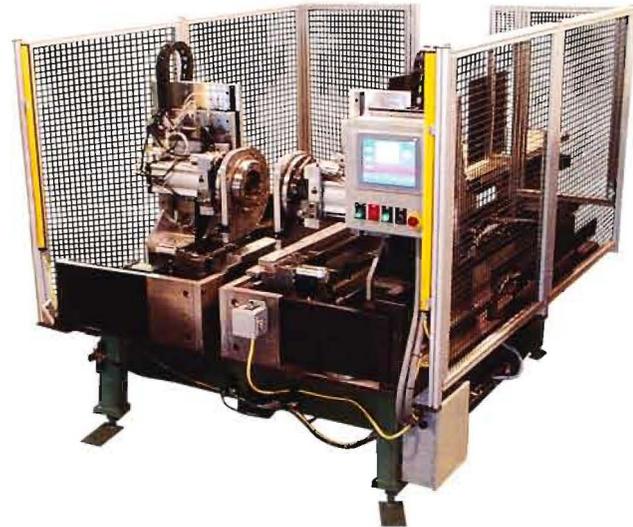


BLOWER HOUSING WRAPPER & ASSEMBLY UNIT

Blower Housings

Complete Form & Assemble System

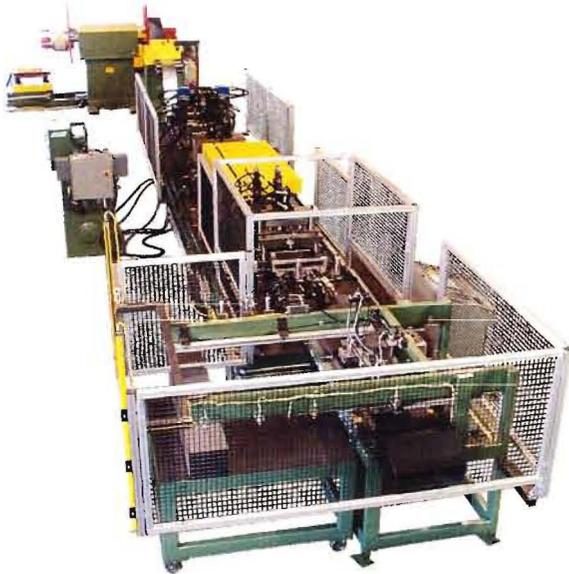
- ◆ Special Patent Pending Tab-Lock Design.
- ◆ Programmable Assembly Unit Produces Assembled & Seamed Blower Housings in a wide range of Diameters, Widths and Styles on one machine.
 - ◆ Less than 20 second cycle time.
- ◆ Quick-change tooling & programmable set-ups produces a variety of styles & sizes in minutes.
- ◆ User Friendly Touch-Screen Controls.



Outer Wrappers

Complete Coil Feed System

- ◆ Punches, Notches, Embosses, Seams & Flanges the Wrappers in a variety of Lengths, Widths & Patterns.
- ◆ Variable Width Quick Change Rollformer & Dies.
 - ◆ Completely Programmable.
 - ◆ Many options to choose from.



CUSTOM ROLLFORM PRODUCTS, INC.

3991 Green Park Rd.
St. Louis, MO 63125
www.customrollformproducts.com



MADE IN USA

Phone: 314-894-3903
Fax: 314-631-3003
sales@customrollformproducts.com

"Quality Designs Means Production You Can Afford"

BLOWER HOUSING ASSEMBLY MACHINE (NEW LANCE, SLIT PUNCH SEAM CLOSING)

The Assembly Machine is designed to form the Blower Housing Wrapper around the two (2) Blower Housing sides, lock seaming them together to produce a completed Assembled Blower Housing Unit. As the Wrapper is formed around the Blower Housing sides our new Lance and Slit Punch Roll interlocks and joins the seams together. Both sides are seamed simultaneously as the Housing is rotated 180° to 210°.

In the Blower Housing Industry most Assembly Machines are designed around a specific style, diameter and depth (width). The Blower Housing Manufacturer needed to buy a special Assembly Machine for each variable style or type of Blower Housing used. Our new Design Application allows for a much more flexible machine design to compensate for most of the variables within a given family or grouping of Housing Applications.

The basic unit consists of two (2) opposed Rotary Actuator Units and two (2) sets of Rotary Lance and Slit Punch Roll Units. One (1) Rotary Actuator and one (1) set of Lance / Slit Rolls are fixed positioned on the frame weldment. The other Rotary Actuator and set of Lance / Slit Rolls are mounted on horizontal slides to adjust for a wide range of housing depths or wrapper widths.

The two (2) opposed Rotary Actuators are fitted with fixtures to hold the Left and Right Hand Blower Housing sides in place through the Seaming Feed Cycle. Each fixture is designed to handle a variety of Housing ventura diameters along with other variations within the Housing Designs and Styles. The Rotary Actuators are designed to hold the Blower Housing Sides in place and inline with the Lance and Slit Rolls.

The Rotary Actuators simultaneously rotate the Blower Housing Sides feeding the Blower Side edges into the Wrapper Seam and the Lance – Slit Punch Rolls. As the Housing Sides rotate they follow the parabolic curvature of the Blower Housing Sides holding them tight into the Wrapper Pocket as the form rolls locks and seams everything together.

The two (2) sets of Horizontal Lance – Slit Rolls are positioned inline with the Blower Housing Sides and the edges of the Wrappers. When lock seaming the Wrapper the straight flanges of the Blower Housing Sides the sides are held in a fix position and the rolls travel down the flange. Once the straight flange is formed the rolls are fixed positioned inline with the Rotary Actuators. The part is then rotated to seam and lock the radius of the Housings.

With the machine set up for the proper Blower Sides and Wrapper, the operator will load both the Left and Right Blower Sides onto the respective Rotary Actuator fixture plate. The Pre-Rollformed Wrapper will be set into the guides positioning it inline with the Blower Housing Sides and Lance – Slit and Punch Roller Sets.

Once the operator starts the automatic cycle, the Blower Side will lower into the Wrapper Pocket, the Lance Slit Punch Rolls will feed around the perimeter of the Blower Housing Assembly forming a completed Blower in a single Feed Form Cycle.