

# Abrasive Delivery System ADS SERIES HOPPERS

**LOAD ABRASIVE  
WHILE CUTTING!**

(No need to stop cutting to  
add more abrasive)

## Continuous Level Monitoring for an Efficient Production Process



Production reliability requires constant vigilance during the entire cutting process. An economical and successful cutting process depends greatly on a constant abrasive flow rate. This fact becomes even more important when cutting brittle materials such as stone, marble or glass.

### Abrasive Flow Monitoring saves Time & Costs

Our ADS SERIES HOPPERS precisely monitor the availability of sufficient abrasive closely during the entire cutting process. This protects your valuable material from damage and saves unnecessary costs and time. Its concept assures process stability, security and a very high degree of reliability.

### Stand Alone Unit or System Integratable

The ADS SERIES HOPPER provides all features to stabilize the cutting process and can be installed in two different ways: a stand-alone unit or an integrated component connected to a centralized control system. When used in one or multiple shift operation of automated cutting systems, the ADS SERIES HOPPER delivery system contributes to the economical use of the entire waterjet cutting system.

### From 500 lbs. to 2000 lbs. Capacity Storage Tanks

The ADS SERIES HOPPERS used in the hydro-abrasive cutting process provides a new level of accuracy and convenience in production cutting operations. Abrasive is stored in the abrasive storage vessel and pneumatically transferred to the abrasive metering assembly.

### The ADS-500 & ADS-2000 SERIES Key Components:

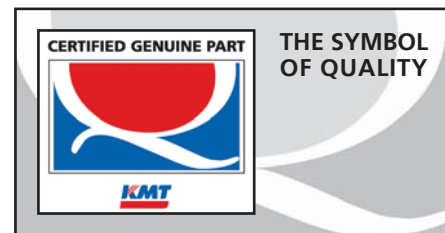
Vessel loading areas allow individual 100 lb. bags of abrasive to be loaded through the integrated sieve lid. It is easily accessible and the abrasive can be loaded, even while cutting, by only removing the top cover. The integrated sieve ensures that no contaminated particles may be loaded.

### The ADS-500 HOPPER

has an abrasive level indicator which uses a weighing mechanism to provide continuous monitoring of the abrasive level. A low-level alarm utilizes a proximity switch to detect the low limit (100 lbs. of abrasive) and will activate a horn alarm to notify user. No need to stop cutting to add abrasive, just pour it in! A regulator and manual valve control the air pressure and provide ON/OFF control.

### The ADS-2000 HOPPER

has a low-level warning (100 lbs. of abrasive) which utilizes a proximity sensor switch to detect the low limit and activate a warning light to notify user. No need to stop cutting to add abrasive, just pour it in! A pressure regulator and solenoid valve efficiently control the air pressure and provide ON/OFF control.



TECHNICAL SPECIFICATIONS	ADS 500 SERIES	ADS 2000 SERIES
Max. Inlet Air Pressure	65 psi (4.5 bar)	65 psi (4.5 bar)
Min. Inlet Air Pressure	35 psi (2.4 bar)	35 psi (2.4 bar)
Normal Operating Inlet Air Pressure	40 psi (2.8 bar)	40 psi (2.8 bar)
Min. Inlet Air Flow	1.0 ft <sup>3</sup> /min (0.028 m <sup>3</sup> /min)	1.0 ft <sup>3</sup> /min (0.028 m <sup>3</sup> /min)
Operating Air Flow	0.17 ft <sup>3</sup> /min (0.005 m <sup>3</sup> /min)	0.17 ft <sup>3</sup> /min (0.005 m <sup>3</sup> /min)
Abrasive Capacity	First fill: 600 lbs (272 kg), Refill: 500 lbs (227 kg)	2000 lbs (908 kg)
Max. Abrasive Flow Rate	3.0 lb/min (1.36 kg/min)	3.0 lb/min (1.36 kg/min)
Abrasive Type	Commercially available, quality graded & properly sized abrasives like garnet. Silica sands or other potentially health hazardous abrasive sands must not be used.	
Hose Size, Connecting Storage Vessel & Metering Device	1/2"	1/2"
Hose Max. Length	100 ft. (30 m)	100 ft. (30 m)
Hose Max. Height Above Vessel	15 ft. (4.6 m)	15 ft. (4.6 m)
Electric Supply	*115V AC/50 or 60 Hz, 1-phase, 5 amps, grounded	115V AC/50 or 60 Hz, 1-phase, 5 amps, grounded

\*24V DC also available

### FEEDLINE IV Metering System & AUTOLINE II™ Cutting Nozzle "Must haves" for your ADS Series Hopper!

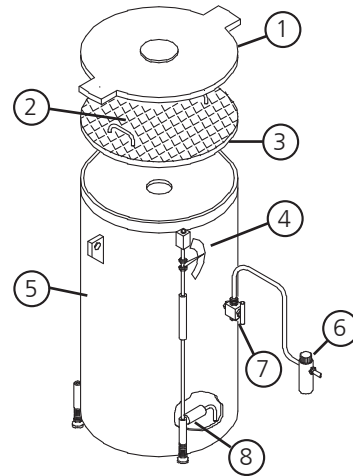
The ADS SERIES HOPPER is just one link in the KMT quality abrasive management system for waterjet cutting. Use with the FEEDLINE IV Electronic Metering System to provide a constant metered flow of abrasive and optimize abrasive consumption. The patented design of the AUTOLINE II™ Cutting Nozzle provides a sharper, faster cutting stream which will further reduce abrasive use and maximize efficiency for lower operating cost.



FEEDLINE IV  
Metering System



AUTOLINE II™  
Cutting Nozzle

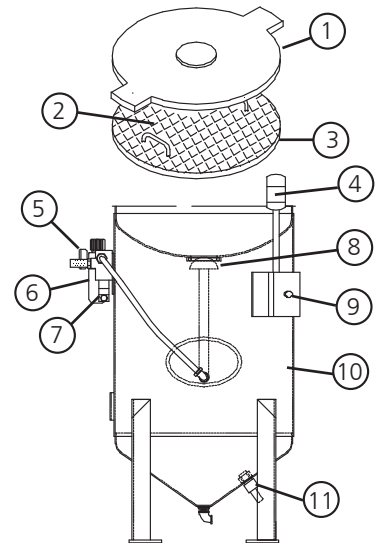


#### ADS 500 SERIES

- 1 Cover
- 2 Abrasive Loading Area
- 3 Screened Lid
- 4 Abrasive Level Indicator
- 5 Abrasive Storage Vessel
- 6 Air Pressure Regulator
- 7 Manual On/Off Air Valve
- 8 Low Level Alarm

#### ADS 2000 SERIES

- 1 Cover
- 2 Abrasive Loading Area
- 3 Screened Lid
- 4 Low Level Warning Light
- 5 Pressure Gauge
- 6 Pressure Regulator
- 7 Solenoid Valve
- 8 Stopper
- 9 On/Off Switch
- 10 Abrasive Storage Vessel
- 11 Proximity Switch



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