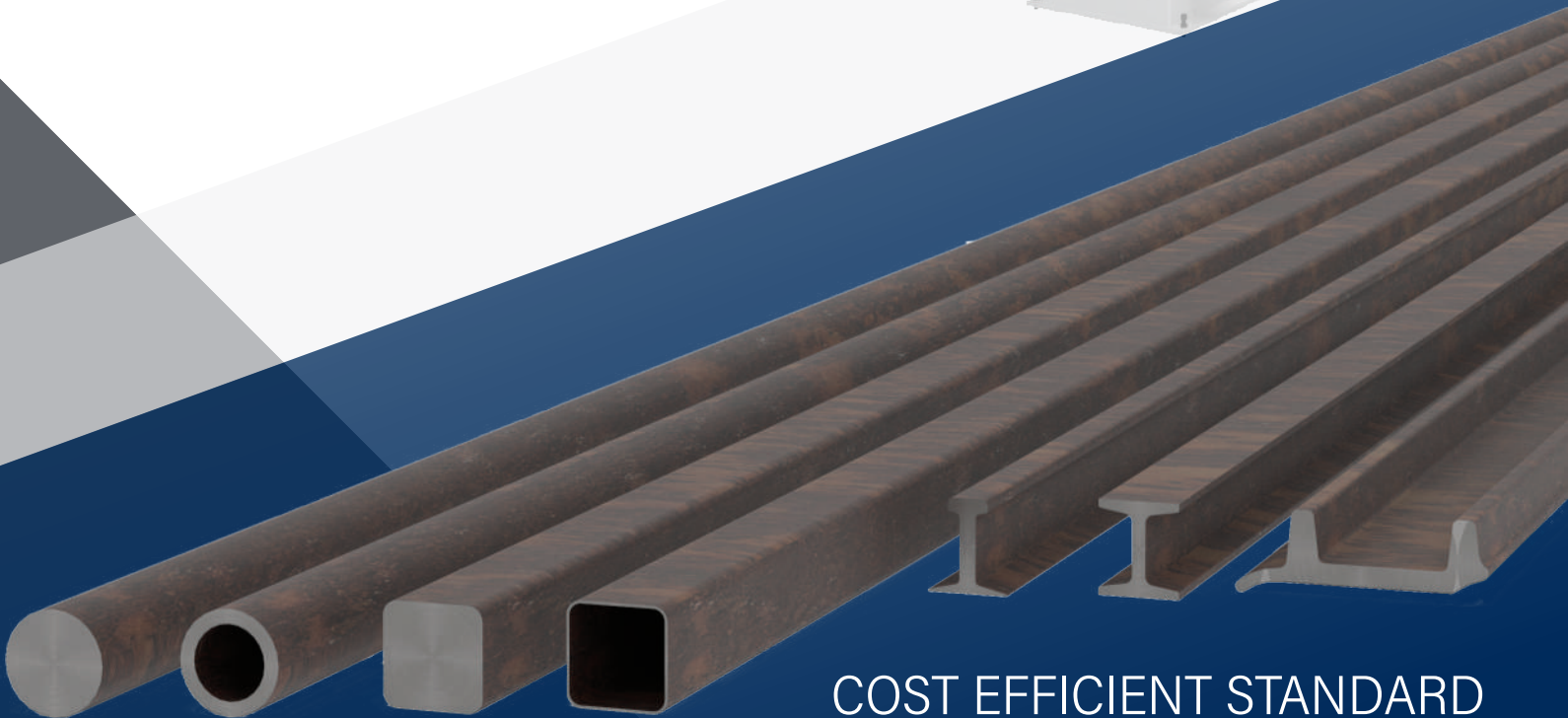




# COMPACT HIGH PERFORMANCE AUTOMATIC PRODUCTION SAW SYSTEMS

FOR BILLET SAWING FERROUS AND NON FERROUS METALS



COST EFFICIENT STANDARD  
BUILDING BLOCK ASSEMBLIES

## ENGINEERED TO BE ADVANCED

*"When Advanced Machine developed the first carbide production saws in the 1960's, our mission was to help our customers achieve the highest production at the lowest cost-per-cut. Now, as we expand the types of machinery we produce to include bandsaws, our mission remains the same: Design and build **Advanced Machines** to make our customers more successful."*

**Willy Goellner, Chairman, AME and HENNIG**

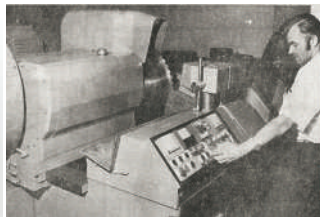
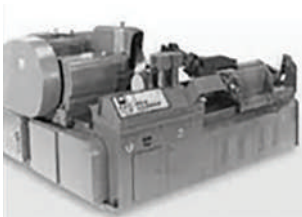
## THE HISTORY OF SAWING

### LATE 19TH CENTURY

The first saw to cut metal, called a hacksaw, entered the market in the late 19th century. Made of hardened carbon steel, its blades were very brittle.

### 1949

Electron-beam welding was a new process used to weld a narrow strip of HSS onto a softer, more flexible band backing, further improving tool life.



This saw was cutting 4 times faster than HSS saws and 8 times faster than bandsaws with Bi-metal blades, disrupting the saw market.

### CURRENT DAY

Advanced Machine and Engineering's AMSAW division continues to move forward with new and innovative designs for the metal-cutting industry.



### EARLY 20TH CENTURY

Around 1902, High Speed Steel (HSS) was developed, improving hacksaw tool life tremendously.

### 1960's

Carbide-tipped band saw blades were invented.

### 1970

Willy Goellner operating the first standard METALCUT 12 production saw on the market, built for METALCUT by AME (Rockford Newspaper August 18, 1970)

### 1980

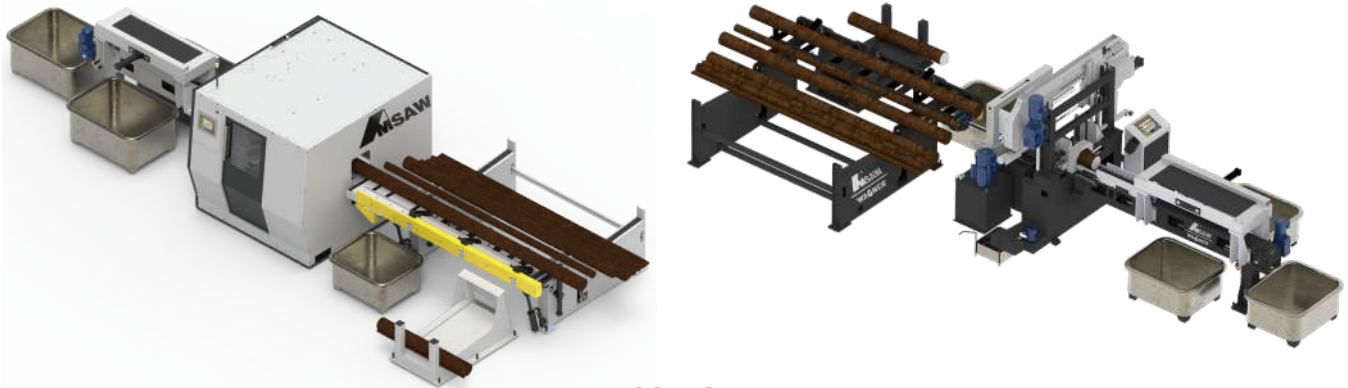
Bi-metal bands have nearly replaced carbon steel bands. Bandsaws also eliminated slower hacksaws, becoming a leading process in metal cutting offering a 4x faster cutting speed.

## MORE ABOUT ADVANCED MACHINE AND ENGINEERING (AME)

*Advanced Machine & Engineering Co. (AME) and its sister company Hennig Inc. are the divisions of Goellner Inc., located in Rockford, IL. The total production area of both companies is approximately 400,000 ft<sup>2</sup> (36,000 m<sup>2</sup>). Both US facilities employ over 400 associates. Goellner Inc. also owns a Hennig holding company out of Munich, Germany, which comprises four European companies in Germany, France, Czech Republic and Bosnia. The total number of EU employees is over 420, with the production area of 200,000 ft<sup>2</sup> (18,600 m<sup>2</sup>). The main products, manufactured under the tradenames AME and Hennig, are machine tools and components, machine protection, chip conveyors & filtration, generator enclosures and fuel tanks.*

# AUTOMATIC SAW SYSTEMS WITH 5 TON LOAD TABLE CAPACITY USING EITHER CIRCULAR CARBIDE OR A BAND SAWS

**BILLET SIZES 1.3" (38mm) - 7.0" (180mm) DIAMETER**



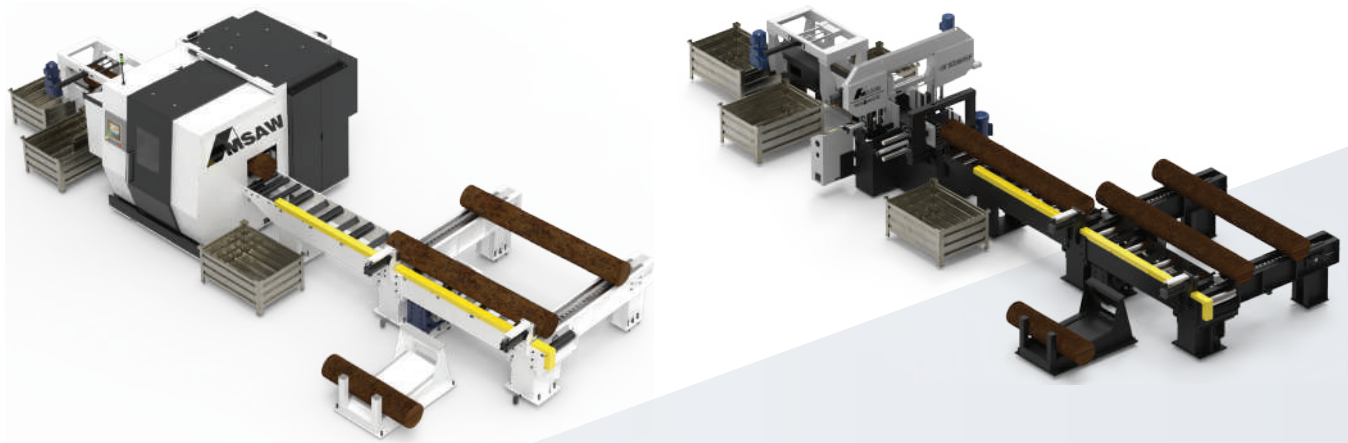
**Table Size**  
**Either for 12ft (4m) or 20ft (6m) long billets**

**NOTE: The table for shorter or longer bars is generally the same but is arranged differently (see floor plans on AMSAW's website.)**

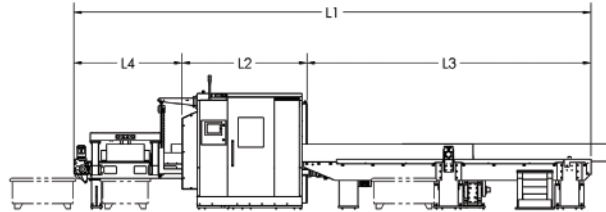
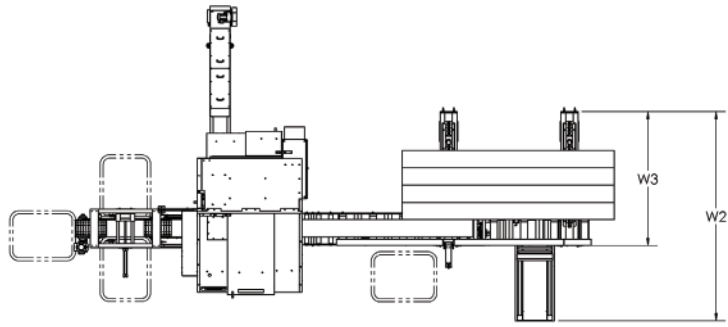
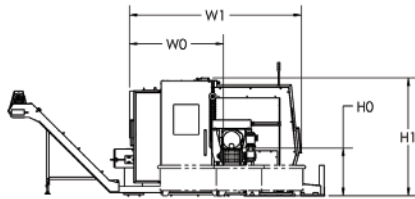
Smaller sizes of 1.0"-7.0" (25-180mm) diameter billets can be mixed loaded on the table and will be automatically measured, cut, and the cut pieces unloaded in pre-selected bins. The SO360B BAND SAW CAN CUT LARGE MATERIAL UP TO 14" (360mm) diameter. To take advantage of this additional capacity, larger sizes over 7.0"-14.0" (180-360mm) can be manually loaded on and unloaded from the power roller conveyor, but automatically cut, and the cut pieces dropped in pre-selected bins.

## AUTOMATIC SAW SYSTEMS WITH CHAIN DRIVE TABLES

**USING EITHER A CIRCULAR CARBIDE OR BAND SAW WITH LARGER TABLE CAPACITY UP TO 14.0" (360mm)**



# COMPACT HIGH PERFORMANCE AUTOMATIC PRODUCTION SAW SYSTEMS



SPECIFICATION	BAND SAW		CIRCULAR BLADE CARBIDE SAWS				
	SO 360A		AMS 70	AMS 125	AMS 180	AMS 250	AMS 350
Round Stock - inch (mm)	0-14(360)		0.4 (10) - 2.75 (70)	1.0 (25) - 4.5 (114)	1.5 (38) - 7.0 (180)	3.0 (75) - 11.0 (280)	5.0 (125) - 14 (345)
Square Stock - inch (mm)	0-14(360)		0.4 (10) - 2.13 (54)	1.0 (25) - 4.5 (114)	1.5 (38) - 6.7 (170)	3.0 (75) - 11.0 (280)	5.0 (125) - 3.58 (355)
Stock Bar Length Max. - ft. (m)	20 (6.0)		20 (6.0)	20 (6.0)	20 (6.0)	20 (6.0)	20 (6.0)
Cutoff Length - inch (mm)	<i>Please see our bandsaw catalogs for details</i>		0.2 (5) - 27.6 (700)	0.3 (8) - 39.4 (1000)	0.3 (8) - 39.4 (1000)	.75 (16) - 30 (760)	.75 (16) - 30 (760)
Remnant End Length - inch (mm)			0.75 (16)	.75 (16)	1.0 (25)	1.5 (38)	1.5 (38)
Min. blade diameter - inch (mm)			11 (280)	11 (280)	14 (360)	24 (610)	26 (660)
Max. blade diameter - inch (mm)			11.2 (285)	16 (406)	23.6 (600)	39 (990)	44 (1120)
Blade pilot diameter - inch (mm)			1.260 (32)	1.969 (50)	3.150 (80)	3.936 (100)	3.936 (100)
(2) Drive pins diameter - inch (mm)			0.394 (10)	0.629 (16)	0.709 (18)	1.181 (30)	1.181 (30)
Drive pins placement diameter - inch (mm)			2.480 (63)	3.149 (80)	4.724 (120)	7.873 (200)	7.873 (200)
RPM variable by inverter (1/min)			30-150	69 - 209	33 - 99	29 - 88	24 - 70
Feed rate inch/min (mm/min)			0-80 (0-2000)	0 - 80 (0 - 2000)	0 - 70 (0 - 1800)	0 - 30 (0 - 750)	0 - 25 (0 - 600)
Max feed rate forward-inch/min (m/min)			787 (20000)	30 (1200)	20 (800)	15 (600)	15 (600)
Repeatability - inch (mm)			0.001 (0.03)	0.002 (0.05)	0.002 (0.05)	0.003 (0.07)	0.003 (0.07)
Micromist tank capacity - oz (liter)			8 (0.23)	8 (.23)	8 (.23)	8 (.23)	8 (.23)
kW / HP			5.5 / 7	7.5/10	15 / 20	30 / 40	45 / 60
kW / HP / bar (PSI)	1.1 / 4.5	3 / 4 / 103 (1500)	3.7 / 5 / 103 (1500)	3.7 / 5 / 103 (1500)	7.5 / 10 / 103 (1500)	7.5 / 10 / 103 (1500)	
Tank capacity - gal (liter)	40 (150)	19.8 (75)	20 (80)	40 (150)	40 (150)	40 (150)	
Feed roller height H0 - ft (m)	3.3 (1.0)	3.3 (1.0)	3.3 (1.0)	3.3 (1.0)	3.3 (1.0)	3.3 (1.0)	
Machine height H1 - ft (m)	7.5 (2.3)	6.6 (2)	6.6 (2)	6.6 (2)	7.9 (2.4)	7.9 (2.4)	
Total length L1 - ft (m)	33.2 (10.1)*	29.6 (9.0)**	22.3 (6.8)	28.9 (8.5)	30.8 (9.4)	33.8 (10.3)	
Machine length L2 - ft (m)	5.4 (1.6)*	5.4 (1.6)**	4.9 (1.5)	5.6 (1.7)	6 (2)	7.2 (2.2)	
Load table length L3 - ft (m)	18.7 (5.7)*	15 (4.6)**	17 (5.2)	13 (4)	15 (4.6)	18.7 (5.7)	
Exit conveyor length L4 - ft (m)	7.9 (2.4)*	9.2 (2.8)**	8.9 (2.7)	9.2 (2.8)	9.2 (2.8)	7.9 (2.4)	
Material position W0 - ft (m)	4.0 (1.2)*	4.0 (1.2)**	2.63 (0.8)	4.3 (1.3)	3.9 (1.2)	5.9 (1.8)	
Machine width W1 - ft (m)	8.2 (2.5)*	8.2 (2.5)**	5.2 (1.6)	4.5 (1.4)	6.9 (2.1)	11.4 (3.5)	
Total width W2 - ft (m)	14.4 (4.4)*	13.5 (4.1)**	9.5 (2.9)	3.3 (1)	11.2 (3.4)	12.4 (3.8)	
Load table width W3 - ft (m)	10.8 (3.3)*	8.2 (2.5)**	4.6 (1.4)	6.8 (2.1)	8.2 (2.5)	10.8 (3.3)	
Machine - lbs (kg)	5693(2582)*	5693(2582)**	5290 (2400)	7000 (3173)	10800 (4909)	16200 (7364)	20300 (9227)
Load Table - lbs (kg)	7000(3173)*	3660 (1661)**	1760 (800)	1860 (845)	3660 (1661)	7000 (3173)	7000 (3173)

Blade size for SQUARE and rectangular stock see cutter path on AME website. \* Load table and exit system are 350 size. \*\* Load table and exit system are 180 size.

# PROCEDURE FOR QUOTING STANDARD COMPACT HIGH PERFORMANCE AUTOMATIC PRODUCTION SAW SYSTEMS:

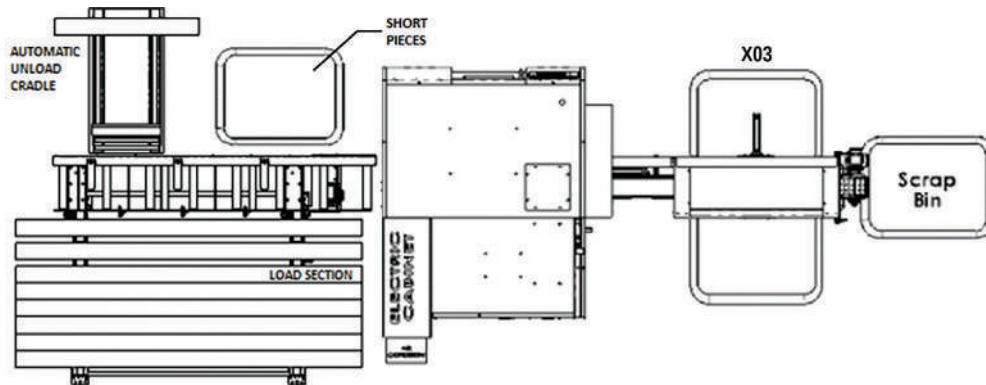
## CUSTOMER DATA:

1. Cross section of material (min. and max. stock diameter).
2. Material (DIN or ANSI Numbers).
3. Cut quantity.
4. Cut length.
5. Bar length.
6. Add automation options



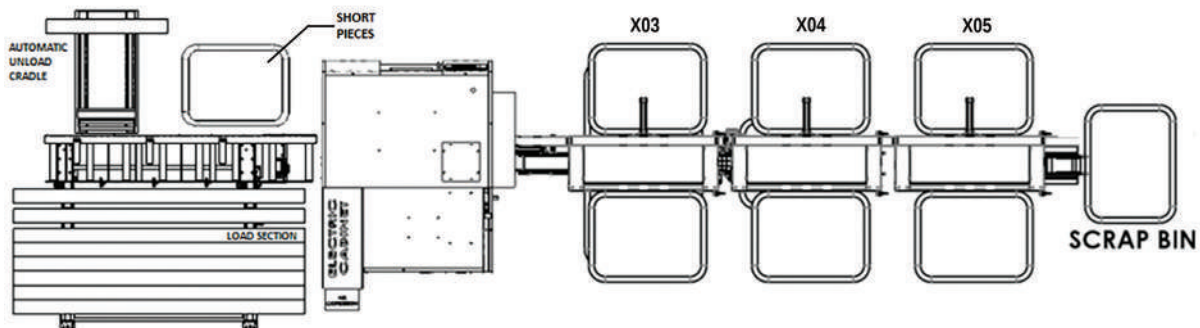
This configurator will select the best cost efficient basic saw from your data and will show an AMSAW price list to select options which can be chosen to assemble a sophisticated automatic saw system (similar as shown on page 2) within the customer's budget. It will print all necessary documents and drawings to mail a hard copy quotation, or it will collect all data for an e-mail quotation. For more information and to see all our products catalogs, please scan the above QR code.

## SELECTION OF OPTIONS (See Floor Plans in Configurator)



### AMS-180P-L5-X03 STANDARD COMPACT AUTOMATIC SAW SYTEM (3-BIN VERSION) WITH AUTOMATIC LOAD AND UNLOAD UNITS FOR 1.50" (38) – 7.0"(180)

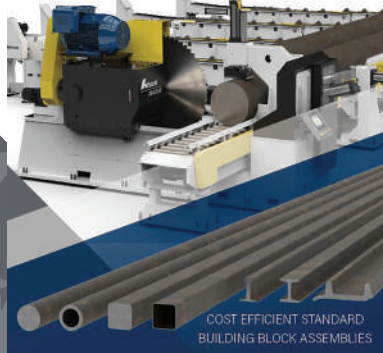
Bar sizes over 7.0" to max 14.0" (350) can be manually loaded and unloaded directly on and from the power roller conveyor and processed on the band saw only (not for circular blade carbide saws).



### STANDARD AMSAW 70,125,180,250,350 COMPACT AUTOMATIC HIGH PERFORMANCE SAW SYSTEMS WITH AUTOMATIC LOAD AND UNLOAD UNITS FOR 12FT AND 20FT BARS WITH EXIT GRIPPER POWER CONVEYOR PART UNLOAD SYTSEM WITH 6 BIN STORAGE AND SCRAP BIN.



**COMPACT HIGH PERFORMANCE AUTOMATIC PRODUCTION SAW SYSTEMS**  
HEAVY DUTY AMSAW S-SERIES



COST EFFICIENT STANDARD BUILDING BLOCK ASSEMBLIES



LARGE 90° CUT BANDSAW SERIES 360 - 2000



**HEAVY VERSION-HIGH PERFORMANCE AUTOMATIC BANDSAW SYSTEMS**

COST EFFICIENT STANDARD BUILDING BLOCK ASSEMBLIES



**GENERAL B BANDSAW SERIES**

**HEAVY VERSION-HIGH PERFORMANCE AUTOMATIC BANDSAW SYSTEMS**

COST EFFICIENT STANDARD BUILDING BLOCK ASSEMBLIES



**RAIL SAWS AND DRILL UNITS FOR THE RAIL INDUSTRY**



COST EFFICIENT STANDARD BUILDING BLOCK ASSEMBLIES



**SPECIAL HIGH PERFORMANCE AUTOMATIC SAW SYSTEMS**

VARIETY OF PROFILES AND BILLETS FERROUS AND NON FERROUS MATERIALS



**QUALITY CIRCULAR CARBIDE AND BANDSAW BLADES**

INCLUDING BLADE SHARPENING MACHINES TRAINING IN BLADE MANUFACTURING AND REPAIR AND EXPERT HELP FROM ONE SOURCE



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