » integral panel
- » integral tank
- » integral lift pump
- » variable speed
- » 2 m code controlled outlets
- » level alarm
- » filter block alarm
- » castor mounted
- » paint finish to customers specification



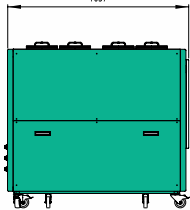




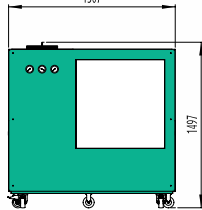
# HYDRAJET SP45-3000



1637



1507



1197

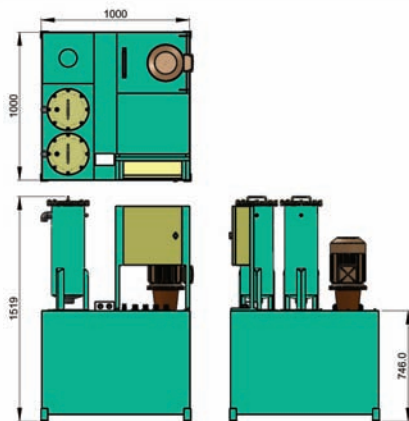
- » max pressure 210 bar 3000 psi
- » max flow 60 ltrs
- » dual filter sets
- » integral panel
- » integral tank
- » integral lift pump
- » variable speed
- » 2 m code controlled outlets
- » level alarm
- » filter block alarm
- » oil skimmer
- » castor mounted
- » paint finish to customers specification







## HYDRAJET TS COOLANT SYSTEM



- » tank capacities: 300 – 1500 ltrs
- » various flows and pressures
- » high pressure coolant options
- » wash guns
- » various filtration options
- » chiller options
- » integral electrical control panel
- » multiple coolant pump configurations

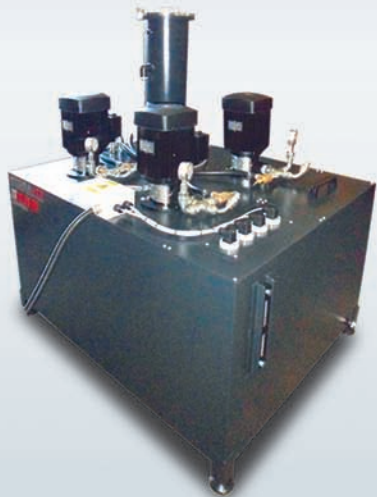


## HYDRAJET TS COOLANT SYSTEM

The Hydra-Jet coolant system has been cleverly designed offering you, the customer, a modular unit which can incorporate many options within the standard design.

Allowing for multiple pumps to supply the machine tool with varying flow rates for flood and bedwashes. In addition, various pressures can be achieved, including high pressure for through tool applications.

Filtration options currently available include cloth bags, paper and magnetic, allowing its use in a wide range of applications. By utilising the larger coolant capacity and incorporating heat exchangers and chillers will also improve the coolants stability.

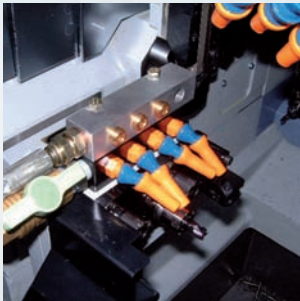




# HYDRAJET

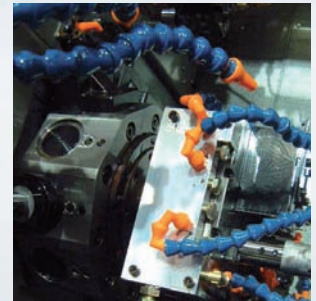
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## ■ ■ ■ ROTARYS AND MANIFOLDS

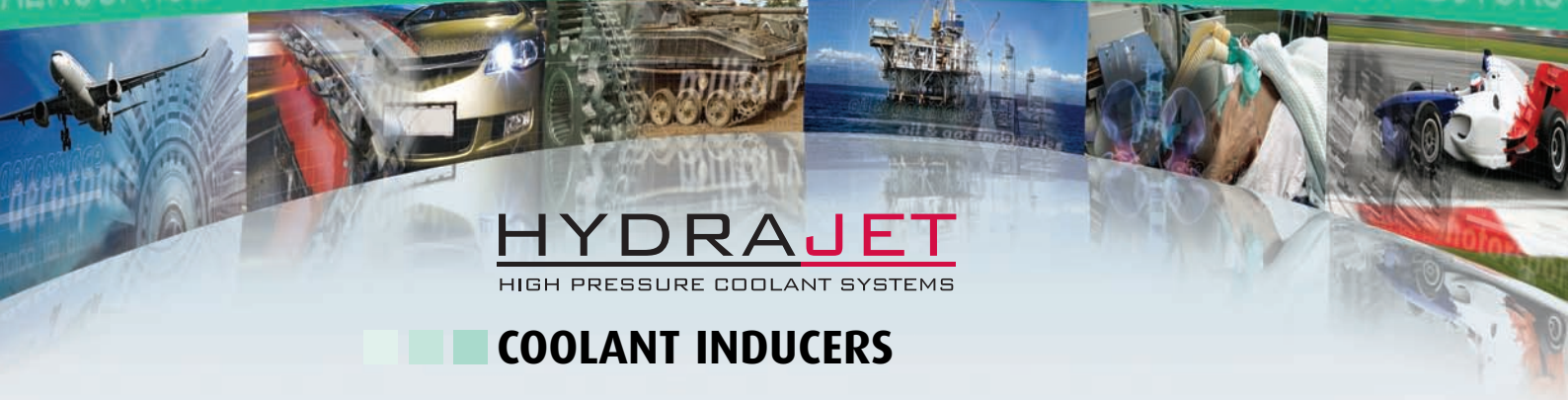


As part of our commitment to providing the **TOTAL SOLUTION** we have seen the need to develop further the 'Full Turn Key' installation on the machine. We have now a wide range of solutions for all types of machines, incorporating the requirement for the manufacture of many special purpose parts such as manifolds; tool plunger release mechanism's; platen's and rotary's.

All are designed and manufactured in our own facilities compliant to ISO standard.







# HYDRAJET

HIGH PRESSURE COOLANT SYSTEMS

## COOLANT INDUCERS



The **HYDRAJET** coolant inducer range has been designed and manufactured by Pumps & Equipment specifically to enable the retrofitting of HPC and UHPC coolant for lathes.

Designs include 'Hydraulic lift off' and 'Rotary indexing' turrets, these inducers can be retrofitted to new machines and existing machines. The design incorporates electrical and mechanical interface enabling 'M' Function control.

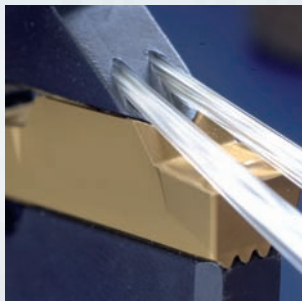




# HYDRAJET

HIGH PRESSURE COOLANT SYSTEMS

## TOOLING



As part of our turn key solutions we are able to modify tool holders to accept 'through tool' high pressure coolant. These modifications are carried out in our own toolroom working closely with the integrated tool supplier where required.

Further to this we are pleased to continue our working relationship with the **Seco** and their **JetStream Tooling System**, delivering 'HPC' and 'UHPC' coolant directly to the cutting interface.







# HYDRAJET

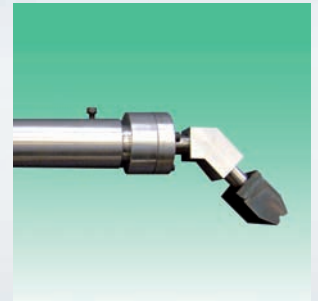
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## NOZZLE TECHNOLOGY



In the application of ‘High Pressure’ and ‘Ultra High Pressure’ coolant we have found it is not just about manufacturing pumping systems. To achieve the maximum benefit from this technology the correct application of the coolant to the cutting interface is of paramount importance.

We have engaged a number of leading experts to assist us with the evaluation and design of nozzle technology. This maximises the flow and pressure available from the **HYDRAJET** system and linked with our engineering and tool room designs we now have a range of products that can be blended for most applications from general machining to grinding.



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