

Mazak

MAZAK SUPERFLOW[®]

HIGH-PRESSURE COOLANT FOR INCREASED
PRODUCTIVITY AND PROFITABILITY



MAZAK SUPERFLOW®

INCREASE YOUR COMPETITIVE ADVANTAGE

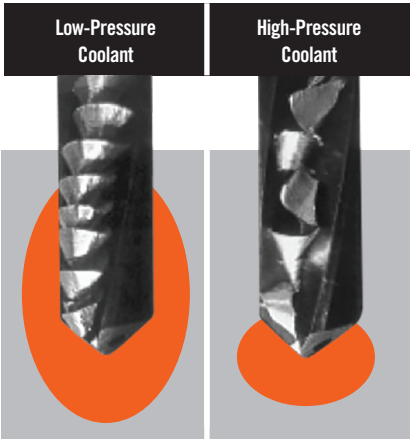
MAZAK SUPERFLOW ENHANCES THE PERFORMANCE OF YOUR MACHINE, using high-pressure coolant to boost productivity and maximize tool life. By enabling improved chip control, reduction of thermal shock and higher feeds and speeds, Mazak SUPERFLOW allows you to get more out of your Mazak equipment and tooling investments. With a range of configurations addressing all machine sizes, Mazak SUPERFLOW offers an option perfectly suited to your unique needs.

HEAT

Temperatures at the cutting edge of a tool often can exceed 1,000° F, creating levels of heat that reduce tool life and can lead to tool failure. While normal flood coolant may fail to reach the cutting zone in many applications, Mazak SUPERFLOW high-pressure coolant ensures direct delivery to the cutting edge, reducing temperatures and improving tools' cutting action. Additionally, the greater level of thermal stability allows for faster surface speeds, boosting productivity while minimizing tooling costs.

CHIP CONTROL

A SUPERFLOW system delivers coolant to the cutting edge, helping to create small chips and efficiently evacuating them from the cut. This eliminates the risk of tool failure due to long, stringy chips that result when cutting many materials. The benefits become especially clear in demanding drilling applications, where high pressure blows chips from the hole and results in greatly improved tool life.



LUBRICITY

With traditional systems, coolant often vaporizes before it can reach the cutting zone. Not only does this minimize its effectiveness in dispersing heat, but it also nullifies the ability of lubricants in the coolant to reduce the amount of heat generated. Mazak SUPERFLOW delivers coolant directly between the tool and workpiece, improving lubrication, tool life and surface finish.

CONVENIENT INSTALLATION

It's easy to achieve the benefits of Mazak SUPERFLOW. SUPERFLOW systems can be easily and quickly installed on your Mazak machine in the field. To install SUPERFLOW, certain levels of preparation must be in place, as outlined below. A mist collector is also recommended for all installations, existing and new machines alike, to eliminate fog resulting from the high-pressure coolant system. High-pressure coolant systems with 1,000/1,500/2,500 PSI require full enclosure.

NEW MACHINE PURCHASES

Mazak SUPERFLOW can be added to any new machine, allowing you to apply the system's benefits immediately upon installation. SUPERFLOW high-pressure preparation is standard on some machines and optional on others. Please ask your distributor or salesperson about Mazak SUPERFLOW during the machine purchase process.

EXISTING MACHINES – WITH SUPERFLOW HIGH-PRESSURE PREPARATION

Existing models of machines are already fully compatible with Mazak SUPERFLOW, making it extremely quick and easy to integrate the system into your machine on site. Contact your Mazak regional salesperson for more information or to schedule an installation.

EXISTING MACHINES – WITHOUT SUPERFLOW HIGH-PRESSURE PREPARATION

Even machines not currently compatible with Mazak SUPERFLOW can benefit from the technology, as we can complete modifications to prepare the machine and then install the new system in the field. Contact your Mazak regional salesperson for more information on how to purchase preparation for your machine and complete installation.

If you're not sure which of the above categories applies to you, your Mazak regional office can verify whether your existing machine is currently compatible with Mazak SUPERFLOW. For more information on Mazak SUPERFLOW, contact us to discover how high-pressure coolant systems will increase your productivity and efficiency.

SUPERFLOW SELECTION GUIDE

Use this guide to select which Mazak SUPERFLOW system best meets your needs.



MODELS	SUPERFLOW S3/2500	SUPERFLOW S8/1000	SUPERFLOW C8/1000	SUPERFLOW T8/1000	SUPERFLOW D8/1000
FLOW RATE*	3 gpm	8 gpm	8 gpm	8 gpm	8 gpm Each Outlet
MAX PRESSURE*	2,500 psi	1,000 psi	1,000 psi	1,000 psi	1,000 psi
DELIVERY CONDITION	Single Pressure	Single Pressure	Single Pressure	Single Pressure	Single Pressure
FILTRATION	Single Bag 5µm std	Single Bag 25 µm std	Hydro-Cyclonic 10 µm std	Twin Bag 25 µm std, (5µm opt)	Twin Bag 25 µm std, (5µm opt)
FEATURES	<ul style="list-style-type: none"> ■ Easy Mobility ■ Easy Installation 	<ul style="list-style-type: none"> ■ Easy Mobility ■ Easy Installation 	<ul style="list-style-type: none"> ■ Easy Mobility ■ Easy Installation ■ Enhanced Filtration 	<ul style="list-style-type: none"> ■ Manual Crossover ■ Easy Mobility 	<ul style="list-style-type: none"> ■ Manual Crossover ■ Easy Mobility ■ Dual Outlets

MODELS	SUPERFLOW DV8A/1000	SUPERFLOW V8M/1000	SUPERFLOW V8A/1000	SUPERFLOW V14i/1000	SUPERFLOW V14i/1500
FLOW RATE*	1-8 gpm Each Outlet	1-8 gpm	1-8 gpm	1-14 gpm	1-14 gpm
MAX PRESSURE*	1,000 psi	1,000 psi	1,000 psi	1,000 psi	1,500 psi
DELIVERY CONDITION	Variable Pressure	Variable Pressure	Variable Pressure	Variable Pressure	Variable Pressure
FILTRATION	Twin Bag 25 µm std, (5µm opt)	Twin Bag 25 µm std, (5µm opt)	Twin Bag 25 µm std, (5µm opt)	Twin Bag 25 µm std, (5µm opt)	Twin Bag 25 µm std, (5µm opt)
FEATURES	<ul style="list-style-type: none"> ■ Auto-Cross Filters ■ Easy Mobility ■ Variable Pressure ■ Dual Outlets 	<ul style="list-style-type: none"> ■ Manual Crossover ■ Easy Mobility ■ Variable Pressure 	<ul style="list-style-type: none"> ■ Auto-Cross Filters ■ Easy Mobility ■ Variable Pressure 	<ul style="list-style-type: none"> ■ Auto-Cross Filters ■ Easy Mobility ■ Easy Installation ■ Diagnostic Capabilities 	<ul style="list-style-type: none"> ■ Auto-Cross Filters ■ Easy Mobility ■ Easy Installation ■ Diagnostic Capabilities

*Based on measurement at the pump.

YAMAZAKI MAZAK CORPORATION

1-131 Takeda, Oguchi-cho, Niwa-gun, Aichi-Pref., Japan
TEL: +(81)587-95-1131

www.mazak.com

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