



Building Machinery is a family tradition.

Ray Smith, Sr. and sons, Ray Smith, Jr. and W. Douglas Smith founded the business, first known as Smith Machine Tool Co., in McMinnville, Tennessee in 1967. Ray, Sr., and his brothers were the owners and managers of Powermatic, the McMinnville-based manufacturer of wood and metal working machinery, which was established by their father, Leonard F. Smith, Sr. in 1928.

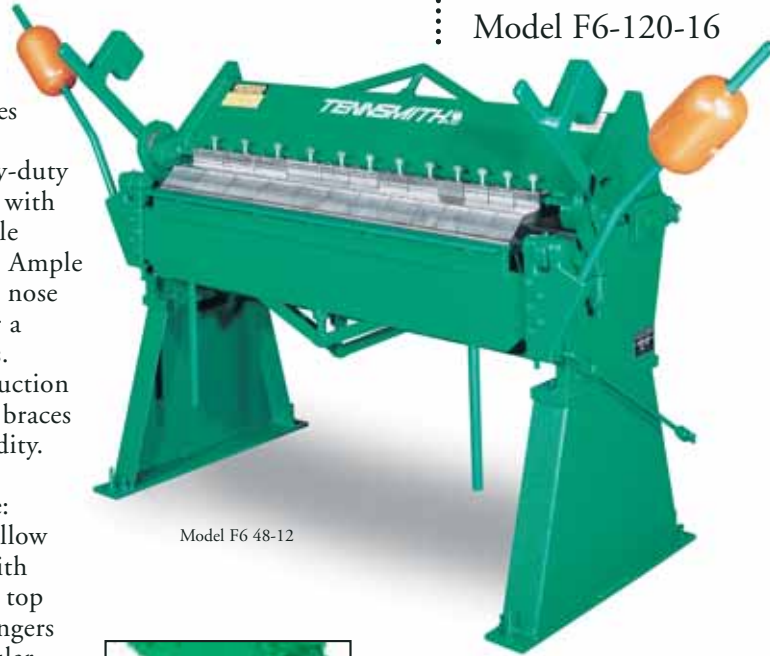
Beginning as a specialty fabricator, SMT rapidly moved into manufacturing and was offering a full range of arbor presses by mid-1968. By 1969, the company was manufacturing foot shears under the brand name TENNSMITH. The TENNSMITH name reflected the location of the plant, the Smith family ownership and played off the sheet metal term of "tinsmith." Smith Machine Tool Co. was reincorporated as TENNSMITH, Inc. in 1977.

Since 1969, TENNSMITH has developed a full range of sheet metal tools including hand brakes, power shears, slip rolls, cleat benders, notchers and rotary machines. By the early 1980s, the company came to be recognized as a market leader in sheet metal fabricating machinery. Quality workmanship, product performance and customer satisfaction are the key ingredients of maintaining out future growth. If you have suggestions, opinions or ideas which will help us improve our products, we would enjoy hearing from you.

- Model F6-48-12
- Model F6-72-12
- Model F6-96-12
- Model F6-120-16

TENNISMITH[®] U.S.A.

TENNISMITH'S F6 Series box and pan brakes were designed to provide heavy-duty forming capability, along with the flexibility of removable 6-inch box depth fingers. Ample clamping and easy-to-use nose bar adjustments allow for a quick-setting bend radius. Welded steel plate construction and heavy truss rods and braces provide strength and rigidity.



Model F6 48-12

Optional features include: extension fingers which allow forming inside corners with a return flange across the top of the boxes; open end fingers which provide for triangular, square, tapered and rectangular tube-forming capabilities. The power assist option is a factory-installed-only, hydraulic-powered, lower-bending leaf.



Optional hydraulic-powered assist.

Finger Assortments				
Model F6	Number of Fingers			Total
	3"W	4"W	5"W	
48-12	4	4	4	12
72-12	6	6	6	18
96-12	8	8	8	24
120-16	10	10	10	30

NEW!

Six-inch Box and Pan Brakes

	Model F6-48-12	Model F6-72-12	Model F6-96-12	Model F6-120-16
Capacity, mild steel	12 gauge 2.7mm	12 gauge 2.7 mm	14 gauge 2.0 mm	16 gauge 1.6 mm
Capacity, stainless steel	16 gauge 1.6 mm	16 gauge 1.6 mm	18 gauge 1.25 mm	20 gauge 1.0 mm
Bending length	48 in. 1220 mm	72 in. 1829 mm	96 in. 2464 mm	120 in. 3048 mm
Maximum lift of beam	1-1/2 in. 38.1 mm	2-1/4 in. 57 mm	2-1/4 in. 57 mm	2-1/4 in. 57 mm
Front to rear beam adjustment	1/2 in. 12.7 mm	1/2 in. 12.7 mm	1/2 in. 12.7 mm	1/2 in. 12.7 mm
Maximum depth of box	6 in. 152.4 mm	6 in. 152.4 mm	6 in. 152.4 mm	6 in. 152.4 mm
Minimum reverse bend (angle and insert removed)	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm
Minimum flange in capacity material	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm
Finger widths	3, 4 and 5 in. 76.2, 101.6 and 127 mm	3, 4 and 5 in. 76.2, 101.6 and 127 mm	3, 4 and 5 in. 76.2, 101.6 and 127 mm	3, 4 and 5 in. 76.2, 101.6 and 127 mm
Dimensions, counterweights in place, LxWxH	72 x 49 x 56 in. 1829 x 1245 x 1425 mm	110 x 53 x 60 in. 2794 x 1347 x 1524 mm	137 X 53 X 60 in. 3480 x 1347 x 1524 mm	161 x 53 x 60 in. 4090 x 1347 x 1524 mm
Shipping weight	1725 lbs. 783 kg	2825 lbs. 1282 kg	3250 lbs. 1475 kg	3675 lbs. 1670 kg
Export crate	80 cu. ft. 2.25 cu. m	115 cu. ft. 3.25 cu. m	145 cu. ft. 4.05 cu. m	190 cu. ft. 5.35 cu. m

Available options: hydraulic-powered assist; radius fingers; extension fingers (right and left extension fingers form inside corners with a return flange across the top on boxes, cabinets, etc.); open end fingers (provide triangular, square and rectangular tube forming abilities). Ask dealer for more details.

SPECIFICATIONS

Hand Brakes

Model HBU48-12
Model HBU72-16

TENNSMITH's box and pan hand brake is an economical tool for a wide range of sheet metal bending and forming operations.

The Model HBU48-12 can handle 12-gauge and lighter materials. The Model HBU72-16 is rated for 6 feet of 16-gauge material. Each hand brake is ideal for both box and pan and straight bending in hot and cold rolled plate, stainless steel, aluminum and heavy plastic.

Ample clamping and nose bar adjustments allow for the bend radius necessary for your application. Welded steel plate construction and heavy truss rods and braces provide strength and rigidity.



Model HBU48-12

This brake features a removable apron insert for 1/4-inch bends in lighter material. The upper leaf adjustment screws feature thrust bearings to prevent upper leaf creep. Ductile steel clamp handles, heavy counterweights and an apron stop rod add to the brake's ease of operation. The removable fingers are case hardened for long service. TENNSMITH'S heavy-duty universal hand brake is a productive addition to any shop doing prototype or design work, fabrication or short run production in heavier materials.

SPECIFICATIONS

4 Inch Box and Pan Hand Brakes

	Model HBU48-12	Model HBU72-16
Capacity, mild steel	12 gauge 2.7 mm	16 gauge 1.6 mm
Capacity, stainless steel	16 gauge 1.6 mm	20 gauge 1.0 mm
Bending length	48-1/4 in. 1225 mm	72 in. 1829 mm
Maximum lift of beam	1-1/2 in. 38.1 mm	1-1/2 in. 38.1 mm
Front to rear beam adjustment	1 in. 25 mm	1 in. 25 mm
Maximum depth of box	4 in. 101.6 mm	4 in. 101.6 mm
Minimum reverse bend (angle and insert removed)	1/4 in. 6 mm	1/4 in. 6 mm
Minimum flange in capacity material	1 in. 25 mm	1 in. 25 mm
Finger widths	2, 3 and 4 in. 51, 76 and 101 mm	2, 3 and 4 in. 51, 76 and 101 mm
Dimensions, counterweights in place, LxWxH	72 x 36 x 53 in. 1829 x 915 x 1346 mm	96 x 36 x 53 in. 2438 x 915 x 1346 mm
Shipping weight	1330 lbs. 603.3 kg	1700 lbs. 772 kg
Export crate	79.5 cu. ft. 2.25 cu. m	94 cu. ft. 2.67 cu. m

Available options: hydraulic-powered assist and radius fingers. Ask dealer for more details.

Hand Brakes

- Model HB73-16
- Model HB97-18
- Model HB97-16
- Model HB121-18
- Model HB121-16
- Model HB121-14
- Model HB145-18



Model HB97-16



Model HB121-16

- Other adjustment features include:
- leveling screws and lock nuts on the pedestals;
- jack screws and tensioner bolts on the apron;
- truss rods on the apron, base, and upper leaf;
- and fully adjustable counter balances to facilitate the bending process.
- Removable apron angle and insert permit 1/4-inch reverse bends in lighter material.

Bored in-line to ensure perfect alignment, the pivot points are fitted with oil impregnated bearings. The hinge pins are high-tensile, alloy steel. Ductile steel clamp handles, heavy yokes, grease fittings, and an apron stop rod complement the many other fine features of these heavy-duty brakes.

TENNISMITH^{USA}

TENNISMITH's heavy-duty hand brakes are designed and built for long service and accurate bending. Welded steel plate construction and heavy truss rods and braces provide strength and durability.

With much more substantial steel side plates than other domestically made units, these brakes have the rigidity required for upper leaf adjustment without the use of wrenches.

Equipped with thrust bearings, the upper leaf adjustment screws permit quick, accurate alignment for different material thicknesses or radii.

SPECIFICATIONS

Heavy-Duty Hand Brakes	Model HB73-16	Model HB97-18	Model HB97-16	Model HB121-18	Model HB121-16	Model HB121-14	Model HB145-18
Capacity, mild steel	16 gauge 1.6 mm	18 gauge 1.25 mm	16 gauge 1.6 mm	18 gauge 1.25 mm	16 gauge 1.6 mm	14 gauge 2.0 mm	18 gauge 1.25 mm
Bending length	73 in. 1854 mm	97 in. 2464 mm	97 in. 2464 mm	121 in. 3073 mm	121 in. 3073 mm	121 in. 3073 mm	145 in. 3683 mm
Maximum lift of beam	1-7/8 in. 47 mm	1-7/8 in. 47 mm	1-7/8 in. 47 mm	1-7/8 in. 47 mm	2-1/4 in. 57 mm	2-1/4 in. 57 mm	2-1/4 in. 57 mm
Front to rear beam adjustment	1/2 in. 13 mm	1/2 in. 13 mm	1/2 in. 13 mm	1/2 in. 13 mm	1/2 in. 13 mm	1/2 in. 13 mm	1/2 in. 13 mm
Minimum reverse bend	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm	1/4 in. 6 mm
Minimum flange in capacity material	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm
Dimensions, counterweights in place, LxWxH	114 x 48 x 59-1/2 in. 2896 x 1220 x 1512 mm	138 x 48 x 59-1/2 in. 3506 x 1220 x 1512 mm	140 x 52 x 60 in. 3556 x 1321 x 1524 mm	159 x 52 x 60 in. 4039 x 1321 x 1524 mm	161 x 53 x 59-1/2 in. 4090 x 1347 x 1512 mm	162 x 54 x 63-1/2 in. 4115 x 1372 x 1613 mm	185 x 53 x 59-1/2 in. 4700 x 1347 x 1512 mm
Shipping weight	1200 lbs. 545 kg	1385 lbs. 628 kg	1675 lbs. 759.8 kg	2300 lbs. 1043 kg	2875 lbs. 1304 kg	3250 lbs. 1477 kg	3400 lbs. 1545 kg
Export crate	94 cu. ft. 2.67 cu. m	125 cu. ft. 3.54 cu. m	141 cu. ft. 3.99 cu. m	169 cu. ft. 4.78 cu. m	187 cu. ft. 5.30 cu. m	196 cu. ft. 5.57 cu. m	224 cu. ft. 6.36 cu. m

Optional hydraulic powered assist available. Ask dealer for more details.

- Model HBU48-16
- Model HBS48-16

Hand Brakes



Model HBU48-16 – Shown with optional stand.



Model HBS48-16 – Shown with optional stand.

Tennsmith's bench-mounted hand brakes are rugged, dependable USA-made tools that won't break your budget. The Model HBU48-16 is a heavy-duty bench brake suitable for box and pan or straight bending in up to 16-gauge mild steel. The brake features a removable apron angle and apron insert permitting 1/4-inch reverse bends in lighter materials. The upper leaf and nose bar has a wide range of adjustment for radius bending. Standard equipment includes an apron stop rod for repeat bends, extension handles and a counterweight. The Model HBS48-16 is identical in features and capacity to the HBU48-16 but is intended solely for straight bending. Like our larger hand brakes, the HBS48-16 features a removable nose bar.

The Models U48-22 and S48-22 are lighter capacity versions of the four-foot bench brake which offer economical alternatives in working 22-gauge and lighter materials. Also, their lighter weights make these models better suited for transporting to remote job sites.

- Model U48-22
- Model S48-22



Model U48-22 – Shown with optional stand.



Model S48-22 – Shown with optional stand.

TENNSMITH'S bench-mounted hand brakes provide an economical means of performing a wide range of sheet metal bending and forming operations. These brakes are of all-steel welded construction, readily adjustable, and utilize bronze bearings at pivot points.

- Radius Bending and Forming Information**
- TENNSMITH hand brakes come equipped with 1/64-inch radius nose bars and fingers as standard equipment. We recommend clearances between the edge of the nose bar and bending apron of twice the material thickness for 16-gauge and heavier materials and one and one-half times the material thickness on lighter than 16-gauge materials. This will approximate a 1/64-inch inside radius on the work piece. Larger radius bends can be made using the standard nose bar by allowing more clearance between the edge of the nose bar and bending apron.

SPECIFICATIONS

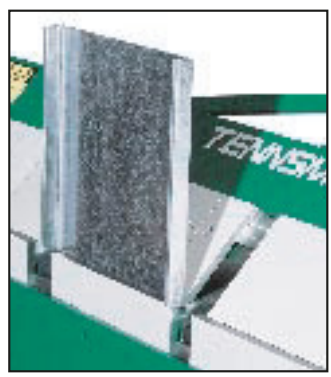
Bench-Mounted Hand Brakes	Model HBU48-16	Model HBS48-16	Model U48-22	Model S48-22
Capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm	22 gauge 0.75 mm	22 gauge 0.75 mm
Bending length	48-1/4 in. 1225 mm	48-1/4 in. 1225 mm	48-1/4 in. 1225 mm	48-1/4 in. 1225 mm
Maximum depth of box	4 in. 101.7 mm	—	3 in. 76.2 mm	—
Maximum lift of beam	1-1/4 in. 31.75 mm	1-3/4 in. 44 mm	7/8 in. 22.2 mm	7/8 in. 22.2 mm
Front to rear beam adjustment	5/8 in. 16 mm	5/8 in. 16 mm	1/4 in. 6 mm	1/4 in. 6 mm
Minimum reverse bend	1/4 in. 6 mm	1/4 in. 6 mm	5/16 in. 7.9 mm	5/16 in. 7.9 mm
Minimum flange in capacity material	1 in. 25 mm	1 in. 25 mm	3/8 in. 9.5 mm	3/8 in. 9.5 mm
Finger widths	2, 3, 4 in. 51, 76, 101 mm	—	2, 3, 4 in. 51, 76, 101 mm	—
Shipping weight	495 lbs. 224.5 kg	460 lbs. 208.7 kg	280 lbs. 127 kg	220 lbs. 100 kg
Export crate	23.6 cu. ft. 0.67 cu. m	23.6 cu. ft. 0.67 cu. m	17.4 cu. ft. 0.49 cu. m	17.4 cu. ft. 0.49 cu. m
Optional stand, shipping weight	95 lbs. 43 kg	95 lbs. 43 kg	95 lbs. 43 kg	95 lbs. 43 kg
Export crate	2.5 cu. ft. 0.07 cu. m	2.5 cu. ft. 0.07 cu. m	2.5 cu. ft. 0.07 cu. m	2.5 cu. ft. 0.07 cu. m

Available options: bolted assembly stand and radius fingers.





Model HBT72-16



Sample bends achieved with HBT72-16.

TENNSMITH's new HBT72-16 is designed to provide forming capabilities for complex parts. This machine is truly a universal hand brake which allows for the removal of both upper and lower segments of fingers. Complex parts, such as, traverse duct and down flanged parts, as well as architectural sheet metal and signage applications, can easily be formed using this machine.

The HBT72-16 is built with the same high-quality features and standards that TENNSMITH brakes are recognized for throughout the industry. Please consult TENNSMITH for specific forming questions or applications.

SPECIFICATIONS

	Model HBT72-16 NEW!
Universal Hand Brake	
Capacity, mild steel	16 gauge 1.6 mm
Capacity, stainless steel	20 gauge 1.0 mm
Bending length	72 in. 1828.8 mm
Maximum lift of beam	1-1/2 in. 38.1 mm
Front to rear beam adjustment	1 in. 25 mm
Maximum depth of box	4 in. 101.6 mm
Minimum reverse bend (angle and insert removed)	1/4 in. 6 mm
Top segment finger widths	2,3 and 4 in. 50.8, 76.2 and 101.6 mm
Lower segment tooling width	2, 3, 3.5, 3.5, 4, 4, 6, 6, 8, 8, 12, 12
Bending beam tooling segments	2, 3, 3.5, 3.5, 4, 4, 6, 6, 8, 8, 12, 12
Maximum transverse bend (through tooling centers)	2 in. 50.8 mm
Maximum transverse bend (at either end of the machine)	3 in. 76.2 mm
Dimensions, counterweights in place, LxWxH	89-1/2 x 32 x 47 in. 2273 x 813 x 1194mm
Shipping weight	2200 lbs. 1000 kg
Export crate	115 cu. ft. 3.25 cu. m

Available options: radius fingers.

Shears

Model 36
Model 52

Model 36A
Model 52A/52H



Model 52



Model 52H

Tennsmith squaring shears offer precision shearing and rugged construction at an affordable price. The shear frame, bed and cutter head assemblies are constructed of heavy-duty cast iron. The shear bed is machined and then surface ground to precision tolerances to ensure an accurate working surface.

These shears feature triaction, ground-alloy tool steel blades. Both the upper and lower blades have a 2° edge relief and the lower blade has an additional 1° face relief for maximum material penetration with minimum effort. Triaction blades help prevent material movement while shearing, prolonging blade life.

TENNSMITH shears have the most complete adjustment features of any sheet metal shear on the market. The lower shear blade is bed-adjusting and the upper blade is adjustable by means of a truss bar on the cutter head. The spring-activated holddown feet clamp the work piece securely in place and are easily adjustable to compensate holding pressure for light or heavy gauge material. There is ample clearance between the holddown feet and shear blades to allow good operator vision for line-of-sight cutting. The standard, double-locking back gauge, which features embossed scales and vernier wheels for fine adjustment, gives highly accurate readings.

SPECIFICATIONS

Foot Squaring Shears	Model 36	Model 52
Maximum shearing capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum shearing capacity, stainless steel	20 gauge 1.0 mm	20 gauge 1.0 mm
Maximum cutting length	37 in. 940 mm	52-1/4 in. 1327 mm
Back gauge range	30 in. 762 mm	30 in. 762 mm
Front gauge range	37 in. 940 mm	37 in. 940 mm
Floor space, gauges in position	45 x 80 in. 1143 x 2032 mm	60 x 80 in. 1524 x 2032 mm
Overall dimensions, less gauges, LxWxH	46-1/2 x 27 x 42 in. 1181 x 686 x 1067 mm	61 x 36 x 42 in. 1550 x 915 x 1067 mm
Shipping weight	700 lbs. 317.5 kg	950 lbs. 431 kg
Export crate	45 cu. ft. 1.27 cu. m	59 cu. ft. 1.67 cu. m

Standard equipment includes a back gauge, front extension arms with stop, bevel gauge and graduated side scales. **Additional options:** squaring arm, high carbon-high chromium blades and stroke counter.

TENNSMITH power shears combine all the features of our foot shears with the advantage and convenience of air or hydraulic operation. TENNSMITH power shears are a productive addition to any shop. The air shears utilize heavy-duty, tie rod-type pneumatic cylinders, which provide up to 40 strokes per minute in capacity materials.

A foot-operated air valve control, pressure regulator, air gauge, oiler/condenser cups and neoprene, padded holddown feet are standard features. We recommend a maximum air supply of 75 psi for operating these shears at rated capacity. Where air supply pressures exceed 75 psi, an in-line regulator is helpful to provide pressure control. Generally, a 10-hp stand-alone compressor would be the minimum recommended size to operate these shears. The model 52H cycles at 60 strokes a minute, thanks to its first class hydraulic system. The unit features a solenoid actuated valve, 3-hp electric motor, 10-gallon tank with sight gauge and thermometer, pressure gauge, check valve and industrial quality cylinders. The motor is protected by a magnetic starter. Other electrical safety features include a low voltage on/off switch; low voltage, shrouded, electric foot switch; step-down transformer with low voltage circuit fuse; fully enclosed electrical box; and insulated reinforced conduit for all wiring. Models 36A and 52A are ideal ways to enhance shearing productivity with minimal investment.

SPECIFICATIONS

Power Squaring Shears	Model 36A	Models 52A / 52H
Maximum shearing capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum shearing capacity, stainless steel	20 gauge 1.0 mm	20 gauge 1.0 mm
Maximum cutting length	37 in. 940 mm	52-1/4 in. 1327 mm
Back gauge range	30 in. 762 mm	30 in. 762 mm
Front gauge range	37 in. 940 mm	37 in. 940 mm
Floor space, gauges in position	45 x 80 in. 1143 x 2032 mm	60 x 80 in. 1524 x 2032 mm
Overall dimensions, less gauges, LxWxH	46-1/4 x 24 x 42 in. 1181 x 686 x 1067 mm	61 x 25 x 42 in. 1550 x 915 x 1067 mm
Strokes per minute, full length	40	40 / 60
Maximum operating pressure	75 psi 5.1 atmos.	75 psi / 1450 psi 5.1 atmos. / 98.6 atmos.
Air consumption per stroke	1.1 cu. ft. 0.031 cu. m	1.33 cu. ft. / n/a 0.038 cu. m / n/a
Motor—230/460v, 3-phase, 60Hz, 1745 RPM	n/a	n/a / 3 hp
Shipping weight	800 lbs. 363 kg	1085 lbs. / 1300 lbs. 492 kg / 590 kgs
Export crate	42 cu. ft. 1.19 cu. m	56 cu. ft. 1.59 cu. m

Standard equipment includes back gauge, front extension arms with stop, bevel gauge, graduated side gauges, foot control, and neoprene padded holddown feet. **Available options:** squaring arm, high carbon-high chromium blades, and one-shot lubricating system.

TENNSMITH^{USA}

MANUAL SHEARS

MODELS
 SK 1020
 SK 618
 SK 416

SK
 series



**Attention roofers, sign-makers, HVAC and racecar builders:
 TENNSMITH introduces the SK Series of Manual Shears.**

TENNSMITH introduces a new line of manual shears to our family of metal forming machinery. The SK Series is built with the quality and high exacting standards that our customers expect. SK Series shears are designed after the popular TENNSMITH LM Series and provide the lower cost alternative of manual operation. Three models are available in the SK Series to accommodate multiple capacities:
 SK416: 52-1/4 in. x 16 ga.
 SK618: 74 in. x 18 ga.
 SK1020: 122 in. x 20 ga.

The SK model shear is hand-controlled. Unlike other foot squaring shears that require "stomping" or "jumping," the SK model is operated with the hands away from the shearing action, resulting in a much safer shear.

CONTACT:
 TENNSMITH, Inc.,
 6926 Smithville Highway
 McMinnville, TN 37110 U.S.A.
 Phone (931) 934-2211 Fax (931) 934-2220
 www.tennsmith.com
 E-mail: info@tennsmith.com

SK Series Manual Shears	MODEL SK1020	MODEL SK618	MODEL SK416
Maximum shearing capacity, mild steel	20 gauge 1.0 mm	18 gauge 1.25 mm	16 gauge 1.6 mm
Maximum shearing capacity, stainless steel	24 gauge .60 mm	22 gauge .75 mm	20 gauge .35 mm
Maximum cutting length	122 in 3100 mm	74 in 1880 mm	52-1/4 in 1327 mm
Back gauge range	24 in 610 mm	24 in 610 mm	24 in 610 mm
Front gauge range	24 in 610 mm	24 in 610 mm	24 in 610 mm
Floor space, gauges in position	73 x 145 1854 x 3683 mm	73 x 97 854 x 2463 mm	73 x 75 1854 x 1905 mm
Shipping weight	3500 lbs 1590 kg	2200 lbs 1000 kg	1500 lbs 680 kg

Available options: Front return sheet support system, material cart, front return chute, squaring arm, front support arms.



PROUDLY MADE IN THE USA



Proudly Made In the USA, since 1967.

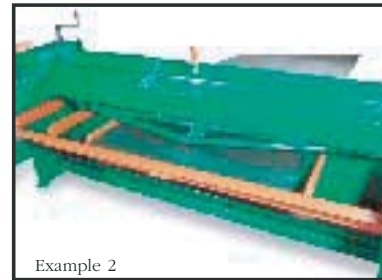
© TENNSMITH, Inc.

Shears

- Model LM412
- Model LM510
- Model LM525
- Model LM1014
- Model LM1214



Example 1



Example 2



The optional four-foot squaring arm is a precision gauge which can be mounted left or right and has inlaid inch/metric scaling and adjustable guide block. Also available in ten and twelve-foot lengths. A toggle on the block lets sheet stock slide underneath, then pivots to the stop position.

The optional sheet support system is recommended for gauging of thin material. With this air-powered support mechanism, one operator can effectively shear cumbersome, light-gauge stock. The sheet support system is available in two styles: System F, available on models LM1014 and LM1214, is a front return support which drops sheared parts to a front chute for easy retrieval; support System R drops sheared material to the rear of the machine.

Unlike competitive front return systems, with the LM Series Performance Package F, you can cut materials longer than the standard back gauge length by deactivating the sheet support. Example 1 illustrates longer material being sheared by sliding material under the backstop. Most competitors are limited to 24" or 30," and longer pieces cannot be sheared like a TENNSMITH. Example 2 illustrates the sheet support system.



Independent, spring-loaded, self-leveling holddowns exert uniform pressure on a work piece, ensuring an accurate cut. The plungers have neoprene inserts to prevent marring the surface of the piece.
NOTE: Safety guard has been removed for photo purposes only.



Model LM510



Models LM412, LM510, LM525, LM1014 and LM1214 are standard with the back gauge system shown with optional digital readout. This unique design allows the operator to move the backstop the complete travel from 0 to 24 inches with the two rotations of the handle. The 2x system is more advantageous than powered back gauge units due to the tremendous speed advantage.

The system includes a brake for accurate repeat cuts. The unit utilizes a 24-inch dual inch/metric scale. Longer back gauge ranges and optional digital readout are available.



Model LM1014 – Shown with optional front sheet support system, front support arms and four-foot squaring arms.

TENNSMITH's low-profile LM Series mechanical shears utilize a simple low maintenance design, coupled with an array of standard features for an attractive combination of high value and solid performance.

Models LM412, LM510, LM525, LM1014 and LM1214 now incorporate the unique 2x back gauge system. This allows the operator to move the backstop from 0 to 24 inches in approximately 2 seconds with only two rotations of the handle. An optional digital readout is available for this system.

The LM Series shears are standard with four-edge, high carbon, high chrome top and bottom blades, independent, self-leveling holddown feet with neoprene inserts, single, continuous and job stroke cycles, motor reverse switch, precision-machined table with hand well, dual inch/metric inlaid bed scales and non-metallic gibs.

The new model LM412 incorporates all the popular LM series features into this 52" cutting length, 12-gauge mild-steel capacity shear. Model LM510 has a rated capacity

of 10-gauge mild steel with a maximum cutting length of 60-1/2 inches. Model LM525 has a capacity of 1/4" mild steel and 60-1/2-inch maximum cutting length.

The LM1014 will handle 14-gauge mild steel up to 121 inches. The LM1214 is rated for 14-gauge mild steel with 145-inch cutting length. To enhance productivity, optional equipment available for the machines include: four or ten-foot squaring arm, front support arms, light beam and protractor attachment. On models LM1014 and LM1214, the air operated sheet support is available in two styles: System R drops the supported material to the rear of the machine; System F returns the supported material to the front of the machine via a front return chute. Please call for details.

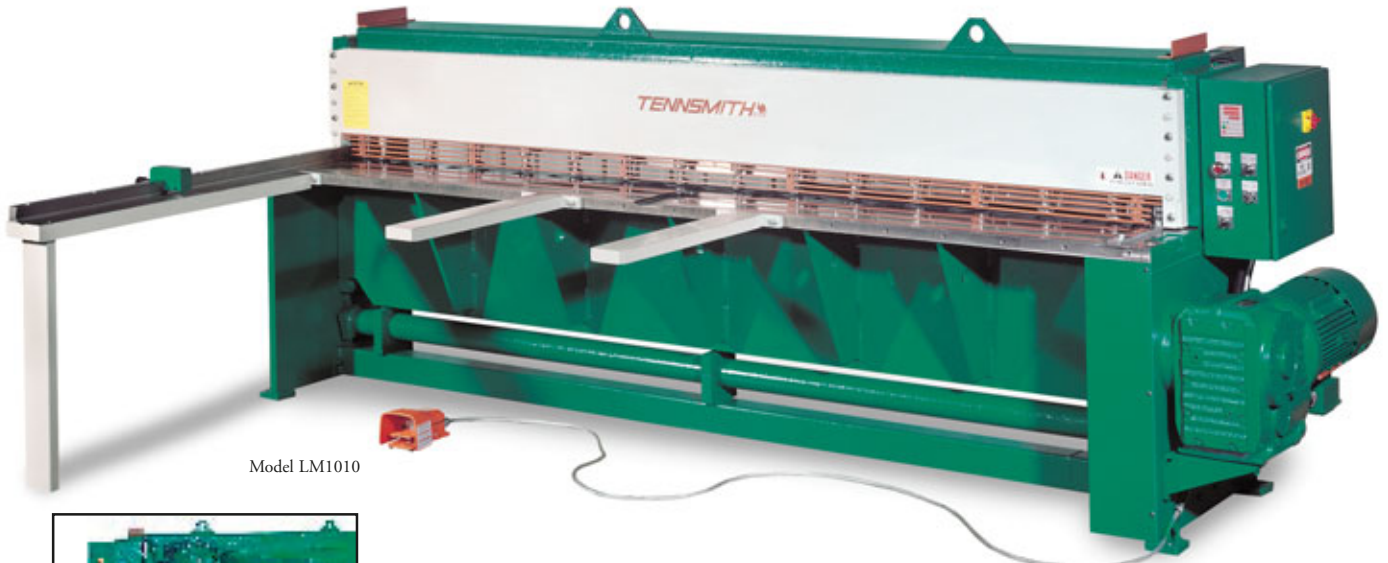
The LM Series shears are now available in a reduced price "Performance Package" configuration. The Performance Package includes: a four-foot squaring arm, a pair of front support arms and an air operated sheet support system. Please contact your local distributor or TENNSMITH for more details.

SPECIFICATIONS

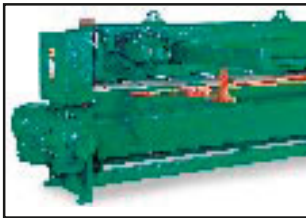
LM Series Mechanical Shears	Model LM412	Model LM510	Model LM525	Model LM1014	Model LM1214
Maximum shearing capacity, mild steel	12 gauge 2.7 mm	10 gauge 3.5 mm	.250 (1/4) in. 6.5 mm	14 gauge 2.0 mm	14 gauge 2.0 mm
Maximum shearing capacity, stainless steel	16 gauge 1.6 mm	14 gauge 2.0 mm	10 gauge 3.5 mm	18 gauge 1.25 mm	18 gauge 1.25 mm
Maximum cutting length	52-1/2 in. 1333.5 mm	60-1/2 in. 1535 mm	60-1/2 in. 1535 mm	121 in. 3073 mm	145 in. 3683 mm
Back gauge range	24 in. 610 mm	24 in. 610 mm	24 in. 610 mm	24 in. 610 mm	24 in. 610 mm
Strokes per minute, full length	40	35	25	35	35
Number of holddown feet	8	12	12	16	18
Motor-230/460v, 3-phase, 60Hz	5 hp	7-1/2 hp	15 hp	5 hp	7-1/2 hp
Overall dimensions, less gauges, LxWxH	72 x 27 x 55-1/2 in. 1829 x 686 x 1410 mm	78 x 27 x 55-1/2 in. 1981 x 686 x 1410 mm	88 x 30 x 59-1/2 in. 2235 x 762 x 1511 mm	139 x 27 x 55-1/2 in. 3531 x 686 x 1410 mm	163 x 60 x 57-1/2 in. 4140 x 1524 x 1461 mm
Floor space, gauges in position	69 x 60 x 55-1/2 in. 1753 x 1524 x 1410 mm	78 x 60 x 55-1/2 in. 1981 x 1524 x 1410 mm	88 x 60 x 59-1/2 in. 2235 x 160 x 1511 mm	139 x 60 x 55-1/2 in. 3531 x 1524 x 1410 mm	163 x 82 x 57-1/2 in. 4140 x 2083 x 1461 mm
Shipping weight	3200 lbs. 1455 kg.	4000 lbs. 1815 kg	6000 lbs. 2730 kg	6275 lbs. 2846 kg	7530 lbs. 3390 kg
Export crate	112 cu. ft. 3.18 cu. m	126 cu. ft. 3.58 cu. m	130 cu. ft. 3.7 cu. m	252 cu. ft. 7.13 cu. m	540 cu. ft. 15.35 cu. m

Shears

Model LM1010
Model LM1010-2x



Model LM1010



The back gauge system of the LM1010 shear features ball screws which provide accuracy and repeatability throughout the 30-inch back gauge travel. The back gauge is powered by a 3/4-hp gear motor and controlled by a "GO TO" control system with stroke counter. An optional rear drop sheet support system is available for the LM1010.



Standard features for the LM1010 control box include: selection for continuous or single cutting stroke, and jog button with reverse switch. A "GO TO" back gauge control pad with stroke counter allows quick, accurate back gauge positioning up to 30 inches.

TENNSMITH's LM1010 is equipped with a standard "GO TO" 30-inch back gauge system. The ballscrew-driven back gauge provides quick, accurate cuts. The shear is powered by a 12-1/2-hp gear motor attached to a mechanical linkage which provides smooth, quiet operation.

The LM1010 is rated at a maximum of 10-gauge material with a cutting width of 121 inches. To enhance productivity, optional equipment available for the machines include: four or ten-foot squaring arm, front support arms, light beam and protractor attachment. A rear drop sheet support system is available for the LM1010.

Additionally, the LM1010-2x is equipped with the popular 2x manual back gauge option. This allows the operator to move the backstop from 0 to 24 inches in approximately 2 seconds with only two rotations of the handle. An optional digital readout is available for this system.

TENNSMITH LM Series shears are quality manufactured in the USA at competitive prices.

SPECIFICATIONS

LM Series Mechanical Shear	Model LM1010	Model LM1010-2x
Maximum shearing capacity, mild steel	10 gauge 3.5 mm	10 gauge 3.5 mm
Maximum shearing capacity, stainless steel	14 gauge 2.0 mm	14 gauge 2.0 mm
Maximum cutting length	121 in. 3073 mm	121 in. 3073 mm
Back gauge range	30 in. 762 mm	24 in. 610 mm
Strokes per minute, full length	31	31
Number of holddown feet	16	16
Motor-230/460v, 3-phase, 60Hz	12-1/2 hp	12-1/2 hp
Overall dimensions, less gauges, LxWxH	145 x 39 x 59-1/2 in. 3683 x 991 x 1511 mm	145 x 39 x 59-1/2 in. 3683 x 991 x 1511 mm
Floor space, gauges in position	145 x 78 x 59-1/2 in. 3683 x 1981 x 1511 mm	145 x 78 x 59-1/2 in. 3683 x 1981 x 1511 mm
Shipping weight	9400 lbs 4273 kg	9100 lbs 4136.36 kg
Export crate	390 cu. ft. 11.08 cu. m	390 cu. ft. 11.08 cu. m

Shears

Model 36
Model 52

Model 36A
Model 52A/52H



Model 52

Tennsmith squaring shears offer precision shearing and rugged construction at an affordable price. The shear frame, bed and cutter head assemblies are constructed of heavy-duty cast iron. The shear bed is machined and then surface ground to precision tolerances to ensure an accurate working surface.

These shears feature triaction, ground-alloy tool steel blades. Both the upper and lower blades have a 2° edge relief and the lower blade has an additional 1° face relief for maximum material penetration with minimum effort. Triaction blades help prevent material movement while shearing, prolonging blade life.

TENNSMITH shears have the most complete adjustment features of any sheet metal shear on the market. The lower shear blade is bed-adjusting and the upper blade is adjustable by means of a truss bar on the cutter head. The spring-activated holddown feet clamp the work piece securely in place and are easily adjustable to compensate holding pressure for light or heavy gauge material. There is ample clearance between the holddown feet and shear blades to allow good operator vision for line-of-sight cutting. The standard, double-locking back gauge, which features embossed scales and vernier wheels for fine adjustment, gives highly accurate readings.

SPECIFICATIONS

Foot Squaring Shears	Model 36	Model 52
Maximum shearing capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum shearing capacity, stainless steel	20 gauge 1.0 mm	20 gauge 1.0 mm
Maximum cutting length	37 in. 940 mm	52-1/4 in. 1327 mm
Back gauge range	30 in. 762 mm	30 in. 762 mm
Front gauge range	37 in. 940 mm	37 in. 940 mm
Floor space, gauges in position	45 x 80 in. 1143 x 2032 mm	60 x 80 in. 1524 x 2032 mm
Overall dimensions, less gauges, LxWxH	46-1/2 x 27 x 42 in. 1181 x 686 x 1067 mm	61 x 36 x 42 in. 1550 x 915 x 1067 mm
Shipping weight	700 lbs. 317.5 kg	950 lbs. 431 kg
Export crate	45 cu. ft. 1.27 cu. m	59 cu. ft. 1.67 cu. m

Standard equipment includes a back gauge, front extension arms with stop, bevel gauge and graduated side scales. **Additional options:** squaring arm, high carbon-high chromium blades and stroke counter.



Model 52H

TENNSMITH power shears combine all the features of our foot shears with the advantage and convenience of air or hydraulic operation. TENNSMITH power shears are a productive addition to any shop. The air shears utilize heavy-duty, tie rod-type pneumatic cylinders, which provide up to 40 strokes per minute in capacity materials.

A foot-operated air valve control, pressure regulator, air gauge, oiler/condenser cups and neoprene, padded holddown feet are standard features. We recommend a maximum air supply of 75 psi for operating these shears at rated capacity. Where air supply pressures exceed 75 psi, an in-line regulator is helpful to provide pressure control. Generally, a 10-hp stand-alone compressor would be the minimum recommended size to operate these shears. The model 52H cycles at 60 strokes a minute, thanks to its first class hydraulic system. The unit features a solenoid actuated valve, 3-hp electric motor, 10-gallon tank with sight gauge and thermometer, pressure gauge, check valve and industrial quality cylinders. The motor is protected by a magnetic starter. Other electrical safety features include a low voltage on/off switch; low voltage, shrouded, electric foot switch; step-down transformer with low voltage circuit fuse; fully enclosed electrical box; and insulated reinforced conduit for all wiring. Models 36A and 52A are ideal ways to enhance shearing productivity with minimal investment.

SPECIFICATIONS

Power Squaring Shears	Model 36A	Models 52A / 52H
Maximum shearing capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum shearing capacity, stainless steel	20 gauge 1.0 mm	20 gauge 1.0 mm
Maximum cutting length	37 in. 940 mm	52-1/4 in. 1327 mm
Back gauge range	30 in. 762 mm	30 in. 762 mm
Front gauge range	37 in. 940 mm	37 in. 940 mm
Floor space, gauges in position	45 x 80 in. 1143 x 2032 mm	60 x 80 in. 1524 x 2032 mm
Overall dimensions, less gauges, LxWxH	46-1/4 x 24 x 42 in. 1181 x 686 x 1067 mm	61 x 25 x 42 in. 1550 x 915 x 1067 mm
Strokes per minute, full length	40	40 / 60
Maximum operating pressure	75 psi 5.1 atmos.	75 psi / 1450 psi 5.1 atmos. / 98.6 atmos.
Air consumption per stroke	1.1 cu. ft. 0.031 cu. m	1.33 cu. ft. / n/a 0.038 cu. m / n/a
Motor—230/460v, 3-phase, 60Hz, 1745 RPM	n/a	n/a / 3 hp
Shipping weight	800 lbs. 363 kg	1085 lbs. / 1300 lbs. 492 kg / 590 kgs
Export crate	42 cu. ft. 1.19 cu. m	56 cu. ft. 1.59 cu. m

Standard equipment includes back gauge, front extension arms with stop, bevel gauge, graduated side gauges, foot control, and neoprene padded holddown feet. **Available options:** squaring arm, high carbon-high chromium blades, and one-shot lubricating system.

TENNSMITH^{USA}

Swing Beam Shears

Model T1025
Model T1225



Model T1025

Standard Features:

- Cut length control
- Shadow light
- Counters
- GO-TO back gauge
- Retractable back gauges
- Squaring arm
- Support arms
- Fully programmable cut length control
- Job storage & recall
- Fully programmable jobs

Options:

- Air operated sheet supports
- Longer squaring arms
- Support arms with disappearing stops
- Ball transfers
- Power blade gap adjustment
- Front gauging
- Conveyors

TENNSMITH's T-Series shears with swing beam design are built to handle capacities of up to 1/4" mild steel. The T-Series is specifically designed with box frame construction that lessens the amount of torsional loads. Each frame is designed to allow maximum rigidity for a more stable blade while cutting. TENNSMITH's welded steel box frame construction all but eliminates deflection and torsional forces.

Economy Packages are also available with reduced features and cost. To make shearing more productive, T-Series shears are available with optional programmable CNC in different memory capacities.

Contact TENNSMITH for a complete brochure on the T-Series shears.

Swing Beam Shears	Model T1025	Model T1225
Maximum shearing capacity, mild steel	1/4 in. 6.5 mm	1/4 in. 6.5 mm
Maximum shearing capacity, stainless steel	3/16 in. 4.76 mm	3/16 in. 4.76 mm
Maximum cutting length	121 in. 3073 mm	145 in. 3683 mm
Back gauge range	40 in. 1016 mm	40 in. 1016 mm
Throat Gap	13	13
Strokes per minute, full length	35	25
Strokes per minute, one foot	60	60
Number of holddown feet	17	19
Motor-230/460v, 3-phase, 60Hz	20 hp	20 hp
Oil Capacity	85	85
Overall dimensions, less gauges, LxWxH	148 x 90 x 84 in. 375.9 x 228.6 x 213.3 cm	160 x 90 x 84 in. 406.4 x 228.6 x 213.3 cm
Shipping weight	17,000 lbs 7,711 kg	21,000 lbs 9,525 kg

Mild steel rated at 80,000 tensile / 44,000 yield. Stainless steel rated at 90,000 tensile / 50,000 yield.

SPECIFICATIONS

Slip Rolls

- Model SR24
- Model SR36
- Model SR42

- Model SR48
- Model SR48P



Model SR36 – Shown with optional stand.



Model SR48 – Shown with optional stand.



Model SR48P

TENNSMITH'S initial pinch slip roll, Model SR48, is a heavy-duty, affordable, production tool for forming curved parts and tubes in 16-gauge and lighter sheet metal. The SR48 roll has three gear-driven rolls that ensure even starting and feeding of capacity materials. The gearing features a 4:1 reduction ratio for ease of operation of heavy materials. All gears are fully enclosed for safety and protection from the elements. TENNSMITH'S SR48P powered slip roll combines all the features of our SR48 initial pinch roll with the productive advantage of electric-powered drive for production forming of curved parts and tubes made of 16-gauge and lighter sheet metal.

Tennsmith's slip rolls combine precision-turned, ground and polished, high carbon steel rolls with heavy-duty, cast iron end frames, and welded steel base to make an accurate and durable forming tool.

Convenient operating features include large roll adjusting screws, scales for speeding repeat set-up, and a front-mounted handle to lift the upper roll for material removal. Wire grooves are standard.

SPECIFICATIONS

Slip Rolls	Model SR24	Model SR36	Model SR42
Capacity, mild steel	20 gauge 1.0 mm	22 gauge 0.75 mm	24 gauge 0.6 mm
Maximum forming length	24 in. 610 mm	36 in. 914 mm	42 in. 1067 mm
Diameter of rolls	2 in. 51 mm	2 in. 51 mm	2 in. 51 mm
Minimum forming radius	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm
Wire grooves	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm
Gearing ratio	n/a	n/a	n/a
Shipping weight	190 lbs. 86 kg	250 lbs. 113 kg	270 lbs. 122 kg
Export crate	8.4 cu. ft. 0.24 cu. m	10.7 cu. ft. 0.31 cu. m	12 cu. ft. 0.34 cu. m
Optional stand, shipping weight	94 lbs. 43 kg	120 lbs. 54 kg	130 lbs. 59 kg
Export crate	13.3 cu. ft. 0.38 cu. m	17.8 cu. ft. 0.51 cu. m	20 cu. ft. 0.57 cu. m

Available option: heavy-duty fabricated floor stand.

Drive power for the SR48P is supplied by a heavy-duty, industrial quality gear reduction motor and roller chain directly to the gear train. The roll drive is controlled by a toggle-action, shrouded foot pedal for instant forward and reverse action. The drive motor is equipped with an electro-magnetic brake to prevent roll creep and over-forming. Electrical and operator safety features include a full-length, front and back wire cable safety mechanism which instantly stops the rolls when tripped, two magnetic motor starters, fully enclosed electrical box with pilot light, insulated reinforced conduit for all wiring and fully enclosed drive train. The rolls and gears are mounted in hardened bronze bushings for long life and precision operation. TENNSMITH'S Model SR48P is the best value of any four-foot, 16-gauge powered roll on the market.

SPECIFICATIONS

Slip Rolls	Model SR48	Model SR48P
Capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum forming length	49 in. 1244 mm	49 in. 1244 mm
Diameter of rolls	3 in. 76 mm	3 in. 76 mm
Minimum forming radius	1-1/2 in. 38 mm	1-1/2 in. 38 mm
Wire grooves	3/8, 1/2, 5/8 in. 9.5, 12.7, 15.8 mm	3/8, 1/2, 5/8 in. 9.5, 12.7, 15.8 mm
Gearing ratio	4 : 1	4 : 1
Roll speed	n/a	22 RPM 17.28 sfpm
Motor—230/460v, 3-phase, 60Hz	n/a	3/4 hp
Dimensions LxWxH	n/a	77 x 29 x 50 in. 1956 x 737 x 1270 mm
Shipping weight	775 lbs. 351.5 kg	1100 lbs. 499 kg
Export crate	33.4 cu. ft. 0.95 cu. m	125.5 cu. ft. 3.56 cu. m
Optional stand, shipping weight	270 lbs. 122.5 kg	n/a
Export crate	37.9 cu. ft. 1.08 cu. m	n/a

Slip Rolls

- Model SR24
- Model SR36
- Model SR42

- Model SR48
- Model SR48P



Model SR36 – Shown with optional stand.



Model SR48 – Shown with optional stand.



Model SR48P

TENNSMITH'S initial pinch slip roll, Model SR48, is a heavy-duty, affordable, production tool for forming curved parts and tubes in 16-gauge and lighter sheet metal. The SR48 roll has three gear-driven rolls that ensure even starting and feeding of capacity materials. The gearing features a 4:1 reduction ratio for ease of operation of heavy materials. All gears are fully enclosed for safety and protection from the elements. TENNSMITH'S SR48P powered slip roll combines all the features of our SR48 initial pinch roll with the productive advantage of electric-powered drive for production forming of curved parts and tubes made of 16-gauge and lighter sheet metal.

Tennsmith's slip rolls combine precision-turned, ground and polished, high carbon steel rolls with heavy-duty, cast iron end frames, and welded steel base to make an accurate and durable forming tool.

Convenient operating features include large roll adjusting screws, scales for speeding repeat set-up, and a front-mounted handle to lift the upper roll for material removal. Wire grooves are standard.

SPECIFICATIONS

Slip Rolls	Model SR24	Model SR36	Model SR42
Capacity, mild steel	20 gauge 1.0 mm	22 gauge 0.75 mm	24 gauge 0.6 mm
Maximum forming length	24 in. 610 mm	36 in. 914 mm	42 in. 1067 mm
Diameter of rolls	2 in. 51 mm	2 in. 51 mm	2 in. 51 mm
Minimum forming radius	1 in. 25 mm	1 in. 25 mm	1 in. 25 mm
Wire grooves	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm	3/16, 1/4, 5/16 in. 5, 6.5, 8 mm
Gearing ratio	n/a	n/a	n/a
Shipping weight	190 lbs. 86 kg	250 lbs. 113 kg	270 lbs. 122 kg
Export crate	8.4 cu. ft. 0.24 cu. m	10.7 cu. ft. 0.31 cu. m	12 cu. ft. 0.34 cu. m
Optional stand, shipping weight	94 lbs. 43 kg	120 lbs. 54 kg	130 lbs. 59 kg
Export crate	13.3 cu. ft. 0.38 cu. m	17.8 cu. ft. 0.51 cu. m	20 cu. ft. 0.57 cu. m

Available option: heavy-duty fabricated floor stand.

Drive power for the SR48P is supplied by a heavy-duty, industrial quality gear reduction motor and roller chain directly to the gear train. The roll drive is controlled by a toggle-action, shrouded foot pedal for instant forward and reverse action. The drive motor is equipped with an electro-magnetic brake to prevent roll creep and over-forming. Electrical and operator safety features include a full-length, front and back wire cable safety mechanism which instantly stops the rolls when tripped, two magnetic motor starters, fully enclosed electrical box with pilot light, insulated reinforced conduit for all wiring and fully enclosed drive train. The rolls and gears are mounted in hardened bronze bushings for long life and precision operation. TENNSMITH'S Model SR48P is the best value of any four-foot, 16-gauge powered roll on the market.

SPECIFICATIONS

Slip Rolls	Model SR48	Model SR48P
Capacity, mild steel	16 gauge 1.6 mm	16 gauge 1.6 mm
Maximum forming length	49 in. 1244 mm	49 in. 1244 mm
Diameter of rolls	3 in. 76 mm	3 in. 76 mm
Minimum forming radius	1-1/2 in. 38 mm	1-1/2 in. 38 mm
Wire grooves	3/8, 1/2, 5/8 in. 9.5, 12.7, 15.8 mm	3/8, 1/2, 5/8 in. 9.5, 12.7, 15.8 mm
Gearing ratio	4 : 1	4 : 1
Roll speed	n/a	22 RPM 17.28 sfpm
Motor—230/460v, 3-phase, 60Hz	n/a	3/4 hp
Dimensions LxWxH	n/a	77 x 29 x 50 in. 1956 x 737 x 1270 mm
Shipping weight	775 lbs. 351.5 kg	1100 lbs. 499 kg
Export crate	33.4 cu. ft. 0.95 cu. m	125.5 cu. ft. 3.56 cu. m
Optional stand, shipping weight	270 lbs. 122.5 kg	n/a
Export crate	37.9 cu. ft. 1.08 cu. m	n/a

Rotary

- Model R22
- Model R24

ROLL CHART — SPECIFICATIONS

Rotary Machines	Model R22
Maximum capacity, mild steel	22 gauge 0.75 mm
Throat	7 in. 177 mm
Distance, shaft center to center	2 in. 50 mm
Shipping weight	67 lbs. 30 kg
Export crate	2.14 cu. ft. 0.06 cu. m

Name	Part Number	Roll Diagram	
"A" 1/8"	22100 22101		Turning
"C"	22106 22107		Burring
"D"	22108 22109		Wiring
"E"	22110 22111		Crimping
"F" 3/4"	22113 22114		Ogee Beading
"G"	22115 22116		Single Beading

ROLL CHART — SPECIFICATIONS

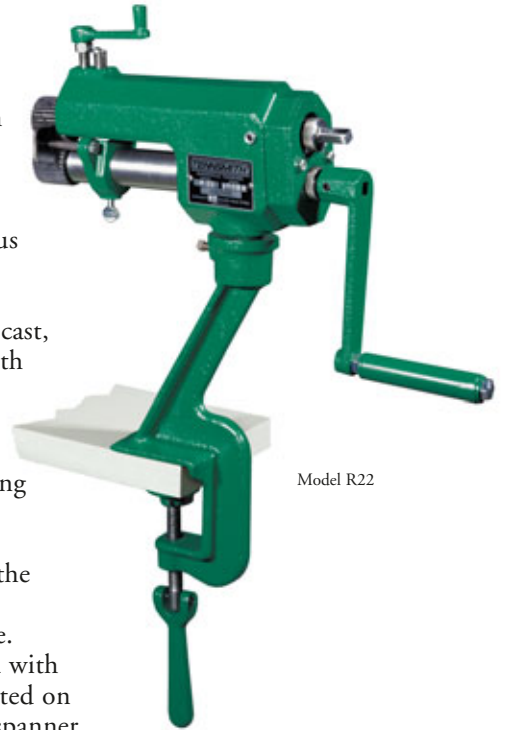
Rotary Machines	Model R24
Maximum capacity, mild steel	24 gauge 0.61 mm
Throat	n/a
Distance, shaft center to center	1-3/4 in. 44.5 mm
Shipping weight	35 lbs. 15.7 kg
Export crate	2.14 cu. ft. 0.06 cu. m

	Roll Diagram
Crimping	
Ogee Beading	

Tennsmith's rotary machine, Model R22, with interchangeable rolls, is a versatile forming tool for the manual performance of numerous sheet metal operations.

This tool features a solid cast, enclosed frame and smooth meshing machine gears. Material can be fed through the rolls in either direction by selecting the proper arbor.

The forming pressure of the rolls is controlled by the crank on top of the frame. This unit comes standard with rolls A, C, D, E and F listed on the chart, a hand crank, spanner and bench stand.



Model R22

Model R24 provides simultaneous crimping and beading on 24-gauge and lighter materials. Spacer collars are provided with the machine to enable crimp-only operation. Optional extended ogee bead rolls are also available to configure the unit solely for beading. Standard equipment for the Model R24 includes ogee bead and crimping rolls, spacers, a hand crank, spanner and bench stand.



Model R24

Power Rotary

Model PR16

The PR-16 power rotary is a versatile machine capable of forming numerous applications up to 16-gauge mild steel material. Standard features include variable speed control, heavy cast body with steel body stand. A 3/4-hp gear motor provides smooth operation. The forming pressure is controlled by a crank on the top of the frame on the standard unit; an optional hydraulic powered forming pressure unit is available. Rolls are ordered separately for this unit. Crimping, single beading, ogee beading, elbow edging, flattening, wiring, burring and turning rolls are available. Please contact the factory for special application forming.



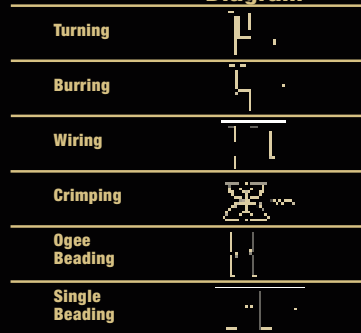
Model PR16

SPECIFICATIONS

Power Rotary Machine	Model PR16
Maximum capacity, mild steel	16 gauge 1.6 mm
Maximum capacity, stainless steel	20 gauge 1.0 mm
Throat depth	10 in. 254 mm
Distance, shaft center to center	2.5 in. 63.5 mm
Gear ratio	3 to 1
Working speed variable	3 to 45 rpm
Motor	3/4 hp
Shipping weight	350 lbs. 159 kg
Export crate	2.14 cu. ft. 0.06 cu. m

ROLL CHART

Roll Diagram



Cleat Benders

Model 18 • Model 24 • Model 30

Model 24 Cleat Bender
Shown with
optional stand.



Tennsmith's cleat benders are manually operated tools that form uniform drive cleat edges on rectangular ductwork in seconds without set-up or adjustment. The upper handle forms the cleat and the lower handle opens the tool for easy removal of the material. Heavy cast iron and fabricated steel construction provides long life and trouble-free operation. A TENNSMITH cleat bender can save you time and money.

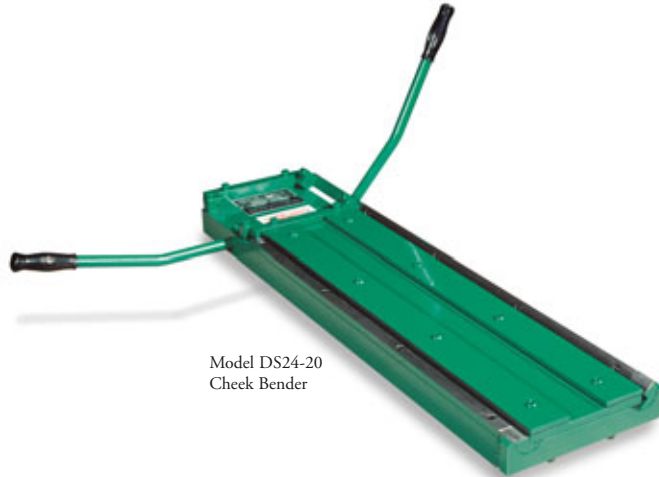
SPECIFICATIONS

Cleat Benders	Model 18	Model 24	Model 30
Maximum capacity, mild steel	20 gauge 1.0 mm	20 gauge 1.0 mm	20 gauge 1.0 mm
Maximum bending	18 in. 457 mm	24 in. 610 mm	30 in. 762 mm
Depth of drive cleat	1/2 in. 12.7 mm	1/2 in. 12.7 mm	1/2 in. 12.7 mm
Dimensions, handles removed, LxWxH	25-1/2 x 12-1/2 x 12-1/2 in. 648 x 317.5 x 317.5 mm	32 x 10 x 11 in. 813 x 254 x 280 mm	38 x 10 x 11-1/2 in. 965 x 254 x 292 mm
Shipping weight	63 lbs. 29 kg	95 lbs. 44 kg	150 lbs. 59 kg
Export crate	6.3 cu. ft. 0.18 cu. m	6.5 cu. ft. 0.19 cu. m	7.9 cu. ft. 0.22 cu. m
Optional stand, shipping weight	82 lbs. 37 kg	90 lbs. 41 kg	105 lbs. 48 kg
Export crate	15.6 cu. ft. 0.45 cu. m	22.4 cu. ft. 0.64 cu. m	26.67 cu. ft. 0.76 cu. m

Available option: heavy-duty fabricated stand.

Cheek Bender

Model DS24-20



Model DS24-20
Cheek Bender

Tennsmith's cheek bender is a rugged tool built for increased productivity while getting the most consistent bends quickly. The Model DS24-20's two-way trunnion design holds the bending apron steady at the base of the bend ensuring accuracy throughout the length of the sheet.

This machine can be bench-mounted and adjusts for bends of 1/4 to 7/8 inches, 24 inches long. The TENNSMITH cheek bender handles mild steel to 20-gauge.

SPECIFICATIONS

Cheek Bender	Model DS24-20
Capacity, mild steel	20 gauge 1.0 mm
Maximum bending	24 in. 610 mm
Bend depth	1/4 in. - 7/8 in. 6.35 mm - 22.2 mm
Dimensions LxWxH, handles removed	31 x 8-1/4 x 2-3/4 in. 788 x 216 x 70 mm
Shipping weight	80 lbs. 37 kg