



TENNSMITH

## Tennsmith Automatic Multi-Tooling Folders

The Tennsmith MTS Series mechanical folding system utilizes a low maintenance design, coupled with an array of standard features for an attractive combination of high value and solid performance. The MTS Series is a multi-tool designed machine. The upper beam comes standard with both segmented and sharp rail tooling. The segmented box tooling allows for a maximum box depth of 4.0". The sharp rail is machines to 30 degrees.



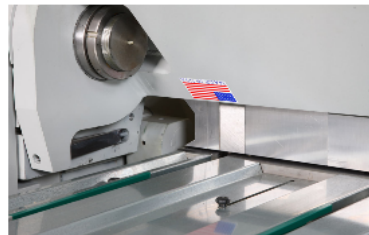
### Solid Construction

This metal brake is plate and weldment steel construction, delivering superior performance and features in a rigid design.



### Intelligent Controls

The Synergy Control System is second to none. It is a highly advanced, Windows-based ECS CNC system that takes the complexity out of programming and running parts.



### Powerful Combination

Combining automated bending of angles up to 145 degree, material clamping and material support make the AutoBrake a powerful machine.



### Precise Folding

The folding beam consists of a thick plate for maximum resistance to bending forces with a machined seat to receive the bending blade.



The MTS Series incorporates a twin motor (Left and Right) direct drive system for the folding beam. This allows the system to be fast and extremely accurate. The twin motor design is capable of bending speeds up to 80 degrees per second. This design also eliminates torque build up commonly found on competitor's chain drive folders. Torque build on a chain drive design will lead to uneven or "fade out" bends. The "fade out" is especially noticeable, on chain drive machines, when forming radius profiles. The MTS result, straight more even part production. Another advantage to this system is maintenance. Unlike with a chain drive folder, there are no adjustments needed to the MTS drive system.

For maximum hemming capacity, a strong feature of the Tennsmith MTS Series is the center drive of the clamping system. The placement of the motor in the center of the machine maximizes power while reducing torque loss through the drive shaft. The twin support legs of the MTS provide positive resistance to the floor enhancing machine rigidity. The center placement of the clamping motor also benefits the forming of radius profiles. To achieve consistent radial shapes, it is very important to have even clamping pressure. Equal clamping pressure will ensure the part is formed evenly throughout the entire profile.

The MTS Series comes standard with crowning system. This crowning system gives MTS owners the most complete adjustment of any standard sheet metal folder on the market today. Gone are the days of shimming your machine to achieve straight bends. The crowning system is easily adjusted and has a scaled face plate that reads 0 to 0.030". This allows you to adjust your machine the same for a wide variety of materials time and time again. Another benefit of the MTS crowning system is radius profiles. With this set-up you will be able to accurately bend straight perfect radius profiles.

## SYNERGY CONTROL FEATURES

Synergy is the newest software designed for Tennsmith's line of powered folding machines. It is a highly advanced CNC system that takes the complexity out of programming and running parts. The full-color, graphical touch screen allows you to store, browse and search for parts, as well as create new parts on the fly.

- Windows 8.1 embedded industry pro.
- Automatic sequencing of the part that is drawn.
- Possibility of saving programs in folders and subfolders.
- 3D Part display.
- Part simulation to verify bends sequence, material handling and collisions.
- A search function is used to make it easier to identify a part.
- Calculates the stretch out of the part.
- Export of programs, library materials and back up to USB stick.
- The actual values of the axis are shown on the display, as well as the motion of the machine in real time.
- There are 3 different hems: Open Closed or Tear Drop.
- Capable of importing DXF files.
- Konstruct offline programming
- Konnect online service and operator assistance.
- Accepts Eagleview® files

With Synergy, you have the option to purchase Konstruct. The Synergy software brings together information from the office-based Konstruct program and the field-based Konstruct Mobile with Tennsmith's technical support program Konnect.



The back gauge for the MTS Series features a servo driven ball screw design. The system is fast extremely accurate and incorporates 14 solid fingers. All three drive systems of the MTS Series: Folding beam, Clamping Beam and Back-gauge are controlled by frequency inverters, giving the MTS unbeatable accuracy and performance.

The material support panels of the MTS are slotted. This allows the panels to be moved back for the bending of reverse or down flanges within the machine. Just one turn of the support panel knobs allows quick and easy adjustment.

## Features & Benefits

- > Energy-efficient electrical design
- > Direct drive Folding Beam with a speed of 90° per second
- > Fast ¾ hp servo driven Back Gauge motor for back gauge speeds of 0.375" to 61" in 2 seconds
- > Center drive Clamping Beam for even more clamping force
- > 126" bending length



The Tennsmith MTS control is easy to learn and easy to use. Even the most inexperienced operator can be trained to produce complex parts in minutes using the SBS system. While the SBS control is simple to use, it offers every tool necessary for producing the most accurate and complex parts of any light gauge folder on the market today.

MTS Series	<b>MTS126-14</b>
Capacity, Mild Steel	14 Gauge (2.0 mm)
Capacity, Stainless Steel	16 Gauge (1.5 mm)
Bending Length	126 in. (3200 mm)
Bending Bars - Standard	1 in (25 mm), 7/16 in (11 mm)
Crowning of the Folding Beam	3-Point 0°-0.030° Adjustment
Folding Beam Adjustment	1 in. (25 mm)
Folding Beam Speed	90° per second
Clamping Beam Tooling - Straight	30°
Kombi Beam Segmented Tooling (Max Box Depth)	4 in. (101mm)
Back Gauge Depth	61 in. (1550mm)
Back gauge Speed (0.375" to 61")	2 seconds
Clamping Beam Opening Height	7 in. (178 mm)
Clamping Beam Speed	2.5" per second
Back Gauge Motor	3/4 hp
Clamping Beam Motor	2 hp
Clamping Beam Motor	2 hp
Bending Beam Motor	2 + 2 hp
Working Height	34 in. (864 mm)
Dimensions, L x W x H	180 x 96 x 72 in. 4572 x 2438 x 1829 mm
Shipping Weight	9,985 lbs. (4529 kg)