

**STOVE
MANUFACTURER
DRAMATICALLY
INCREASES
PRODUCTIVITY
WITH FINN-POWER
TURRET PUNCH PRESSES**

FINN-POWER®
Englander

England's Stove Works Inc., Monroe, VA, is a leading manufacturer of pellet, wood, gas, and multifuel-burning stoves. The company was founded in 1975 by Bob and Ron England, who began making stoves in their backyard. England's Stove Works has experienced steady growth from the time when production was only one or two stoves per day to the present daily volume of 300 - 400 units. The company is adding a 75,000 square-foot-facility a few miles from its existing plant for painting & finishing and shipping operations.



Bob Dillard, vice president & plant manager (left) and Dan Hammond, plant maintenance manager. Ron England purchased his first Finn-Power Express in 1998.

Englander and Summers Heat stoves are sold through large retailers such as Ace Hardware, Home Depot, Lowe's, Southern States, Sutherland's, True Value, Ziegler Lumber, and many other dealers. The company says that the reason for its products' popularity is simple: *We believe in making available a quality product at a great price. Our products are among the most competitive priced on the market...and have been for years.*

The management of England's Stove Works also takes great pride in their advances in design and environmental concerns. An article in the January, 2006 issue of *HEARTH & HOME* magazine listed England's Stoves Works as one of the wood stove manufacturers recognized in the *Certified Stoves Hall of Fame* for exceeding EPA emission standards.

In 1998, the company introduced a new pellet stove – the PDVC – which quickly became a best seller. In order to keep up with demand for that product, and stay competitive in the industry, England's Stove Works had to

"The Finn-Power turrets are the heartbeat of our company."

invest in new fabrication machinery. "At the time, we were new to punching," explains Dan Hammond, plant maintenance manager. "We had an older technology single station press. We needed to upgrade our punching and bending operations." After an extensive search, the company purchased a Finn-Power F5 Express – load, punch, unload. "We use the F5 on heavy gauge steel," Hammond continues. We run a truckload of 7 gauge steel a day on the F5. We are impressed with the longevity of the F5 – we literally processed millions of 7 gauge sheets through it."

When the company needed an additional turret punch press in 2005, England's Stove Works once again chose Finn-Power – this time a C5 Compact Express. "Finn-Power has been great to work with," says Hammond. "From the president to the service technicians, Finn-Power has earned our trust and our business. We had faith in the Finn-Power equipment and service from past experience, and we were quite confident with our decision to invest in another Finn-Power turret punch press."

C5 Express

In July, 2005, the Finn-Power C5 Compact Express was installed at England's Stove Works. The C5 Express adds unmanned operation to the C5 turret punch press through highly compact load/unload automation. The unit's loading /unloading solution utilizes the space above and below the machine – requiring only slightly more space than a turret punch press. It is fast, with simultaneous loading and unloading during processing, accurate, and it does not limit easy manual operation.

The 20-station, 33-ton C5 hydraulic turret punch press has a maximum sheet capacity of 50" x 100" and is available with either Siemens or Fanuc controls.

Tooling flexibility is also important to England's Stove Works. Up to 10 auto-index and Multi-Tool® holders may be installed in a Finn-Power turret. England's Stove Works has six auto-index stations and one 10-station Multi-Tool in the C5. Unique to the C5 turret punch press, full tonnage indexable upforming allows complex forming operations to be made quickly by using a single forming tool. An index mechanism is used to turn the forming tool into an NC programmed angle.

Another Finn-Power C5 feature important to England's Stove Works is the brush table. "The brush table allows us shake out when we want them out," explains Hammond. "We put a small micro-tab in the heavy material and the brush table keeps the part in place through unloading. Other benefits of the brush table include noise reduction and no scratches when we run aluminum or stainless steel parts."

Finn-Power's upforming feature provides a precise process for knock-outs, louvers, and other forming. Finn-Power resolved the conventional problem of the die height impeding free sheet movement. Finn-Power's design allows forming heights up to 16 mm (0.62") with the forms made



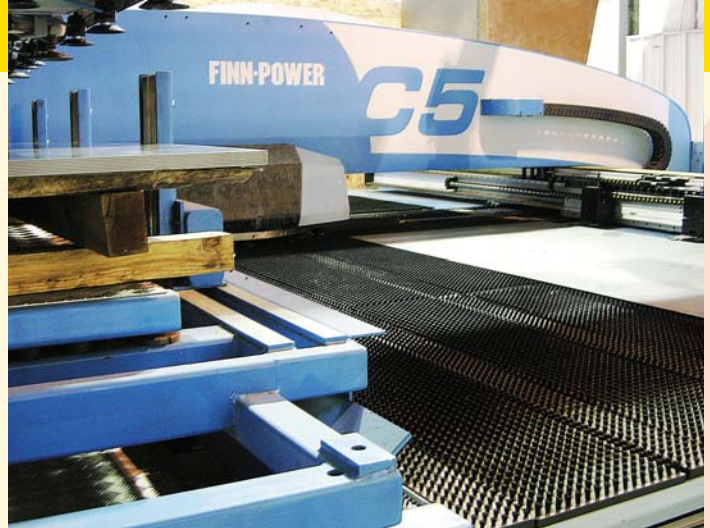
by the die moving upwards and then retracting, allowing completely free sheet movement, eliminating scratched or jammed sheets.

Other features of the C5 turret punch press include:

- ▲ **Super Fast Servo Hydraulic Punching** – Nibbling speeds up to 1100 hpm. The servo-controlled ram, stroke speed, and position are fully and individually adjustable in both directions. Another benefit is different punching modes (punch, Quiet Punch™, downforming, and marking).
- ▲ **Easy Loading** – Four optimally-positioned gauge pins allow easy loading of blanks or full-sized sheets. Sheet loading is performed with a simple push and always close to the table edge. Sheet supports rise from the table to allow easy positioning of heavy material.
- ▲ **Efficient Unloading** – The C5 delivers the processed components to a freely programmable position on the table, increasing the operator's efficiency. The entire material flow on the C5 can be conducted from just one side. This allows simple and efficient logistics and enables the machine to be positioned anywhere on the shop floor – even in a corner.
- ▲ **Automatic Clamp Setting & Movement** – Finn-Power's patented automatic clamp setting PCS is a standard C5 feature. It automatically positions sheet clamps according to the numerical program, virtually eliminating punching of the clamps. When changing production from full size to small sheets, clamp settings can be made automatically without wasting operator time.
- ▲ **Catch & Carry Work Chute** – Finn-Power's "Catch & Carry" work chute is not just a drop door or a work chute in the ordinary sense. Its mechanism allows the reception of several components to 19.7" x 19.7" in size onto a level from which they subsequently exit from the machine as a stack.

Around-the-Clock Operation

During the busy season – April through December -- both the Finn-Power F5 Express and the C5 Compact Express operate 24/7. "The Finn-Power turrets are the



The C5 Compact Express features a 20 station, 33-ton hydraulic turret punch press and highly compact load/unload automation

"We've become Finn-Power addicts because these machines have allowed us to compete in the world of large retailers."

heartbeat of our company," says Hammond. "We've become Finn-Power addicts because these machines have allowed us to compete in the world of large retailers. We've grown dramatically since we've installed the Finn-Power turrets. We can't...and we don't...ship late. Our customers score us on our deliveries.

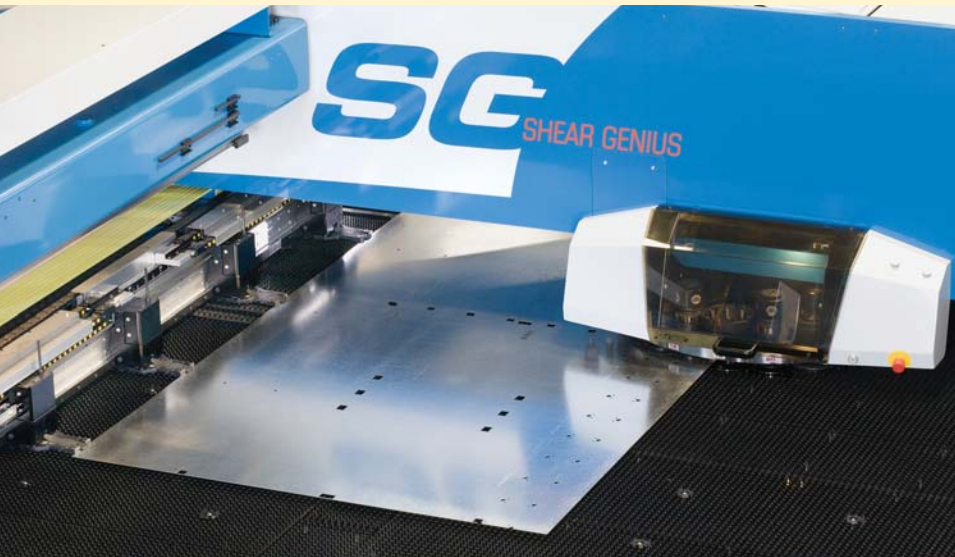
If you ship late, not only do you pay a fine...you may not be there next year."

England's Stove Works still out-sources nearly 50% of its punch/bend fabrication. "Our eventual plan is to do all fabrication in-house," says Hammond. "We are looking at additional automation with either the Finn-Power Laser Punch or Shear Genius to help us reach the next level."



The management of England's Stove Works Inc. estimates that it has processed millions of 7 gauge sheets on Finn-Power turret punch presses.

STOKING THE FLAME OF PRODUCTIVITY...



There are many choices when purchasing sheet metal fabrication equipment. At first glance, much of the equipment from different builders may appear to be similar. However, with closer inspection, and a little homework, the differences are quite apparent.

A new generation of fabrication equipment is now available to provide enhanced productivity, quality, and opportunities for the fireplace, patio, and barbecue industry.

Finn-Power offers a full range of sheet metal fabrication equipment from stand alone machines to full Flexible Manufacturing Systems for Lean Manufacturing. Finn-Power can help your company fabricate the sheet metal products you bring to HPBA EXPO 2007 faster, with lower production cost, and higher quality.

We are members of HPBA and have extensive experience in your industry. Finn-Power provides flexible solutions to

increasing your manufacturing productivity.

Contact us and we will demonstrate how **"Stoking the Flame of Productivity"** with Finn-Power machines, cells, and systems can pay handsome dividends for your company.



FINN-POWER

Finn-Power International, Inc.

710 Remington Road
Schaumburg, IL 60173 USA
tel 847 885 3200
fax 847 885 9692
www.finnpower.com

"With the help of Finn-Power, our company has been transformed from a small, technologically-deficient shop to one that is highly rated among the most modern plants in the region. Finn-Power has been one of the keys to the success of this company and has supported our growth in terms of technology, quality, and production."

- Western Canada Stove Manufacturer

