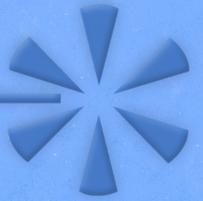


Jetstream[®]

Subsidiary of Federal Signal Corporation



PERFORMANCE UNDER PRESSURE.

That's what you get with everything we offer. Jetstream of Houston is the leading designer, manufacturer, and provider of innovative high-pressure water blasting products and solutions for a wide range of applications, including industrial cleaning, surface preparation, hydro-demolition, and abrasive waterjet cutting. Since 1976, we have provided our customers with safe, sure, and simple solutions that get the job done. Innovative designs, advanced manufacturing processes, and unique coating technologies create distinct Jetstream features that include: easily replaceable valve cartridges and internal components, oil-less water bearings, and magnetic braking for rotating tools, and easily interchangeable fluid ends for pumps. With simple yet rugged construction and color-coded Visual Safety System markings, our products deliver exceptional performance, maximum safety and productivity, and minimal downtime on every job.

WHEN YOU NEED US, WE'LL BE THERE.

Jetstream has the most comprehensive products, services, rental, and training in the industry. Whether you are looking to purchase or rent water blasting equipment, or if you need service and support for your existing equipment, we've got you covered with the most experienced and customer-focused team in the industry. In the United States, our products are serviced by FS Solutions. With 13 convenient locations, FS Solutions provides high-performance parts and accessories, Jetstream rentals, repair and rebuild, and safety training services. Worldwide, our distribution network is there to handle your every need. Jetstream is a subsidiary of Federal Signal Corporation and has the financial strength, backing, and network of global distributors to support any customer.



SURFACE PREPARATION

Orbi-Jet X22

The **Orbi-Jet™ X22** is the perfect rotary tool for maximum surface coverage and superior cleaning for wide or narrow surface areas. Rated up to 22,000 psi, the rugged, self-powered tool utilizes up to four compound angle, hard-hitting, replaceable nozzles. The tool rotates in multiple 360° user-selectable patterns to quickly and effectively scarify surfaces or remove coatings, such as rust, paint, concrete, or other tough adherents.

KEY FEATURES:

- Provides the widest cleaning path in the industry
- Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip
- 3-tools-in-1 nozzle: two nozzles for a narrow path, two nozzles for a wide path or all four nozzles for a complete clean
- Automated cleaning option available by adding the Orbi-Jet™ nozzle on a lance machine

INDUSTRY APPLICATIONS:

- All surface preparation
- Automotive and aviation
- Concrete and hydro-demolition
- Pulp and Paper
- Tank, tote, and vessel cleaning

EASY TWO-MINUTE IN-THE-FIELD OVERHAUL
Using the Rebuild Kit with two standard hex wrenches

TWIS-LOK™ LIGHTWEIGHT SHROUD
Protects tools and provides safe water displacement



MAGNETIC BRAKING SYSTEM
Controls rotational speed to reduce wear and maximize impact without streaking

NOZZLE CHOICES FOR COMPLETE CLEANING
Uses tungsten carbide OX Series, Sapphire UHPX/UHPXi Series, or Synthetic Diamond UHPXD Series nozzles

INLET CONNECTION*	SPEED RANGE	DIAMETER (LESS SHROUD)		ASSEMBLY LENGTH (WITH ADAPTER)		ASSEMBLY WEIGHT		MAX. FLOW RATE (HAND GUN)		MAX. OPERATING PRESSURE**	
		IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI	BAR
3/8" NPT Female	1000-1500	2.0	51	4.0	102	2.1	0.95	7.5	28.4	15,000	1034

*Inlet connection on the tool is 9/16" MP; inlet listed is with the adapter that is included in the part numbers shown.
**Without 15K Adapter, Orbi-Jet X22 max pressure is 22,000 psi (1500 bar).

KITS & ACCESSORIES

Premium Kits and Starter Kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



REBUILD KIT



Rebuild kit allows for a two-minute complete overhaul of wear components right in the field.

TOOL KITS

DESCRIPTION	PREMIUM KIT (PN 63305)	STARTER KIT (PN 63392)	15K KIT (PN 63306)
Orbi-Jet X22 Tool	✓	✓	✓
20K Rebuild Kit	✓		
O-Ring Maintenance Kit	✓	✓	✓
Adapter	✓		✓
Nozzle Container	✓	✓	✓

ACCESSORIES

Nozzle Extensions

Extensions are installed into the Orbi-Jet™ X22 tool to provide a wider cleaning pattern and serve as flow straighteners, further reducing turbulence, for more aggressive waterjets. Sold Individually.



SURFACE PREPARATION

MagJet X40

The **MagJet X40™** is a rugged, self-powered, rotating tool utilizing up to four straight-pattern, hard-hitting, replaceable sapphire nozzles, rated up to 43,5000 psi, to clean thick and hard-to-remove materials.

KEY FEATURES:

- Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip
- Rebuild kit allows five-minute complete overhaul of wear components in the field
- Multiple head assemblies are available so that the desired rotation speed can be maintained across a wide range of flow rates

INDUSTRY APPLICATIONS:

- All surface preparation
- Automotive and aviation
- Concrete and hydro-demolition
- Pulp and Paper
- Tank, tote, and vessel cleaning



INLET CONNECTION*	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE (HAND GUN)		MAX. OPERATING PRESSURE	
		IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI	BAR
9/16" HP Female	1000-2500	2.3	57	9.4	238	4.0	1.8	7.0	26.5	43,500	3,000

KITS & ACCESSORIES

Premium Kits and Starter Kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



REBUILD KIT



The patented seal cartridge facilitates quick seal changes without special tools or small parts that are easy to lose.



TOOL KITS

DESCRIPTION	T3 STARTER (PN 65306)	T4 STARTER (PN 66236)	T5 STARTER (PN 65308)	T6 STARTER (PN 66237)	T3/T5 PREMIUM (PN 65307)	T4/T6 PREMIUM (PN 66238)
MagJet X40 Tool	✓	✓	✓	✓	✓	✓
T3 Head Assembly	✓				✓	
T4 Head Assembly		✓				✓
T5 Head Assembly			✓		✓	
T6 Head Assembly				✓		✓

ACCESSORIES

Head Assemblies

Multiple head assemblies are available so that the desired rotation speed can be maintained across a wide range of flow rates.



DESIGNATION	PART NO.
T1	66881
T2	66261
T3	64919
T4	65803
T5	64920
T6	65804
T7	66259

Aluminum External Guard

Provides additional protection to reduce wear of the head assembly and body.



SURFACE PREPARATION

FXG2 Tornado Gun

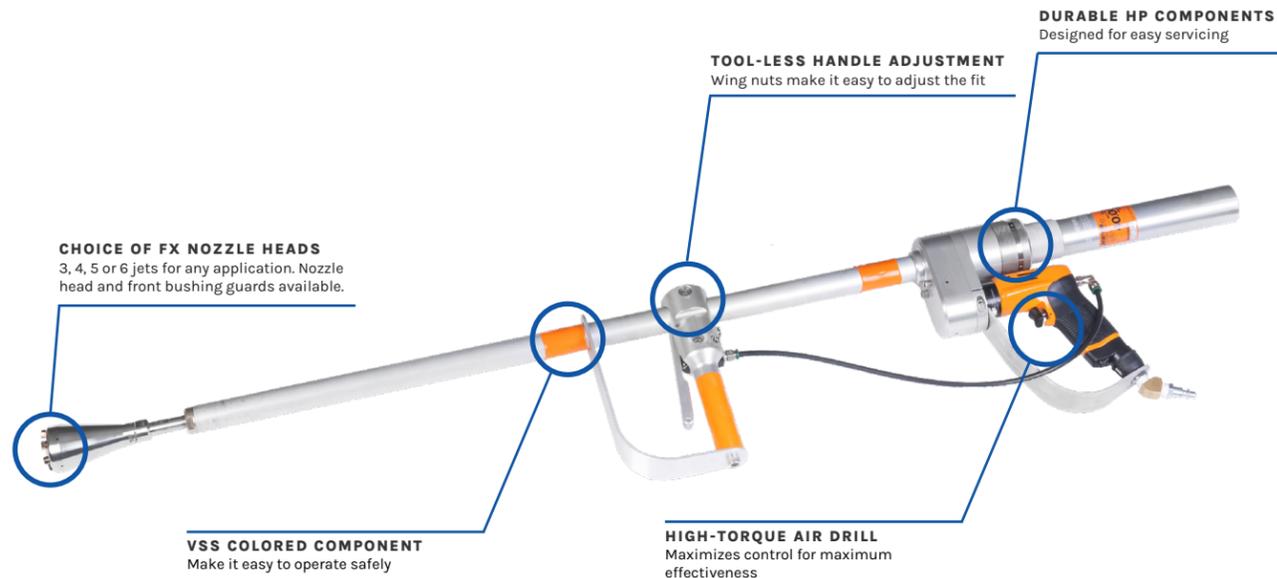
The **FXG2 Tornado Gun**, used in conjunction with the Jetstream Multi-Mode or Unloader style tumble box, is a dual trigger, air-powered rotating barrel waterblast control gun. Maximizing safety, serviceability, and durability, FXG2 Tornado Guns are designed to provide the highest level of productivity.

KEY FEATURES:

- High-torque air drill
- Large bearings with extended HP seal life of 40-60 hours
- No-grease barrel bushings
- Easy to replace HP seal bushing design
- Uses FX nozzle heads with 2, 3, 4, 5, or 6 jets. Available nozzle head and front bushing guards
- Use with Sapphire UPHX/UHPXi Series or synthetic diamond UHPXD Series nozzles
- Optional lightweight shoulder stocks
- Tool-less wing nut handle adjustment
- Serialized assemblies
- VSS colored components for safety

INDUSTRY APPLICATIONS:

- All surface preparation
- Automotive and aviation
- Concrete and hydro-demolition
- Pulp and Paper
- Tank, tote, and vessel cleaning



KITS & ACCESSORIES

FXG2 TORNADO GUN PACKAGES

Two optional packages are available:

Part No. 66938 includes a 36" front barrel FXG2 gun, a Multi-Mode valve, and a 25 foot hose

Part No. 66939 includes a 48" front barrel FXG2 gun, a Multi-Mode valve, and a 25 foot hose



MULTI-MODE VALVE (FRONT VIEW)

REBUILD CARTRIDGE



Jetstream's replacement cartridge contains fewer parts than competitors' and allows for a complete valve rebuild in just 30-seconds.

BARREL LENGTH		WEIGHT		INLET CONNECTION*	NOZZLE HEAD CONNECTION	ROTATIONAL SPEED	AIR REQUIREMENTS				MAX. FLOW		MAX. OPERATING PRESSURE	
IN	MM	LBS	KG				MIN. INLET PRESSURE	MIN. AIR CONSUMPTION		GPM	LPM	PSI	BAR	
48.0	1219	13.8	6.3	9/16" Type M	9/16" Button Seal	1500-2500	90	6.2	20	9.4	7	26.5	40,000	2,758
36.0	914	13.0	5.9				PSI	BAR	CFM	L/S				

ACCESSORIES

Adjustable Shoulder Stocks



Nozzle Holder Guard



Tornado FX Nozzle Heads



Tornado Nozzle Head - Small Diameter



Front Bushing Guard



PIPE CLEANING

J-Force

The **J-Force™** series tools are self-powered rotating tools designed to navigate and clean pipes with bends with ease. The durable tools have front, side, and rear jets that clean and clear blockages and provide thrust to propel the tools down the pipe for maximum cleaning power and minimum wear. Water provides the rotational motion and creates the bearing on which the nozzles spin. There are no oil or ball bearings to replace!

KEY FEATURES:

2-Inch

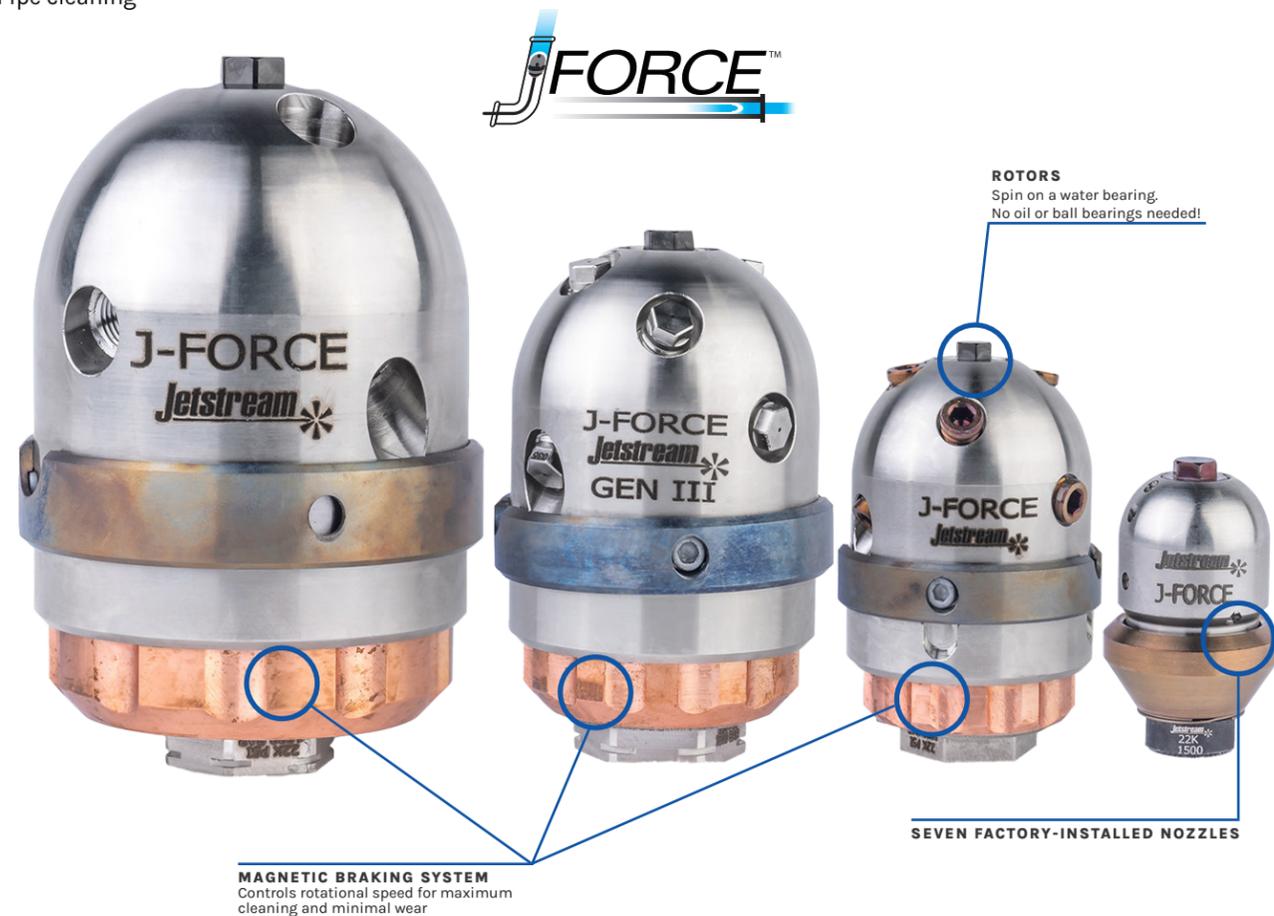
- Equipped with three forward-facing ports at 15°/30°/45°, two radial ports at 90°, and two rearward-facing ports at 132°
- Seven nozzles are factory installed and must be purchased separately at the time of order

3-Inch | 4-Inch Gen III | 6-Inch

- Equipped with two forward-facing ports at 10°, two forward-facing ports at 45° (3-inch and 4-Inch Gen III only), two radial ports at 100°, and two rearward-facing ports at 135°
- Field repairable in less than 2 minutes!

INDUSTRY APPLICATIONS:

- Drain line cleaning
- Pipe cleaning



KITS & ACCESSORIES

Premium Kits and Starter Kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



REBUILD KIT



Rebuild kit allows for a five-minute complete overhaul of wear components right in the field.

3-INCH PREMIUM TOOL KITS

DESCRIPTION	3/8" NPT (PN 67872)	9/16" TYPE M (PN 67874)	3/8" MP LH (PN 67876)	3/8" MP RH (PN 67878)	9/16" MP LH (PN 67880)	9/16" MP RH (PN 67882)
JF3X15 Tool	67859					
JF3X22 Tool		67860	67861	67862	67863	67864
Rebuild Kit	✓	✓	✓	✓	✓	✓

4-INCH PREMIUM TOOL KITS

DESCRIPTION	3/8" NPT (PN 67628)	3/4" TYPE M (PN 67630)	9/16" MP LH (PN 67632)	9/16" MP RH (PN 67634)
JF4X15 Tool	67029			
JF4X22 Tool		67030	67031	67032
Rebuild Kit	✓	✓	✓	✓

6-INCH PREMIUM TOOL KITS

DESCRIPTION	1/2" NPT (PN 65480)	9/16" MP (PN 65482)	M24 (PN 65484)
JF6X15 Tool	64915		
JF6X22 Tool		65380	65381
Rebuild Kit	✓	✓	✓

PIPE CLEANING

RotoMag

The **RotoMag X22** and **RotoMag X22N** are self-powered rotating tools designed for cleaning stacks, sewer lines, drains, tanks, online boilers, and other large diameter pipes.

KEY FEATURES:

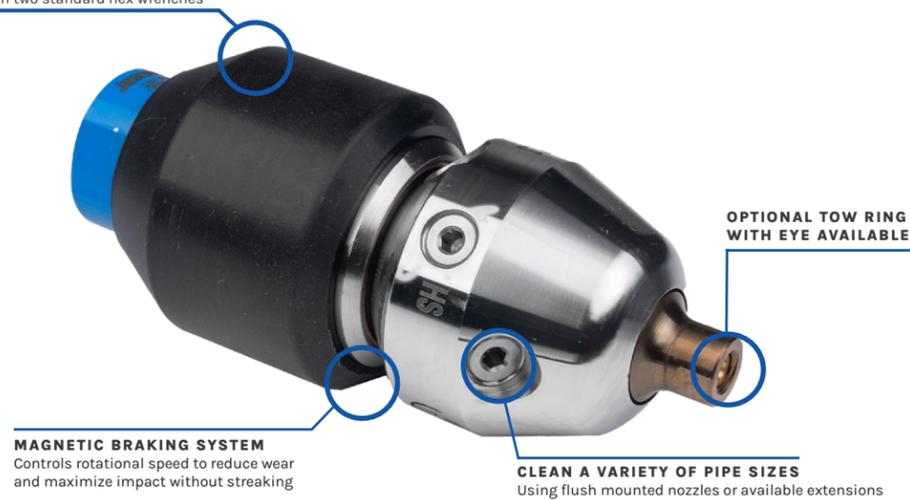
- Up to eight flush-mounted nozzle inserts provide a low profile for cleaning small pipes while extensions are available for larger pipes, allowing the RotoMag to clean pipes ranging from 3-1/2 to 60 inches in diameter
- Includes eight nozzle port plugs
- The RotoMag X22 uses Tungsten Carbide RM Series nozzles, Sapphire RMS Series nozzles, or Synthetic Diamond RMD Series nozzles. The RotoMag X22N uses Tungsten Carbide P4TC Series or Synthetic Diamond JS4FD Series nozzles.

INDUSTRY APPLICATIONS:

- Drain and sewer lines
- Pipe cleaning
- Tank, tote, and vessel cleaning

TWO MINUTE IN-THE-FIELD OVERHAUL

Using the Rebuild Kit with two standard hex wrenches



8 Port



6 Port



4 Port



2 Port

MODEL	PART NO.	INLET CONNECTION	NOZZLE SIZE	SPEED RANGE	DIAMETER (LESS SHROUD)		ASSEMBLY LENGTH (WITH ADAPTER)		ASSEMBLY WEIGHT		MAX. FLOW RATE (HAND GUN)		MAX. OPERATING PRESSURE	
					RPM	IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI
X22	63945	3/4" MP Female	1/2"-28 UNEF	50-300	2.75	70	8.65	225	6	2.7	80	303	22,500	1551
X22N	65095		1/4" NPT Male											
NO MAGNETS														
X22	65231	3/4" MP Female	1/2"-28 UNEF	> 300	2.75	70	8.65	225	6	2.7	80	303	22,500	1551
X22N	65232		1/4" NPT Male											

KITS & ACCESSORIES

Premium Kits and Starter Kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



REBUILD KIT



Rebuild kit allows for a two-minute complete overhaul of wear components right in the field.

TOOL KITS

DESCRIPTION	X22 PREMIUM (PN 63813)	X22 STARTER (PN 63811)	X22N PREMIUM (PN 65130)	X22N STARTER (PN 65129)	HIGH FLOW PREMIUM (PN 68581)	HIGH FLOW STARTER (PN 68580)
RotoMag X22 Tool	✓	✓				
RotoMag X22N Tool			✓	✓		
High Flow RotoMag Tool					✓	✓
Rebuild Kit	✓		✓		✓	
O-Ring Maintenance Kit	✓	✓	✓	✓	✓	
Adapter	✓	✓	✓	✓	✓	✓
Tow Ring	✓		✓		✓	✓

ACCESSORIES

Nozzle Extensions

Used to put nozzles closer to the inner surface of large pipes for more effective cleaning. Available in two connection types and three lengths and can be coupled.

Tow Rings

Eye-less tow ring standard with all RotoMag assemblies. Optional tow ring with eye included in all Premium Kits.

Centralizers

Support the tool while providing a controlled, even cleaning along with damage protection. Available in skid, cage, and scissor styles.



PIPE CLEANING

Swivel X15 & X22

The **Swivel X15** and **Swivel X22** are self-powered, 360° rotating swivel tools designed for cleaning medium to large diameter pipes.

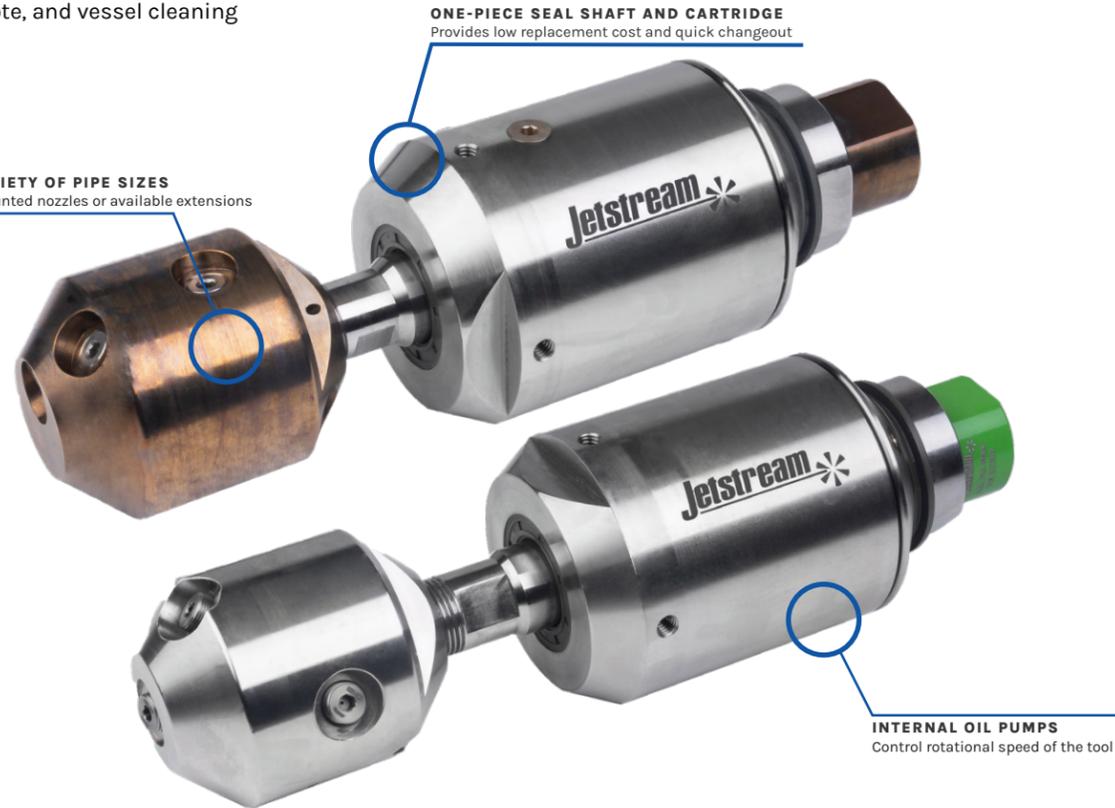
KEY FEATURES:

- Rotational speed of the nozzle head is controlled by the internal oil pump assembly on the swivel
- Stainless steel swivel and head with flows up to 50 gpm (189.2 lpm). Flow rate calculated by the multiplying number of nozzles by the flow rate
- Swivel X15 uses up to six flush-mounted P4TC or standard HHTCO nozzles. Swivel X22 uses two, four, six, or seven Tungsten Carbide RM Series nozzles, Sapphire RMS Series nozzles, or Synthetic Diamond RMD Series nozzles
- Typical seal and oil life over 100 hours
- Low seal replacement cost and quick change, with the seal shaft and cartridge all in one piece
- Speed adjustment without oil change or spillage

INDUSTRY APPLICATIONS:

- Pipe cleaning
- Tank, tote, and vessel cleaning

CLEAN A VARIETY OF PIPE SIZES
Using flush mounted nozzles or available extensions



MODEL	INLET CONNECTION*	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE		MAX. OPERATING PRESSURE	
			IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI	BAR
Swivel X15	3/4" NPT Female	RPM	3-5/8"	92	9.5	241	11	5	50	189	15,000	1034
Swivel X22	3/4" MP Female	50-1000	3-5/8"	92	9.5	241	11	5	50	189	22,000	1516

KITS & ACCESSORIES

Premium Kits and Starter Kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.

Oil Kit (PN. 64180) and Rebuild Kit (PN. 64247) are available for full servicing tools. Each kit contains one of the available nozzle holder configurations.



SWIVEL X15 TOOL KITS

DESCRIPTION	6 PORT, P4,R22 STARTER	7 PORT, P4,R22 STARTER
Swivel Assembly	✓	✓
Nozzle Holder	✓	✓
Nozzle Plug	✓	✓
Tow Ring	✓	

NOTE: 3/4" ORS nozzle holders require some form of extensions to allow 1/4" NPT nozzles. Tool assemblies come with two 2" nozzle extensions (PN 65456-02).

SWIVEL X22 TOOL KITS

DESCRIPTION	6 PORT, RM,R22 STARTER	7 PORT, RM,R22 STARTER
Swivel X22 Assembly	65033-6RM22	65033-7RM22
Seal Assembly	✓	✓
Oil Kit	✓	✓
Plastic Tubing	✓	✓
Hose Barb	✓	✓
Hose Barb	✓	✓
Syringe	✓	✓

ACCESSORIES

Nozzle Holders

Six or seven port styles for all applications.



Nozzle Extensions



Tow Ring



Centralizers

Available in skid, cage, and scissor styles.

PIPE CLEANING

MagDart X40

The **MagDart X40™** is a self-powered rotating nozzle that offers a polisher or unplugging head for cleaning a wide range of process lines. The tool rotates in a 360° pattern to provide maximum surface coverage and superior cleaning.

KEY FEATURES:

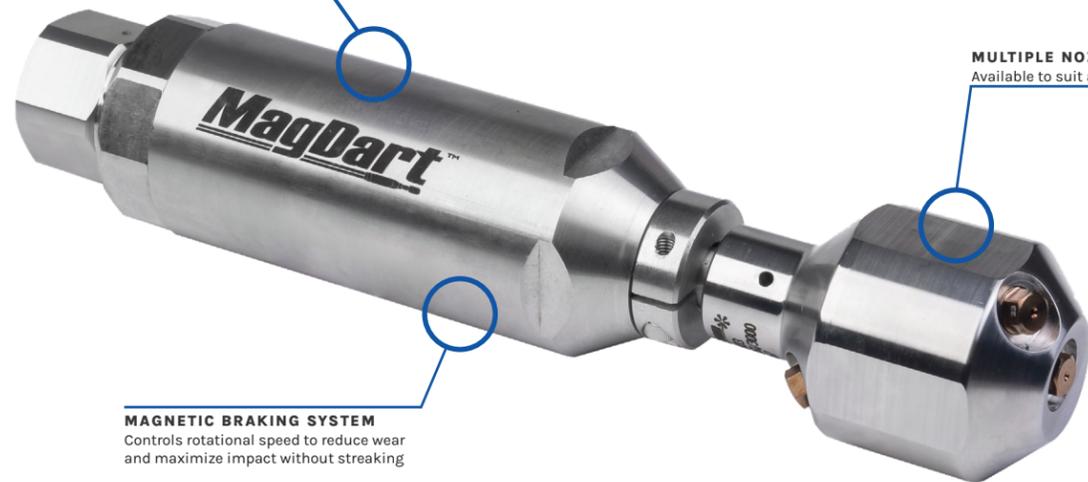
- Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip
- Multiple nozzle holders are available for the desired rotation speed to be maintained across a wide range of flow rates
- Rebuild kit allows five-minute complete overhaul of wear components right in the field
- Use with Sapphire UHPX/UHPXi Series or Synthetic Diamond UHPXD Series nozzles

INDUSTRY APPLICATIONS:

- Pipe cleaning
- Drain and sewer lines

MagDartX40™

FIVE MINUTE IN-THE-FIELD OVERHAUL
Using the Rebuild Kit



MAGNETIC BRAKING SYSTEM
Controls rotational speed to reduce wear and maximize impact without streaking

MULTIPLE NOZZLE HOLDERS
Available to suit any application

INLET CONNECTION	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE		MAX. OPERATING PRESSURE	
	RPM	IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI	BAR
9/16" HP Female	200 - 800	2.0	51	9.9	251	6.0	13	12	45	43,500	3,000

KITS & ACCESSORIES

Premium kits and Starter kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



REBUILD KIT



The patented seal cartridge facilitates quick seal changes without special tools or small parts that are easy to lose.

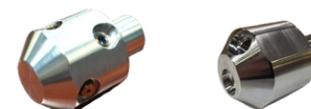
TOOL KITS

DESCRIPTION	MEGA 66799	R10 UNPLUGGER 66800-R10UP	R17 UNPLUGGER 66800-R17UP	R10 POLISHER 66800-R10P	R17 POLISHER 66800-R17P	R10 PREMIUM 67112-R10	R17 PREMIUM 67112-R17
MagDart X40 Tool	✓	✓	✓	✓	✓	✓	✓
R10 Unplugging Nozzle Holder	✓	✓				✓	
R17 Unplugging Nozzle Holder	✓		✓				✓
R10 Polisher Nozzle Holder	✓			✓		✓	
R17 Polisher Nozzle Holder	✓				✓		✓
Seal Cartridge	✓	✓	✓	✓	✓	✓	✓
Seal Kit	✓	✓	✓	✓	✓	✓	✓

ACCESSORIES

Nozzle Holders

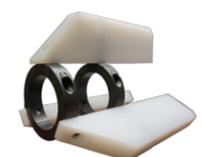
Unplugging and polisher nozzle holders available in two different flow rates.



DESIGNATION	PART NO.	OFFSET	FLOW RANGE (GPM)
Unplugging	66418	R10	8 - 12
Unplugging	66433	R17	4 - 8
Polisher	66447	R10	8 - 12
Polisher	66448	R17	4 - 8

Centralizers

Skid style. Support the tool while providing a controlled, even cleaning along with damage protection.



TANK AND VESSEL CLEANING

H₃Orbiter

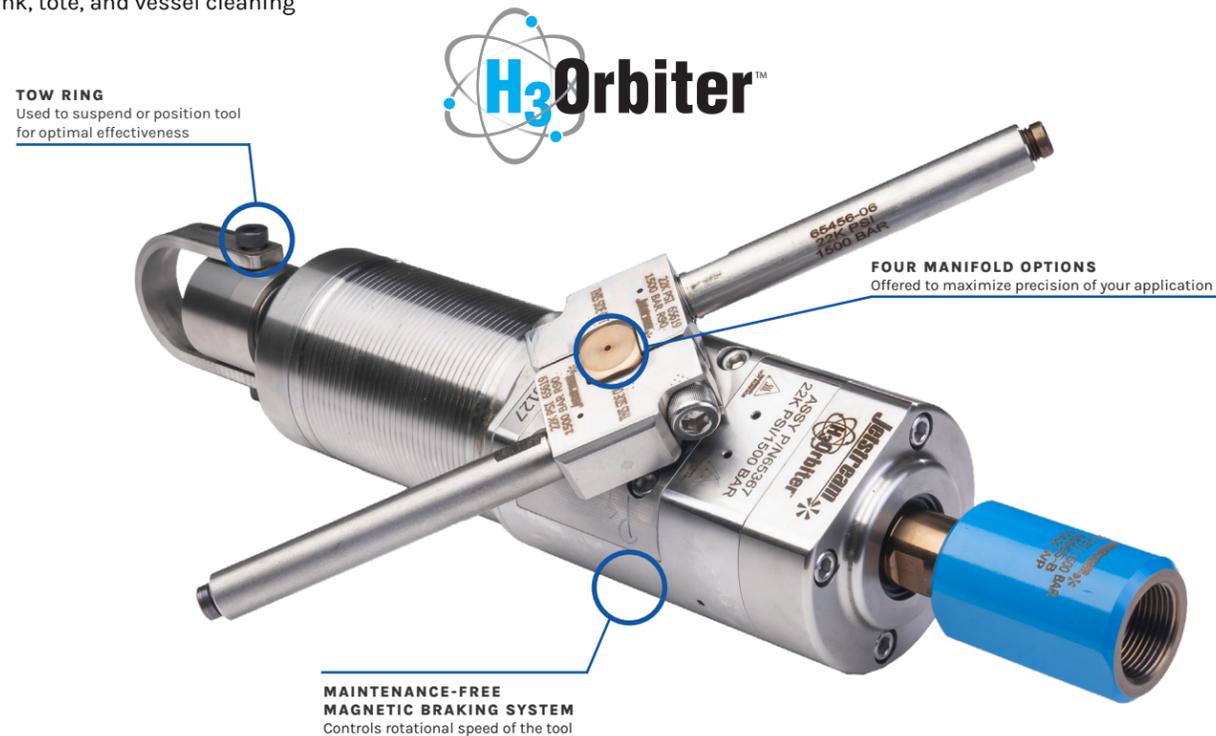
The **H₃Orbiter™** (H₃O) is a 3-D water blasting tool designed to effectively and efficiently clean tanks and vessels. The rotation of the nozzles and body allows the tool to perform a complete 360 degree clean at pressures up to 22,000 psi (1500 bar). Flow rates are controlled through four different manifold options that provide 10 to 80 gpm (37 to 302 lpm): High Flow, Medium Flow, Low Flow, and Extra-Low Flow.

KEY FEATURES:

- H₃Orbiter uses 2 HHTC or JS4 series nozzles.
- Wide range of accessories is available including cage centralizers and extensions. Only 1" or 2" extensions can be used when the H₃Orbiter is installed in the centralizer
- For pipe cleaning, the H₃Orbiter can be placed in a centralizer with an optional kick plate. When installed with the centralizer, the kick plate allows for self-generated forward movement with each 180o rotation of the manifold

INDUSTRY APPLICATIONS:

- Railcars
- Tank, tote, and vessel cleaning



CONNECTION* (MALE)	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE		MAX. OPERATING PRESSURE	
		IN	MM	IN	MM	LBS	KG	GPM	LPM	PSI	BAR
1-1/8" ORS Male	Adjustable; 8-50 rpm	4	100	16.65	423	35	16	80	307	22,000	1500

KITS & ACCESSORIES

Premium kits and Starter kits are available for full product tools. All kits include a durable waterproof case, the Product Instructions, and the Quick Start Guide.

Premium Kits also include a rebuild kit with the tools required to completely rebuild the tool quickly and easily.



TOOL KITS

DESCRIPTION	PREMIUM
H ₃ Orbiter Tool	✓
Service Kit	✓
Adapter	✓
Type M Adapter	✓
R30, R50, R90, R150 Manifold	✓
2", 6", 12", 24" Extension	✓
1/2" NPT Half Coupling	✓
1-1/8" ORS Coupling	✓
Coupling Plug	✓
Tow Ring	✓

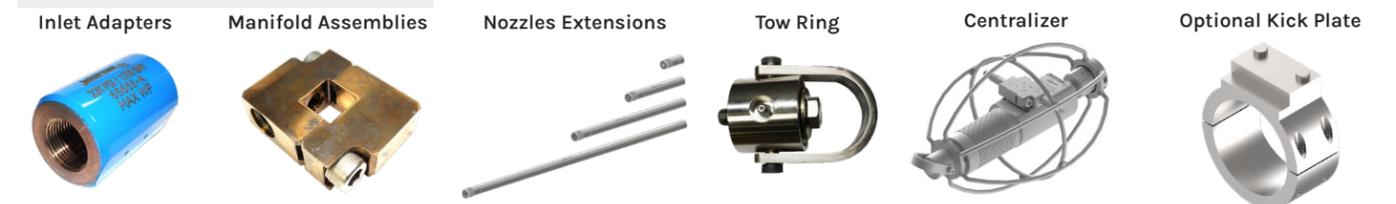
Starter kits available for specific manifolds and extensions

MANIFOLDS

Four manifolds provide a range of flow capabilities between 10 to 80 gpm to match your application High (50 to 80 gpm), Medium (28 to 55 gpm), Low (16 to 30 gpm), and Extra-Low Flow (10 to 18 gpm)



ACCESSORIES



TUBE CLEANING

DrillJet

The **DrillJet™** is a self-powered rotating nozzle used for removing deposits in tubes without the use of any external rotating components. It is assembled from three components: the nozzle body, internal rotor, and rear thruster. The inner rotor (with four orifices - two front-facing and two radial), the only rotating component in the DrillJet, spins at ultra-high rpms. The nozzle can be used with either rigid or flexible lances.

KEY FEATURES:

- Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip
- Front cap protects rotor and allows continuous spinning even after hitting an obstruction for reliable performance
- Supports working pressures up to 22,000 psi

INDUSTRY APPLICATIONS:

- Tube cleaning
- Heat exchanger cleaning



SIZE	TUBE ID RANGE		INLET CONNECTION	FLOW RANGE		DIAMETER		ASSEMBLY LENGTH		MAX. OPERATING PRESSURE	
	MM	IN		MM	GPM	LPM	IN	MM	IN	MM	PSI
9.5	0.47-0.63	12-16	M7, 1/16" NPT, 1/4" LH or 1/4" RH	4.5-8.0	17-30	0.37	9.5	1.54	39.1	22,000	1,500
13	0.60-1.00	15-25	1/8" NPT, 1/8" BSPP, 1/4" LH, 1/4" RH, 3/8" LH or 3/8" RH	7.0-10.0	27-38	0.50	13.0	1.65	42		
18	0.87-1.30	22-33	1/4" NPT, 1/4" BSPP, 9/16" LH, 9/16" RH	10.0-14.0	38-53	0.71	18.0	2.16	54.9		
24	1.10-2.00	28-51	3/8" NPT, 3/8" BSPP, 9/16" LH, 9/16" RH	10.0-24.0	38-91	0.94	24.0	2.54	64.5		
33	1.50-2.40	38-61	1/2" NPT, 1/2" BSPP, 9/16" MP GLAND	8.0-47.0	30-178	1.30	33.0	3.30	83.8		

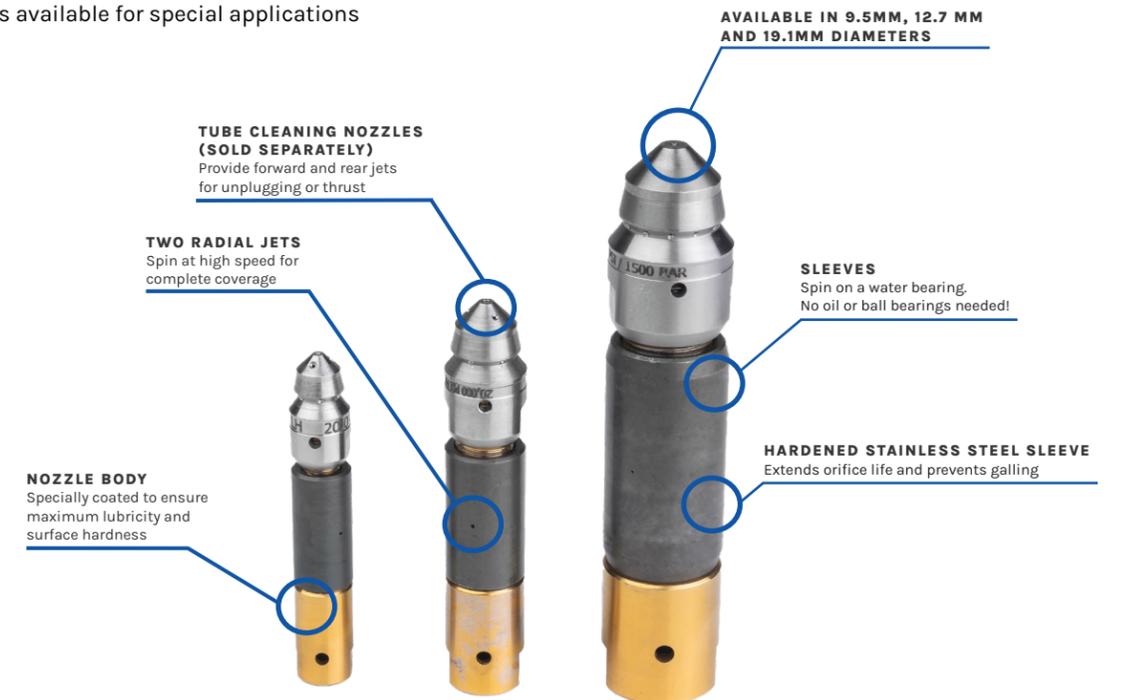
TUBE CLEANING

Tube Spinners

Jetstream **Tube Spinner Nozzles** provide the most thorough cleaning of tube walls. Maximum impact and the elimination of streaking result from having two larger spinning jets rather than several smaller non-rotating jets.

KEY FEATURES:

- Self-rotating sleeve has two radial jets that spin at high speed for complete coverage
- HPFR/HPFL or HPER/HPEL tube cleaning nozzles are connected to the tube spinner nozzle to add forward jets for unplugging tubes and/or rearward jets to pull nozzles and flex lance through tube (sold separately)
- HPFR/HPFL nozzle blanks, sold below, can be installed in place of HPFR/HPFL or HPER/HPEL nozzles when no forward or rearward jets are required
- Tube Spinner outside diameters are the same as standard tube cleaning nozzles
- Custom flow rates available for special applications



PART NO.	FLOW RATE NO.	INLET CONNECTION (FEMALE)	OUTSIDE DIAMETER		LENGTH (WITH HPF NOZZLE)**		10,000 psi (690 bar)		12,500 psi (862 bar)		15,000 psi (1,034 bar)		17,500 psi (1,207 Bar)		20,000 psi (1,379 bar)	
			IN	MM	IN	MM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM
64213	1	1/4" MP LH	.375	9.5	2.22/2.57	55/65	2.3	8.7	2.7	10.2	3.0	11.4	3.4	12.9	3.8	14.4
64214	1	1/4" MP RH	.375	9.5	2.22/2.57	55/65	2.3	8.7	2.7	10.2	3.0	11.4	3.4	12.9	3.8	14.4
64215	1	3/8" MP LH	.500	12.7	2.57/2.99	65/76	3.3	12.5	3.9	14.8	4.5	17.0	5.1	19.3	5.7	21.6
64216	1	3/8" MP RH	.500	12.7	2.57/2.99	65/76	3.3	12.5	3.9	14.8	4.5	17.0	5.1	19.3	5.7	21.6
64217	1	9/16" MP LH	.750	19.1	3.55/4.02	90/102	4.5	17.0	5.5	20.8	6.4	24.2	7.4	28.0	8.5	32.2
64218	1	9/16" MP RH	.750	19.1	3.55/4.02	90/102	4.5	17.0	5.5	20.8	6.4	24.2	7.4	28.0	8.5	32.2
64219	2	9/16" MP LH	.750	19.1	3.55/4.02	90/102	8.8	33.3	10.3	39.0	11.7	44.3	13.1	49.6	14.6	55.3
64220	2	9/16" MP RH	.750	19.1	3.55/4.02	90/102	8.8	33.3	10.3	39.0	11.7	44.3	13.1	49.6	14.6	55.3

**MP connection uses HPFR/HPFL/HPER/HPEL cap nozzle. Lengths are HPFR and HPFL/HPER and HPEL respectively. SOLD SEPARATELY.

TOOL RENTALS

Jetstream provides pumps, parts, and tool rentals for all the demands of your job. You can pick up the equipment you need, or we can deliver it straight to your job site. Our tools are ready to work the second they arrive on-site and are backed by our world-class customer support team and highly trained technicians that are committed to the success of your project.

BEST-IN-CLASS SERVICE AND SUPPORT, TAILORED TO YOU

Jetstream is a subsidiary of Federal Signal Corporation's Environmental Solutions Group. Member companies include Vactor Manufacturing, TRUVAC, Guzzler Manufacturing, Westech Vac Systems, Ltd., and Elgin Sweeper Company.



If you need service and support for your equipment, Jetstream has you covered with the most experienced and customer-focused team in the industry.

In the United States, our products are serviced by FS Solutions. With 13 convenient locations, FS Solutions provides high-performance parts and accessories, Jetstream rentals, repair and rebuild, and safety training services. In Canada, Joe Johnson Equipment (JJE) is there to handle your every need.

Whatever your needs may be, Jetstream offers a full range of products, services, and customized solutions designed to keep your products and projects running smoothly, effectively, and efficiently!



VALVE REBUILD PROGRAM

Get same as new performance and reliability for your valves with Jetstream's Valve Rebuild Program (VRP).

The program utilizes OEM parts and processes to maximize the value of your equipment by:

- Reducing hourly operational costs
- Boosting up-time
- Optimizing reliability
- Restoring original system performance
- Increasing return on investment

We guarantee to provide new seals, springs, suction/discharge valve, and lapping with every rebuild.

TRADE-IN PROGRAM

The Trade-In Program offers customers an opportunity to exchange any competitor tools for credit towards Jetstream Signature Series Premium Kits. Tools do not have to be functional, but they must be a complete part.

**Discounts applied at the time of trade-in.*

TRAINING

To ensure customer satisfaction, Jetstream has developed the Right Start program, a four-step plan designed to provide the owners and operators of new Jetstream waterblast units with the knowledge and support needed to feel familiar, confident, and satisfied with Jetstream equipment and personnel.

TRANSPORTATION

Once a new water blaster is built and thoroughly tested, the Shipping Manager contacts the new owner to arrange for the unit's arrival to the right place at the right time.

TRAINING

All new water blasters include personal training by a Jetstream Technician. Training involves both classroom and "hands-on" instruction to make sure that each operator is thoroughly familiar with the design and function of the unit and accessories, enabling him to safely put the new equipment to optimal use.

FOLLOW-UP

Within 30 days of delivery, and again within 60 days, the Solutions Provider will call to answer any questions and ensure complete satisfaction.

TRUST

If any questions or problems ever arise, the Jetstream team is available and committed to providing prompt answers and solutions.

PREPARING YOU TO SUCCEED

Jetstream provides a wide range of training courses

PUMP OPERATION & MAINTENANCE: The course combines extensive hands-on training with classroom instruction and is recommended for maintenance personnel, operators, and supervisors.

FS SOLUTIONS SAFETY TRAINING: As the experts on waterblast and industrial vacuum equipment, FS Solutions makes OSHA training and compliance more convenient than ever through hands on courses developed by Gary Toothe, whose significant contributions and 25 years of experience are well-known in the waterblast and industrial vacuum industries.

ONLINE WITH FEDERAL SIGNAL ESG UNIVERSITY: FS Solutions offers interactive courses through our Federal Signal Environmental Solutions Group University on subjects ranging from operator skill and safety to advanced classes for supervisors and managers in water blasting and industrial vacuum technologies.





Streator, IL
(815) 672-6028

Toledo, OH
(888) 415-7368

New Brunswick, NJ
(732) 448-7830

Highland, IN
(219) 924-3180

Lexington, SC
(803) 996-0741

Leeds, AL
(800) 822-8785

Williston, ND
(701) 572-7421

La Porte, TX
(281) 674-8668

Gonzales, LA
(225) 647-0660

Midland, TX
(432) 563-4450

Salt Lake City, UT
(801) 808-4590

Long Beach, CA
(866) 515-9891

Lakewood, WA
(253) 584-0653

Jetstream has the most comprehensive products, service, rental, and training in the industry. Whether you are looking to purchase or rent water blasting equipment, or if you need service and support for your existing equipment, we've got you covered with the most experienced and customer-focused team in the industry.

In the United States, our products are serviced by FS Solutions. With 13 convenient locations, FS Solutions provides high-performance parts and accessories, Jetstream rentals, repair and rebuild, and safety training services. In Canada, Joe Johnson Equipment (JJE) is there to handle your every need.

Jetstream is a subsidiary of Federal Signal Corporation and has the financial strength, backing, and network of distributors around the world to support any customer.

INTERNATIONAL DISTRIBUTORS

Orbitec
Santiago, Chile

Powerjet Rentals
Glasgow, Scotland

Asia Waterjet
Dubai, UAE

Total Blasting
Johannesburg, South Africa

Metco
Adelaide, Australia

FS Asia
Shanghai, China

Asia Waterjet
Singapore

JETSTREAM OF HOUSTON

5905 THOMAS ROAD
HOUSTON, TEXAS 77041

(832) 590-1300

(800) 231-8192

The logo consists of a red square with a white stylized 'F' and 'S' inside, followed by the word "Solutions" in a bold, black, sans-serif font.

