

The Chase FS-180 Inverted Sealer Ultrasonic Fabric Sealing System

General Description

The Chase FS-180 Inverted Ultrasonic Fabric Sealing System will "sew" and/or slit knitted, woven, and non-woven man-made thermoplastic materials without needle or thread. Material can be processed at rates up to 42 surface feet (12.8 m) per minute. The Chase FS-180 system differs from Chase's FS-90 in that the welding head is located beneath the table surface. This gives the operator greater visibility of the sealed area.

The Chase FS-180 Inverted Sealer is a sealing unit that can be mounted in a fabric handling system, and includes a variable speed drive mechanism; pneumatically activated sealing wheel arm; drive motor; control box; and foot switch or start circuitry to lower and rotate the sealing wheel and start ultrasonics.

The Chase FS-180 Inverted Sealer is a stand alone system in a sewing table and uses a Model 2000bdc 1100-watt ultrasonic power supply (includes a converter, booster) and 1" diameter button horn. The appropriate sealing wheel, with configuration dependent upon the specific application is not included. Various sealing patterns are available, including standard single stitch, dot, right or left slant, zigzag, or custom-designed patterns at an additional expense. External amplitude (output) control is also available.

The Chase FS-180 Inverted Sealer may be integrated into automated production lines by eliminating the foot switch and providing a start switch to the power supply.

Applications and Process Advantages

Materials suitable for processing with the Chase FS-180 Ultrasonic Fabric Sealing System include 100% synthetics, such as nylon polyester, polypropylene, polyethylene, modified acrylics, vinyl, urethane, and synthetic blends with up to 40% non-synthetic fiber content (dependent upon the application). Some blends with up to 50% non-synthetic fiber content have been processed. In addition, a variety of films and coated papers may be processed.

Machine configuration and the location of the anvils enable flexibility and tight turns in sealing or cutting.

FOR MORE INFORMATION on the Chase FS-180 Inverted Ultrasonic Fabric Sealing System and the Chase FS-90 Ultrasonic Fabric Sealing System or Chase Machine & Engineering's Ultrasonic Slitters, Tube Formers, Cut-To-Length, Filter, and Laminating Machines or other custom continuous web machinery please call Guy Gil, National Sales Manager.



The Chase FS-180

This also provides an unobstructed view of the fabric in the processing area.

Typical applications for the systems include protective garments, disposable hospital gowns and shoe covers, face masks, infants' nursery garments, filters, bags, curtains, sails, and web splicing. Sealed edges with no stitch holes prevent penetration of chemicals, liquids, blood pathogens, or particulates, thus providing a benefit over conventional stitching methods. With ultrasonic slitting, the edges are sealed as they are cut, providing smooth, clean, even edges with no bead.

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Key Features

- **Two position foot switch** — First portion of depression raises and engages the rotary wheel applying force to the material being processed; second portion activates ultrasonics and wheel rotation.
- **Operator safety** during use — no needles or other moving parts above the work surface.
- **Variable speed drive motor** provides continuous operation at speed ranges of 0 to 42 ft./min. (0 to 12.8 m).
- **Operator selectable maximum operating speed** enables operator to set the maximum feed speed at the fully-depressed foot switch position setting.
- **Operator controls** conveniently located on the front of the machine, including pneumatic pressure regulator gauge; on/off switch; and power on indicator.
- **Visibility** — The stack and horn are mounted beneath the table for clear operator visibility.
- **Standard sewing table** with adjustable height.
- **Variable sealing widths** — single arm width of up to 3/4 inch (6.35 mm).
- **Optional back puller.**

Warranty

The Chase Model FS-180 Inverted Ultrasonic Fabric Sealing System carries a one-year warranty on all parts and workmanship. The Model 2000bdc carries a three-year warranty on materials or workmanship. This warranty applies to equipment purchased in North America.

For More Information

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Find us on the web at www.chasemachine.com

Mechanical Specifications

Pneumatic Requirement:

80 psi clean, dry air

Sealing wheel force against face of horn: Variable
1 to 50 lbs

Dimensions:

Model FS-180:

Height: Adjustable
Width: 22" (559 mm)
Depth: 15" (381 mm)

Model 2000bdc Power Supply:

Height: 6 1/4" (159 mm)
Width: 16 5/8" (422 mm)
Depth: 19 3/8" (492 mm)
plus 3" [76 mm] cable clearance

Sewing Table Option:

Height: adjustable
Width: 48" (1,220 mm)
Depth: 26" (660 mm)

Electrical Specifications:

Power Requirements:

Model FS-180: 117V AC, 1 phase, 5 amp,
50/60 hz

Model 2000bdc: 100-120V AC, 1 phase, 13 amps,
50/60 hz

Power supply electrical connection:

NEMA 5-15P plug provided,
requires NEMA 5-15R
receptacle

Note: For complete power supply information, refer to Branson data sheet 2000bdc.