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# POWERSTREAM VP

# High pressure coolant systems with variable pressure

The ideal High Pressure Coolant System for Swiss machines that can deliver up to 2,000 PSI of filtered coolant for maximum machining productivity. The High Pressure Coolant System is fully self contained and customized through a wide selection of factory supplied options.





# POWERSTREAM VP

## **Maximum Efficiency with Variable Pressure**

Modern machining requires continuous, uninterrupted operation and as cutting cycles get more complicated, the high pressure coolant system needs to respond to allow automatic changes in pressures delivered to the cutting interface. LNS's latest innovation combines the latest software technology with proven high pressure system design to ensure easy programmable pressure changes.

The new high pressure system builds on LNS's existing high pressure coolant technology but, through clever design, simplifies the generation and delivery of clean filtered coolant to the machine tool through programmable pressure outputs. The system can be programmed to change pressures automatically at different points when requested through M functions from the machine or can be run at a constant pressure as set through the systems onboard display.

The heart of any high pressure coolant system is the high pressure pump. LNS uses only top quality components and high pressure pumps that are field proven in hundreds of applications to ensure long life and reliable operation.

#### LNS e-Connect

The PowerStream VP is e-connect capable and permits real time data communication with the CNC control. Installation time reduction and ease of set up are greatly enhanced with this option. Pressure and port selection are easily changed and constantly monitored.

#### **Application Customization**

The proper use of high pressure coolant requires the ability to offer a wide selection of options. Options available to enhance the performance of any specific machine consist of:

- Various pump configurations of up to 2,000 PSI
- Port Selection: 4 or 8
- · Dual filter canister

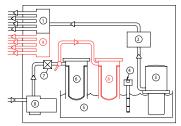
#### Standard Features

The Siemens HMI is designed to monitor all functions of the PowerStream VP. The HMI shows fluid level in the tank, monitors filter cleanliness and indicates port selection. High quality components, such as Siemens PLC and variable speed drive are used throughout.









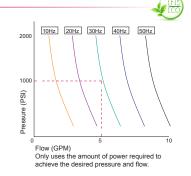
### **Precise Coolant Delivery**

The PowerStream VP uses a low pressure pump (8) to transfer the coolant from the machines coolant tank through the filter canister system (6) (dual canisters is an option) into a holding tank (5) then to a high pressure pump. This coolant transfer is automatically controlled by an on board level sensor (4) within the system. When a filter is blocked the onboard pressure sensor (7) alerts the machine tool that the filter needs to be replaced or with dual canisters switched to the second filter. The integral high pressure pump (3) then delivers high pressure coolant to a single (1) or bank (9) of independently controlled solenoid valves (bank of ports gives maximum of 8 outputs). The solenoid valves distribute the coolant to the required area within the machine tool. The pressure output of the high pressure is controlled by the systems on board software to produce various pressures as preprogrammed or called for by the machine tool. The systems onboard monitoring system (2) controls the pumps output to ensure maximum efficiency and minimum power consumption.

#### **LNS Eco**

LNS's focus on reducing environmental impacts through reduced energy consumption has also lead to in built system monitoring and control to ensure only the power used in actual pressure delivery is the pressure created by the system. Over the life of the system, this means reduced running costs, reduced component wear and less heat generation.

By constantly monitoring the pressure output from the system LNS regulates the speed of the motor, only using the minimum amount of power to reach the desired pressure. By doing this, the system doesn't create excess flow which wastes energy and creates excess heat.



PowerStream VP Standard Features		
Flow Rate	7.5 GPM	5 GPM
Filtration	Dual filter canister with 10µ filtration as standard	
Number of outlets	4 ports as standard	
Tank capacity	35 gallons	
Size	40 x 22 x 47.25 inches	
Options		
8 Ports Output		
LNS e-connect		

### Your "One-Stop-Shop" for machine-tool peripherals

LNS is your one-stop-shop for industry leading bar feeding equipment and accessories, chip conveyors and coolant management systems. So you get unmatched product range, applications experience, service and support.

The LNS customer service and technical support teams are the industry's most experienced. Together, they provide expert product selection and application assistance, professional installation and comprehensive training.

We support every product we sell with replacement parts, and both field and factory service. We provide this expert service through trained technicians who are strategically positioned throughout the world.

And because we design every bar feed, chip conveyor and coolant system we sell, we can provide parts and service for all LNS equipment – even chip conveyors and bar feeds that have been in service for over thirty years.



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