

AFM Abrasive Flow Machining



SPECTRUM

Wide Range of Capabilities

The SPECTRUM Series abrasive fl ow 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

Туре		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 ³	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

AUTOFLOWTM 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.