

Machine Model	AFES-3D8T	AFES-3D10T	AFES-3D12T	AFES-3D13T
Wire Diameter Range (Millimeters)	2mm - 8mm	*4mm - 10mm	*4mm - 12mm	*5mm - 13mm
Wire Diameter Range (Inches)	0.080" - 0.313"	0.160" - 0.394"	0.160" - 0.472"	0.197" - 0.500"
Max. Wire Tensile At Max. Wire Diameter	620 N/mm <sup>2</sup>	620 N/mm <sup>2</sup>	620 N/mm <sup>2</sup>	620 N/mm <sup>2</sup>
— # — (kPSI)	90 kPSI	90 kPSI	90 kPSI	90 kPSI

## Performance Specifications

### Feeder Axis #1

Wire Feed Resolution (Millimeters)	<0.0001mm	<0.0001mm	<0.0001mm	<0.0001mm
Wire Feed Resolution (Inches)	<0.00001"	<0.00001"	<0.00001"	<0.00001"
Max wire feed speed (Meters)	152 m/min	149 m/min	145 m/min	138 m/min
Max wire feed speed (Feet)	506' f/min	488' f/min	475' f/min	452' f/min

### Bender Axis #2

Bender Resolution	<0.0001°	<0.0001°	<0.0001°	<0.0001°
Max Bender speed	2500°/sec	1200°/sec	1200°/sec	1200°/sec
Max Bender angle	Unlimited	Unlimited	Unlimited	Unlimited

### Z-Axis #3

Z-Axis Resolution	<0.0001°	<0.0001°	<0.0001°	<0.0001°
Max Z-Axis speed	400°/sec	400°/sec	400°/sec	400°/sec
Max Z-Axis rotation	+/-190	+/-190	+/-190	+/-190

### Turret Axis #4

Turret Axis ToolChange time	250 mSec	250 mSec	250 mSec	250 mSec
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### Servo Cutter Axis #5

Servo Cut time	150 mSec	200 mSec	200 mSec	200 mSec
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### Set-Up Time

Same Wire Diameter	1 minute	1 minute	1 minute	1 minute
Change feeder rollers & Bending tools	8 minutes	8 minutes	8 minutes	8 minutes

### Power Consumption, Electrical & Air Requirements

Average Power Consumption (KW/h)**	2	2.4	2.6	2.6
Electrical requirement	50/60 Hz 400V or 460V, 3 phase - all models***			
Installed Power	49KVA	52KVA	55KVA	75KVA
Air requirements	100 PSI @ 2 SCFM - all models			

### Dimensions & Weight (Machine weight only / not for shipping)

Width, Depth & Height (meters)	2.59 x 2.08 x 2.13	2.59 x 2.08 x 2.13	2.59 x 2.08 x 2.13	3.05 x 2.08 x 2.13
— # — (Inches)	102" x 82" x 84"	102" x 82" x 84"	102" x 82" x 84"	120" x 82" x 84"
Gross weight (Kg)	4196 Kg	4276 Kg	4354 Kg	5300 Kg
Gross weight (Lbs)	9250 Lbs	9410 Lbs	9600 Lbs	11690 Lbs

\* Machines can form wire down to 2mm with additional tooling.

\*\* Power Consumption Data is measured on average production.

\*\*\* Specify on Order.

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**All above data are preliminary specifications.**

FORMING OUR FUTURE WITH YOURS

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AFES-3D8T  
AFES-3D10T  
AFES-3D12T  
AFES-3D13T

ACCIFORM MODULAR  
PERFORMANCE IN CNC WIRE BENDING



AFES-3D shown without safety barrier for display purposes.



**Automated Industrial Machinery, Inc.**

# ACCIFORM

## FEATURES & BENEFITS

- Concurrent Operations: Dual processor allows programming a part while running production
- Production Statistics for cost estimating & scheduling
- 2D/3D DXF file transfer & optional 3D Step file import
- Animation / Bending simulation allows you to see programmed moves before running production
- Remote, off-line programming with stand-alone software or through installed network card
- Color touch screen monitor and industrial grade sealed keyboard for data entry
- Simple programming with Windows® based operating system
- Exceptional accuracy and repeatability
- Sealed, oversize bearings for low maintenance operation
- Wire fed directly from coil
- A variety of servo drive options for combinations of faster feed and bending speeds
- High-Speed Servo cutting system, the fastest cut in the CNC market
- One keystroke transition between metric and English units of measure
- Merge individual part programs for production of complete assemblies or program to make alternating parts
- Programmable delay or hold functions to match downstream operations in work cells
- Spiral software function allows user to define any spiral with just three numbers
- Easily accessible tooling for minimal setup and changeover time
- Hardened and ground tool steel moving parts for exceptional wear and tool life
- I/O's for interconnection of auxiliary equipment such as robotics, threaders, & inspection devices
- Highest overall production speeds in the industry
- Network ready for (Dial-A-Service)
- Serial, Ethernet & USB Ports
- Safety Gate with safety Interlock switch on the access door is included
- +/- 190 degrees rotation limits
- Temperature controlled electronics cabinets with washable filters
- Optional integration with Coordinate Measuring machines available

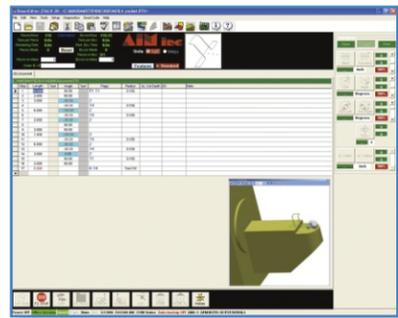
# MODULAR

**The AFES-3 D Series. The machine that pioneered modularity in the wire industry.**  
Modular frame construction provides the most flexible, versatile 3D machines in the market.

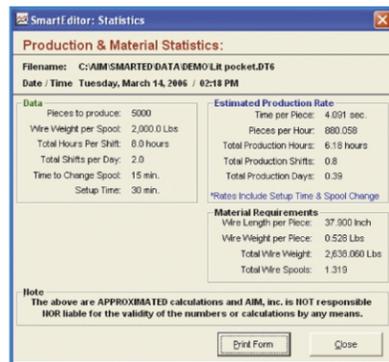
### Multiple Mandrel Indexing Tool Head Option

All AFES-3D benders are available with the Turret Head indexing tool head option. Turret Head machines feature not just one but TWO programmable bending pins. The hard bending pin is used for short bend-to-bend requirements and producing parts with extremely complex bends. The roller bearing bending pin is used for radius generation in making rings, spirals or large radius bends.

The multi-mandrel tool cluster holds round pins, roller tools, and sharp bend dies...all of which are user replaceable. The Servo Wire Cutter provides burr-free square cuts and is capable of a "zero length" cut-off.



**Simple Programming Interface.**  
SmartEditor® helps figure out machine movements. User only needs to add feed length, bend angle, radius size & tool configuration



Instant Production Estimates and Material Consumption

### Expandability - Versatility

All 3D benders can be expanded by simply separating and inserting the appropriate modules. Adding modules for inline secondary operations such as chamfering, threading, undercutting and flattening can extend the versatility of your AccuForm AFES-3D machine. Stand-alone floor mounted units are available for chamfering, threading, ball-end radius and cold heading. Multiple axes pick and place units can automatically transfer formed parts to secondary machine operations. A second bending head can be added for extremely intricate bends.

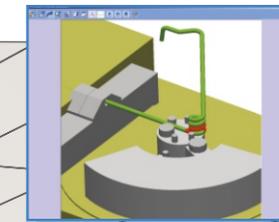
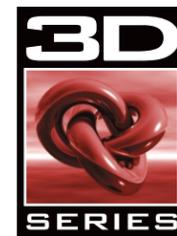
### Wire Bending Made Easy

The AccuForm modular line of 2D & 3D programmable CNC steel wire benders make virtually any kind of simple or complex parts from round and flat wire.

Using AIM's SmartEditor® program, a variety of different shapes can easily be designed. SmartCode can be used for standard shapes such as rings, polygons and spirals by simply entering the desired lengths, number of sides or diameters.

DXF files can be imported from your CAD system. Animation Simulation shows the part being formed before production begins allowing changes to be made prior to machine operation.

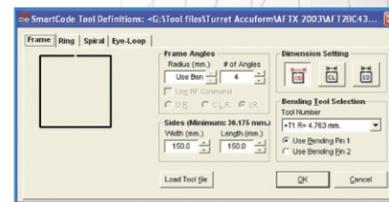
"Dial-a-Service" allows access to any machine worldwide via internet allowing diagnostics to be performed within minutes.



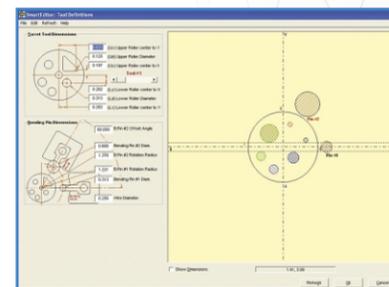
Production Animation with Collision Detection  
Makes programming Seamless!



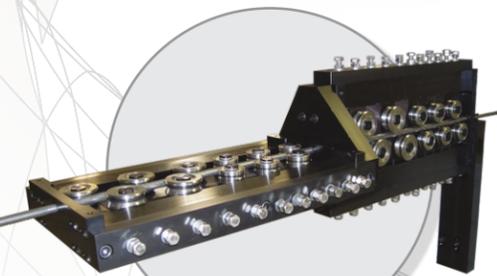
AFES-3D shown without safety barrier for display purposes.



SmartCode for automatic programming of frames, eye loops, rings and spirals.



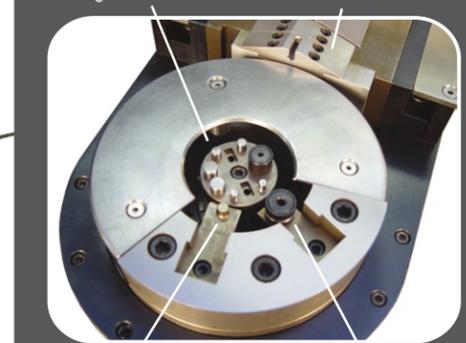
Graphic Representation of Installed Tools on Machine.



Dual Size Straightener Rollers for Wide Range of Wire Diameters

### TURRET HEAD Indexing Tool Changer

Replaceable Bending Mandrels / Dual Acting, Servo Wire Cutter



Programmable Hard Bending Pin / Programmable Roller Bending Pin

