

SCHECHTL

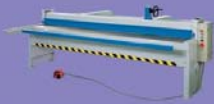


WHAT YOU SEE



IS WHAT YOU GET

METAL FORMING
INCORPORATED



THE NEW SHAPE OF MODERN METAL FOLDING

Metal folding is the most-advanced, technically superior and cost-efficient approach to metal bending in the world today. And the revolutionary Schechtl SpectraFold sheet metal folding systems are unmatched for increased productivity, versatility, cost savings, and the competitive edge.

The SpectraFold series is a sheet metal mechanic's dream. These machines can make virtually any shape the architectural sheet metal contractor, sign contractor, job shop or precision manufacturer can dream up. Produce everyday parts like copings, gravel stops, gutters and down spouts, plus extremely complex cornice work, unlimited sign profiles and even complex boxes - all automatically, accurately and at extremely low cost.

Almost any piece imaginable is possible using Schechtl SpectraFold, and because it's all unveiled before your eyes on the multi-dimensional SpectraFold computer control screen - now with 3D display - what you see is what you get.

Thanks to its interactive, intuitive graphic programming process, SpectraFold is the standard for bending even the most intricate pieces. These specially designed machines can revolutionize the way you form your sheet metal parts

Now you can create parts of exceptional quality in record time, while cutting equipment and labor costs significantly. No more hand brake and prick punching. No more heavy lifting of clamping and folding beams. No more inaccuracies or waste. No more limitations on what shapes you can create and how many you can store.

Work up to eight times faster, with less manual labor. Schechtl units can make 400 feet of coping - with hem and kick on both sides - per man-hour. This very inexpensive equipment can be had for less than a third of the cost of one sheet metal worker and for much less than competitive machines.

Cost-efficiency, ease of operation, and high quality are the keys to metal folding, the keys to Schechtl systems, and the keys to your competitive edge. For any shape you can imagine, Schechtl SpectraFold can make it a reality. And remember, what you see is what you get.



SPECTRAFOLD COMPUTING - NEW DIMENSIONS IN METAL FOLDING

Seeing is believing! Through Schechtl's real-time, interactive, intuitive graphic programming process, the number of shapes programmable on the exclusive SpectraFold CNC Control, with its industrial-grade touch-screen computer, is unlimited. What you see is what you get, on-screen and on the machine, automatically!

Schechtl software's natural programming operates the way a sheet metal worker thinks. The endless number of designs you can envision are exactly the shapes you also can produce, only with Schechtl SpectraFold.

And now, with 2D and 3D display technology, anyone can efficiently and safely produce perfect parts with a minimal amount of training. The breakthrough 3D feature provides depth of each part and bend in true graphic scale.

The machine control can store 9,900 different graphic part programs in its RAM memory, and 220 more shapes on computer disk. Compare that flexibility with other icon-driven controls, which store just 24 shapes before you have to change disks.

As you program, everything happens on-screen. And as you run the part, the interactive graphics show each piece being oriented properly and each fold taking place, so the operator knows a perfect part is being made and when to manipulate the piece.

Because of the intuitive process of Schechtl software, you can put complete trust in your purchase of a computer-controlled machine. It's much easier to understand, much easier to learn, and much more flexible. And with less than a day of training, anyone can work the simple computer controls. **Features include:**

- Windows software technology
- Full-color, flat screen graphics display - 2D and 3D
- 32-bit microprocessor
- Totally upgradeable software
- RS232 communications port
- Permanent storage on 3-1/2" disks
- Completely integrated service diagnostics
- Automatic angle and backstop corrections
- Run time calculation
- Automatic blank calculation
- Piece counter

Now in 2D and 3D! Effortlessly track exact dimensions and sequence of each bending process.



The three-axis CNC system positions the backgauge, clamping beam and folding beam. The interactive graphics let the operator know when and how to flip and turn parts - essential for accurately producing complicated cornice work or long, detailed pieces.

Two programming options allow a simple graphic interface or insertion of customized dimensions. Every part can be reviewed graphically or by name. And the true graphic software delivers quick and simple creation of radii, without cumbersome macro programs.

SPECTRAFOLD MODELS & FEATURES

From the combined family of SpectraFold MAX, MAB and the new MAC series, there are more than a dozen precision, automatic Schechtl models from which to choose.

- Bending lengths of 40", 60", 80", 100", 122" and 159".
- Machines with maximum bending capacities from 22 gauge to 9 gauge.
- Various rectangular backgauge shapes and a special 120" J-shape.

All models feature Schechtl's exclusive, real-time, interactive, intuitive graphic programming. (See the inside of the back cover for a complete list of machine models and specifications.)

Backgauge



Schechtl's automated backgauge with integrated sheet support system.

The high-speed, extremely accurate Schechtl backgauge system ensures exactly the right-sized bend - every time - and has several important features that differentiate the SpectraFold from all others. Unlike competitors' machines, the Schechtl backgauge uses a massive 1.25" dual-ball screw drive, coupled with powerful 1.5" Thompson rods, to provide pinpoint positioning accuracy of +/- .004" and perfect, long-term parallelism. Instead of spring-steel fingers, which must be replaced over and over, SpectraFold machines have solid-steel gauging fingers guaranteed for the life of the machine. Taper gauge fingers are also available for architectural tapering.

Backgauges are available in 40", 60" and 80" rectangular shapes and a 120" J-shape configuration for bending large, four-sided panels.



MAX 3100



Backgauge motor



Massive 1.25" ball screws position solid-steel fingers, while sturdy Thompson rails assure parallelism.



Schechtl's magic - interactive, on-screen programming with simple operation and perfect part production each and every time. Even complex cornices can be automatically produced and graphically stored in the amazing SpectraFold computer, with swivel-tilt monitor that also eliminates glare.



Massive folding beam construction ensures high-quality bending with no deflection.

Folding Beam



Unlike competitors' folding beams made of hollow, thin steel that are susceptible to large forces when bending, the Schechtl SpectraFold has a massive steel folding beam. It is driven by ultra-modern frequency inverter technology, which moves the beam with ramp acceleration at speeds up to 90 degrees per second.

The folding beam is mounted in huge solid-steel castings with massive bearings to guard against beam twist.

Ultra-modern, high-precision rotary encoders position the bending beam. Its physically stable design has been proven in thousands of SpectraFold installations worldwide. With bending accuracy of +/- 1/2 degree, the massive steel structure will not deflect under full load. Extremely thick sandwich steel creates a very small profile, so the operator does not have to move away from the folding beam during bending.

Most importantly, the folding beam is completely flat in front, simplifying material handling and eliminating the need for two operators to push parts into the backgauge with pre-bent flanges angled into the beam.

An all-new, ultra-fast material thickness adjustment, with positive-locking mechanism, allows material changeover in less than 10 seconds and ensures perfect parallelism of the folding beam.



Frequency inverter powers folding beam system for extremely fast and accurate positioning.



Quick folding beam material thickness adjustment, in ten seconds or less.

Upper Clamping Jaw

The upper clamping jaw on the Schechtl SpectraFold is an eccentric-driven, extremely high-speed machine component. It has a uniquely designed release function that makes the SpectraFold the fastest machine in existence, through substantially increased material handling efficiency.

Since more than half the cycle time of making any part relies on how quickly the operator manipulates the piece - loading, turning, flipping, unloading, etc. - the upper jaw is programmed so that, after the folding beam rises to make a bend up to 90 degrees, it quickly releases the part during the beam's downward swing. The operator can complete the next movement of the part while the beam is returning for a new fold. The upper clamping jaw opens to 4.75" of height on the MAX, 5.5" on the MAB and MAC, at a speed of 2.8" per second.

Lower Clamping Jaw

SpectraFold's lower clamping jaw is made of stiff steel construction, which ensures minimum deflection in the clamping and bending process. The system provides free space behind the lower clamp, into which pre-bent flanges can go for reverse bending.

Tooling

When it comes to SpectraFold's innovative tooling systems, what you want is what you get - when you want it. Unlike other folders, with SpectraFold models you can add and interchange tooling whenever you wish, using either of the two styles of locking systems:

- Bolt-on system, for jobs where tool changes are seldom needed.
- Snap-on system, for changing tools quickly and frequently. Bearing-loaded tools snap easily into a holding rail, for quick-and-easy changeout.

A wide variety of tooling is available for virtually any application. You gain the flexibility of being able to add tools as your demands require.



Backgauge sheet support pans are adjustable front to back, to open free space behind lower tools for pre-bent flanges going in opposite directions.



Snap-on tooling is loaded by hand, without wrenches, in seconds.



MAB 3100



SCHECHTL SHEAR FAMILY

Schechtl shears are the perfect complement to the outstanding SpectraFold line. Three series of shears are available, for light, medium and heavier gauge cutting. Choose from 13 models, with cutting lengths of 40', 60', 80', 122', 159' and 174'. Capacities range from 16 gauge to 9 gauge cold rolled steel.

These ergonomically designed machines are all created to be run by one operator and, at up to 35 cuts per minute, they are all very productive, with features you won't find elsewhere.

Schechtl shears are fast, accurate, reliable and the easiest to use in the industry. And to top all that, they are also the most affordable! (See the inside of the back cover for a complete list of shear models and specifications.)



SMT 3100, 10 foot, 16 gauge shear (.090" alum.)
High productivity at an amazingly low price. Shown with optional mobile blank wagon.

MSB 3100, 10 foot, 14 gauge steel shear (.125" alum.)
Features smooth cuts, and a quick 35 strokes per minute for huge cutting capacity.



MSC 3100, 10 foot, 11 gauge steel (.175" alum.)
High capacity with great accuracy.



MSC 4500, 14.5 foot, 16 gauge model is the perfect shear for metal building industry.

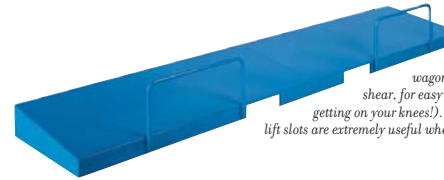
Standard and Optional Equipment

All units offer integrated sheet supports with backgauging, eliminating the need for two operators to hold metal against the backgauge. Even the thinnest material cannot slip under the backgauge.

Backgauge sheet supports carry the sheet all the way through the cutting cycle and then deposit it at a gentle angle into a rolling blank wagon. This guards against scratching of sensitive materials, such as copper or pre-painted steel, and eliminates bent or marred corners.

The system can deposit sheets either in front or back. Front return is ideal for shops with limited space.

Schechtl shears come standard with a 30", deep-front-operated, manual backgauge - the fastest in the industry. (The gauge can be moved from 0" to 30" in about six seconds.) A positive locking mechanism ensures no gauge slippage as the operator bangs steel against it. Optional motorized or NC computerized backgauges are also available.



Optional rolling blank wagon pulls out from under the shear, for easy unloading (no more getting on your knees!). Convenient forklift lift slots are extremely useful when cutting larger jobs.



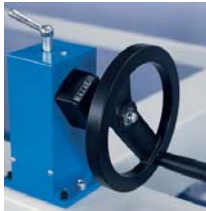
Optional motor backgauge (0" to 30") with position indicator, for pneumatic sheet support with front delivery (also available with back delivery).



Optional motor backgauge with NC control has digital display, quick function mode, RAM for 99 programs with 6 steps.



Integrated sheet support returning part to front of shear and eliminates a two-person operation.



Front-operated manual backgauge standard on all units.

Features for Easy Material Handling

For easy material handling, the SMT and MSB shear models come with a unique, full-length telescoping front sheet support that makes it a breeze for one operator to handle even 5' by 10' sheets. This clever system moves in with the sheet as it is cut. On heavier gauge MSC shears, there are five front support arms with T-slots, scales and gauge fingers for easy front gauging. All machines include a 40° squaring arm with inlaid scales. Longer squaring arms with T-slots and front gauging stops are also available.



Adjustable support arms with T-slot and scale, stainless steel, removable and adjustable hollow grip areas for easy handling.



Telescoping front sheet support for large plates.



Extended squaring arm with in-laid scale, models MT, SMT, MSB.



Optional support arms, squaring arm with in-laid scale, models MT, SMT, MSB, MSC.



Adjustable miter gauge for miter cuts (model MSC), with scale ring (0 to 45 degrees) and clamping lever.



Adjustable miter gauge for miter cuts (models SMT, MSB), with scale ring (0 to 45 degrees) and clamping lever.



Stroke counter, sequential counting of strokes with a reset button.

ALSO FROM SCHECHTL – Hand Brakes

For construction, architectural applications or classic sheet metal work, the Schechl UK Series of universal hand brakes is the standard for success. The UKV allows bending of metals up, down and sideways.



SCHECHTL: "From the Practice, for the Practice"

Schechtl, a German manufacturer founded in 1910 and based near Munich, is the European leader in design and construction of light-gauge sheet metal equipment. With a global reputation for high-tech, high-quality design, manufacturing and engineering of machinery for the metal building, architectural sheet metal, and sign industries, Schechtl has installed thousands of metal folders around the world.

METALFORMING Inc.: Exclusive Importer and Distributor/North America

METALFORMING Inc. is the largest seller of metal folding technology in North America and the exclusive importer and distributor of Schechtl SpectraFold machines and Schechtl Shears on the continent. The company has combined the most-experienced applications engineering staff, a highly trained sales and service team, and the largest parts inventory available to provide the widest choice of sheet metal products in the industry, back by unparalleled customer support.

We do not manufacture, so there's no bias in the product selections we offer. We simply deliver the best array of solutions from the world's most-respected makers of sheet metal folding equipment and accessories. With thousands of folding machines successfully installed and operating in North America, METALFORMING is a complete company with total understanding of the folding market and all aspects of folding technology, training and service.

It costs nothing to investigate the potential impact our family of products can have on your operations. By carefully assessing your present requirements and future demands, METALFORMING can provide the best choice of systems to match your needs today and tomorrow, and deliver the highest-quality and most-efficient architectural sheet metal, metal roofing, and sign making equipment and technology from anywhere in the world.

Folder Specs

MODEL	WORKING LENGTH	BENDING CAPACITY			MOTOR		DIMENSIONS			WEIGHT
		Inches	Steel Gauge	Aluminum Inches	Stainless Gauge	Bending Beam	Clamping Beam	Length Inches	Depth Inches	
MA 1000	40.9	11	0.157	14	1 HP	.5 HP	72	70	55	2690
MA 1500	60.6	13	0.125	16	1 HP	.5 HP	92	70	55	3130
MA 2000	80.3	14	0.110	18	1 HP	.5 HP	111	70	55	3570
MA 2500	100	16	0.080	22	1 HP	.5 HP	131	70	55	4050
MA 3100	122	16	0.080	22	1 HP	.5 HP	151	70	55	4560
MAX 3100	122	16	0.080	22	1.5 HP	1.0 HP	156	70	56	5450
MA 4000	159	22	0.050	26	1 HP	.5 HP	190	70	55	5500
MAB 1000	40.9	9	0.197	13	2 HP	1.5 HP	82	70	63	4760
MAB 1500	60.6	10	0.197	26	2 HP	1.5 HP	101	70	63	5400
MAB 2000	80.3	11	0.177	14	2 HP	1.5 HP	117	70	63	6020
MAB 2500	100	14	0.138	16	2 HP	1.5 HP	137	70	63	6660
MAB 3100	122	14	0.125	18	2 HP	1.5 HP	156	70	63	7300
MAB 4000	159	18	0.070	22	2 HP	1.5 HP	196	70	63	8710
MAC 2000	80.3	9	0.250	12	4 HP	3 HP	125	70	67	7650
MAC 2500	100	10	0.197	13	4 HP	3 HP	145	70	67	8444
MAC 3100	122	11	0.177	14	4 HP	3 HP	165	70	67	9240

Shear Specs

MODEL	SMT/BV				MSB/BV				MSC/BV				
	1500	2000	2500	3100	1500	2000	2500	3100	2000	2500	3100	4000	4500
Working Length	60"	80"	100"	122"	60"	80"	100"	122"	80"	100"	124.6"	159"	177"
CAPACITY													
Steel	.098"	.098"	.075"	.060"	.138"	.118"	.070"	.075"	.157"	.138"	.118"	.075"	.060"
Aluminum	.157"	.157"	.120"	.100"	.217"	.177"	.157"	.125"	.250"	.216"	.177"	.177"	.090"
Stainless Steel	.060"	.060"	.048"	.040"	.090"	.075"	.060"	.040"	.100"	.088"	.075"	.060"	.040"
Cuts Per Minute	35	35	35	35	35	35	35	35	27	27	27	27	27
Cutting Angle	2.97°	2.24°	1.80°	1.45°	2.97°	2.24°	1.80°	1.45°	2.14°	1.74°	1.40°	1.10°	1.10°
Rated Power (HP)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
DIMENSIONS													
Length	736"	933"	113"	136.6"	73.6"	93.3"	113"	136.6"	95.3"	115"	139.6"	174"	189"
Width with Backgauge	69"	69"	69"	69"	69"	69"	69"	69"	90"	90"	90"	90"	63"
Working Height	33.5"	33.5"	33.5"	33.5"	33.5"	33.5"	33.5"	33.5"	36"	36"	36"	36"	36"
Total Height	53"	53"	53"	53"	53"	53"	53"	53"	58"	58"	58"	58"	58"
Weight (LBS.)	2211	2772	3025	3110	2677	2972	3278	3353	4906	5434	6149	7150	8200

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