



Flow

Designed with an outstanding sound-abatement package, the 20XW is the quietest pump on the market.

20XW Pump



Standard Features

- 50 or 100 horsepower electric TEFC motor
- Single or dual mechanical, patented double-acting intensifiers
- Radial piston, variable displacement, pressure-compensated hydraulic pump
- Automatic shutdown with digital display for low hydraulic oil level, high hydraulic oil temperature and low inlet water pressure
- Digital warning display for low inlet water pressure and high hydraulic oil, check-valve and bleed-valve temperatures
- Redundant system pressure control relief valves
- Self-diagnostics
- Water booster/filtration system with automatic shut-off
- Customer interface connections for remote start/stop, E-stop, pump warning and pump shut-down
- Auto bleed-down
- Cooling water flow control with automatic shut-off
- Easy access filter banks
- Noise reduction package
- Slow-start package
- Allen Bradley SLC-500 controller
- Maintenance tutorial
- Energy-efficient motor
- Dual-output pressure control

Reliable Cutting Performance

Patented intensifier pumps from Flow International Corporation (FLOW) have proven their reliability through millions of hours of continuous on-the-job operation. The 20XW sets the standard for high output, high-pressure pumps for universal waterjet and PASER® abrasivejet cutting applications. With 50 or 100 horsepower motors and high flow rates, these pumps can power multiple nozzles for industrial cutting and cleaning requirements. Self-diagnostics and durable high-pressure components make the 20XW easy to operate and maintain.

The FLOW Edge

FLOW combines its 30-plus years of expertise in the waterjet industry with the latest technology to bring you the 20XW pump. Backed by unsurpassed quality and reliability field-proven through thousands of systems worldwide, FLOW intensifier pumps such as the 20XW offer you continuous operation 24 hours a day, seven days a week.

Environmentally-Sound Technology

With the 20XW, you also gain the environmental benefits of ultrahigh-pressure waterjet technology. Waterjet cutting uses filtered tap water to cut materials, adding no hazardous substances to the machining process. As a cold-cutting technology, ultrahigh-pressure waterjet cutting eliminates toxic fumes generated by heat. And, the waterjet carries the cut kerf material into a catcher tank, significantly reducing airborne dust. As a result, you run a cleaner, safer operation.

The Industry Leader in Technology and Customer Service

The recognized leader in the ultrahigh-pressure waterjet industry, FLOW offers a complete selection of turnkey systems for your cutting and cleaning needs. Our acclaimed customer and technical service personnel support you around the clock, around the globe.

Cutting Quality

FLOW's patented intensifier design and large-volume attenuator offer unmatched pressure stability at the nozzle. The intensifier pump automatically compensates for variable demand with minimal pressure decrease or spikes, resulting in superior cutting quality.

Durable Components

FLOW's patented designs and dedication to research and development produce superior performance and extended service hours for our components. You can feel confident your pump will continue to run at peak efficiency with high-quality, genuine FLOW spare parts and consumables.

The Technology

FLOW's reciprocating intensifier pumps consist of an electric motor, a hydraulic system and a high-pressure intensification system. Hydraulic oil pressure acts on a double-acting piston resulting in a force on a plunger that pressurizes water in a small chamber. Because the ratio of the piston area to the plunger area is constant, output water pressure can be regulated by controlling input hydraulic oil pressure.

An attenuator maintains a constant output pressure during the intensifier cycle. For ideal jet stream performance, the attenuator is designed to ensure the highest possible pressure stability available in any intensifier pump.

Specifications

Performance

20XW Single Intensifier	20XWS-40	20XWS-60
Pressure	40,000 psi [2,720 bar]	60,000 [4,137 bar]
Ratio	13:1	20:1

Maximum continuous operation

Output flow rate 50/60 Hz	1.57 gpm [5.94 lpm]	1.00 gpm [3.79 lpm]
Orifice diameter 60 Hz	0.019 in. [0.483 mm]	0.014 gpm [0.356 lpm]
Operating sound level	<75 dB(A)	<75 dB(A)

20XW Dual Intensifier

20XWD-40	20XWD-60	
Pressure	40,000 psi [2,720 bar]	60,000 [4,137 bar]
Ratio	13:1	20:1

Maximum continuous operation

Output flow rate* 60 Hz	3.14 gpm [11.88 lpm]	2.00 gpm [7.57 lpm]
Orifice diameter 60 Hz	0.027 in. [0.686 mm]	0.020 in. [0.508 mm]
Operating sound level	<75 dB(A)	<75 dB(A)

Equipment

Intensifier

Type	ESL (Extended Seal Life)
Design	Double acting
Shift type	Electrical

Hydraulic system

Reservoir volume	33.0 gallons [125 liters]
Cooling system	Oil to water heat exchanger
Filtration	Dual filters
Pump	Radial piston
Displacement	20XW Single 4.0 in. ³ [63 cm ³] 20XW Dual 8.0 in. ³ [126 cm ³]
Attenuator size	124.0 in. ³ [2,032 cm ³]

Electric Motors Available^{† †}

20XW Single 50 hp [37.3 kW]	50 Hz	60 Hz
Voltage (VAC) ^{† †}	190/200/380/415	200/230/460
Current (Full load amps)	156/148/77/71	147/128/64
20XW Dual 100 hp [74.6 kW]	50 Hz	60 Hz
Voltage (VAC) ^{† †}	190/200/380/415	200/230/460
Current (full load amps)	292/277/146/134	271/236/118

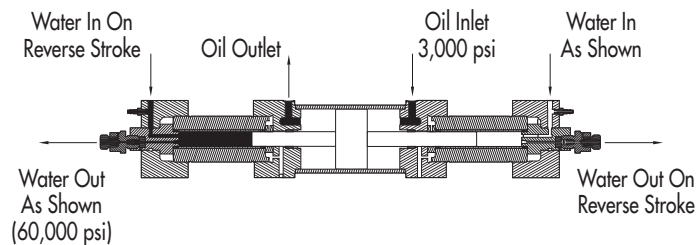
General

Pumped fluid	Water
Inlet water pressure*	10 psi [.75 bar]
Weight	20XW Single 3,400 lbs [1,542 kg] 20XW Dual 4,200 lbs [1,905 kg]
Overall dimensions	84.75 x 43.5 x 58.0 in. [215.3 x 110.5 x 147.3 cm]

[†] Starter available from FLOW as an option

^{† †} Electric motors configured for other voltages are available

* See Inlet Water Quality sheet



Flow International Corporation

is the world's leading developer and manufacturer of ultrahigh-pressure (UHP) waterjet technology for cutting, cleaning and food safety applications. FLOW provides total system solutions for industries including automotive, aerospace, paper, surface preparation and food production.

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