

# The Chase FS-90 Ultrasonic Fabric Sealing System



*The Chase FS-90 shown with optional table*

## General Description

The Chase FS-90 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 60 feet per minute. Higher speeds, up to 123 feet per minute, can be achieved with modification to the equipment.

The Chase FS-90 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 raise and rotate the sealing wheel and start ultrasonics.

The Chase FS-90 is a stand alone system and can be used with the Model 2000bdc 1100-watt or Model 2000LP 500-watt ultrasonic power supply (includes a converter booster and horn). Various sealing patterns are available, including standard single stitch, dot, right or left slant, zigzag, or custom-designed patterns at an additional expense. The Chase FS-90 may be inserted into an optional sewing table.

The Chase FS-90 system may be integrated into automated production lines by eliminating the foot switch and providing a start signal to the power supply.

## Applications and Process Advantages

Materials suitable for processing with the Chase FS-90 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, films and coated papers may be processed.

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

cutting. 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 or bulk.

**FOR MORE INFORMATION** on the Chase FS-90 Ultrasonic Fabric Sealing System and the Chase FS-180 Ultrasonic Fabric Sealing System Inverted Sealer 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.

## 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 60 ft./min. and 7 to 123 ft./min.
- 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 control panel, including pneumatic pressure regulator gauge; on/off switch; power on indicator; and nip control.
- Stainless steel table surface.
- Optional dual sealing arm adds capability of supporting up to three-inch wide sealing or lace making wheel, or enables dual sealing and slitting.
- Optional slitting wheel mechanism separate from sealing mechanism for individual control and longer anvil life.

## Warranty

The Chase Model FS-90 Ultrasonic Fabric Sealing System carries a one-year warranty on all parts and workmanship. The Model 2000bdc and 2000LP carries a three-year warranty on materials or workmanship. This warranty applies to equipment purchased in North America.

## For More Information

Call (401) 821-8879

E-mail [guygil@chasemachine.com](mailto:guygil@chasemachine.com)

Find us on the web at [www.chasemachine.com](http://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-90:

Height: 25 1/8" (638 mm)

Width: 30" (762 mm)

Depth: 22" (559 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

#### Model 2000LP Power Supply:

Height: 9" (229 mm)

Width: 7 3/4" (197 mm)

Depth: 13 1/2" (343 mm)

plus 3" [76 mm] cable clearance

#### Sewing Table Option:

Height: adjustable

Width: 48" (1,220 mm)

Depth: 27" (686 mm)

## Electrical Specifications:

### Power Requirements:

Model FS-90: 100-130V AC, 1 phase, 5 amp,  
50/60 hz

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

Model 2000LP: 100-120V AC, 1 phase, 7 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 and Branson data sheet 2000LP