TRIDAN

Durability. Dependability. Service.

INNOVATIVE AUTOMATION

TRIDAN LIVERNOIS

Better Together

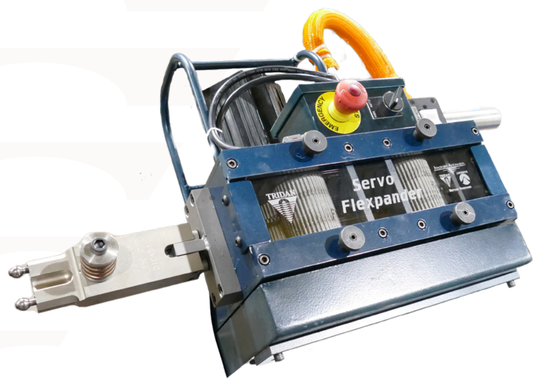
Servo Flexpander

Description and Specifications

For almost 50 years, the Tridan Flexpander has been recognized as the ideal means of flexibly expanding heat transfer coils for high model mix and moderate volume production applications. Its ease of use and performance make it the most widely used expansion system in the heat transfer industry. The Tridan Servo Flexpander expands on the capabilities of the Flexpander by allowing it to be used on thicker wall tubes and with new heat exchanger materials like mild steel, cupro-nickel, aluminum brass, and stainless steel. It also provides an unprecedented new level of control to improve performance, speed, adjustability, and efficiency.

The Tridan Servo Expander is the most flexible and powerful unit amongst the various coil expanders in our product line ranging for low to high volume systems.. It provides portability along with simple configuration, rapid adjustments, and high speeds needed for running the higher model mix production inherent in today's heat exchange industry.

Features of the Servo Flexpander



- Highly flexible operation that allows the operator to control which tubes in the coil are expanded in any sequence.
- Versatility in operation by allowing the expansion of tubes in a variety of fin patterns.
- Agility in operations allowing different models of coils to be expanded consecutively.
- Capability to expand a wide variety of materials from aluminum and copper to mild steel and stainless steel at high expansion speeds.
- Excellent quality due to precise control of the rod, tip, and jaw function providing excellent tube to fin bond and control of final coil dimensions.
- Configurability for a wide range of tube sizes/tube center distances through simple tooling changeovers which are field upgradable.
- Available in Standard, Wide, and Extra Wide Format allowing for up to 12 tube expansions per cycle with pushbutton adjustment of expansion length for precise expansion control.

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The following are general specifications. We will gladly customize any of our systems to meet the unique requirements of your unique application.

Tube Inside Diameters	1/4" to 3/8" (6.35mm to 9.53mm) with our SSFE-3 version with 1/4" Rods. 3/8" to 3/4" (9.53mm to 19.05mm) with our SSFE-4 version with 3/8" Rods.
Tube Materials	Copper, Aluminum, Mild Steel, Cupro-Nickel, Stainless Steel, and others possible.
Maximum Tubing Wall Thickness	0.050" (1.27mm) for Copper, 1/4 to 1/2 Hard 0.050" (1.27mm) for Al, 1/4 to 1/2 Hard 0.050" (1.27mm) for Cu-Ni 10%, Red Brass, Annealed Mild Steel, or Aluminum-Brass
Standard Tube Center to Center Dimensions	3/4" to 3" (19.05mm to 76.2mm)
Maximum Standard Expandable Fin Length	Virtually any length can be accomodated
Tubes Per Cycle	Two or more dependent upon center-to-center distance. Up to twelve tubes per cycle for the Extra Wide Servo Flexpander
Minimum Required Tube Extension Outside of End Sheet for Clamping	3/4" (19.05mm) for all diameters with approximately 1/4" (6.35mm) for bell length.
Maximum Width of Adjacent End Sheet Flange Required for Clamping	1.375" (34.9mm)
Expansion Speed	Up to 60 ft/min (15M/min) for all materials and wall thicknesses.
Setup and Changeover Times	15 Minutes for Complete Change 15 Minutes for Center-to-Center Change 8 Minutes for Outside Diameter Change 3 Minutes for Wall Thickness Change "Pushbutton" change for expansion length
Electrical	3 Phase Power at 9600 Watts Please note that various power configurations are available based upon location.

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