



# AFM Abrasive Flow Machining



# SPECTRUM

## Wide Range of Capabilities

The SPECTRUM Series abrasive flow machine offers a broad range of process capabilities with a selection of media cylinder diameters ranging from full pressure 10" (250mm) models, to lower pressure 24" (600mm) versions.

The SPECTRUM Series machines are available in designs that can be built to meet any production requirements. Many options are available, such as Internal Media Refeed Systems, Index Tables, Automatic Process Control and Programming, Media Cooling Units, Workpiece Handling Systems, Customized Work Platforms, and many others.



## FEATURES and BENEFITS

- + **AUTOFLOW™ advanced Flow control**  
Measure and control the flow rate of abrasive media in real time to optimize process performance and maximize media service life.
- + **Media temperature management options**  
Controlling the temperature of the abrasive media gives a more consistent machining rate.
- + **Configurable AFM system**  
Select from a menu of accessories to build a custom system that meets your specific requirements.
- + **Fast setup and change of media**  
Generously dimensioned work envelope for large workpieces and rapid tool change. All process data at a glance.
- + **Intuitive User Interface**  
12" color touch screen clearly displays machine status and simplifies setup.
- + **Full Recipe Control**  
All process parameters are stored in on-board recipes, allowing quick and secure product changes.



# TECHNICAL INFORMATION

## AFM SPECTRUM



### SYSTEM CONFIGURATIONS

Type		Spectrum 10	Spectrum 12	Spectrum 16	Spectrum 16 (HP)	Spectrum 24
Media Tube Diameter	inch	10	12	16	16	24
Media Hydraulic Cyl Bore	inch	8	8	8	12	12
Clamp Hydraulic Cyl Bore	inch	8	8	10	12	12
Media Pressure (Max)	psi	1200	800	500	1000	500
Lower Media Piston Stroke	inch	18.5	18.5	21	21	24
Media Capacity - Volume (Not including options & fixture)	in <sup>3</sup>	1,600	2,200	4,300	4,300	11,000
Media Capacity - Weight (Not including options & fixture)	lbs	100	138	270	270	700
Media Flow Rate	GPM	24	34	151	58.5	120
Hydraulic Power Unit	HP	25	25	25	40	40
Hydraulic System Flow Rate	GPM	15	15	15	30	30
Maximum Fixture Diameter	inch	40	40	50	54.5	54.5
Minimum Opening	inch	2	2	2	4.5	4.5
Maximum Opening	inch	32	32	32	49.5	49.5
Work Table Height	inch	63	63	70	100	100
Machine Height (Max)	inch	153	153	160	193	211
Machine Width	inch	100	100	109	110	110
Machine Depth (with Operator Workstand)	inch	238	238	281	326	326
Machine Weight (est.)	lbs	15000	15000	31000	33000	35500
FLA (Subject to Change)	Amp	50	50	50	50	50

### STANDARDS ACCESSORIES

- 480V/3Ph/60 Hz or 380V/3 Ph/50 Hz
- Allen Bradley PLC
- 12" High Resolution Wide Screen HMI
- AUTOFLOW™ Advanced Flow Control
- Extended Lower Media Cylinder
- Media Tube Cooling Cuffs (not for 24/12/12)
- EWON Module for Remote Support
- Basic Media Temperature Monitoring
- Machine RAL 9007 Gray with RAL 9006 Gray Aluminum Accents

### OPTIONAL ACCESSORIES

- CE (Europe)
- Siemens PLC & HMI
- CSA (Canada) + 575 VAC (Transformer)
- Advanced Media Temperature Monitoring
- Lower Media Cross Cooler (Recommended for 24/12/12)
- Single Fixture Hydraulic Slide Cart
- Dual Fixture Hydraulic Index Table
- Internal Media Refeed System
- External Media Refeed System
- Upper Media Retention System
- Operator Workstand
- Machine Guarding with Front Light Curtain
- Machine Guarding with Front Hinged Access Doors
- 5 Ton Chiller (Closed Loop Cooling System)
- Remote Chiller Control on HMI
- Media Mixing & Warming Tool
- LED Work Area Lighting (Processing Area & Base)
- 2 Spare Media Cups and 1 Hydraulic Oil Filter

NOTE: Specifications and availability are subject to change without notice.