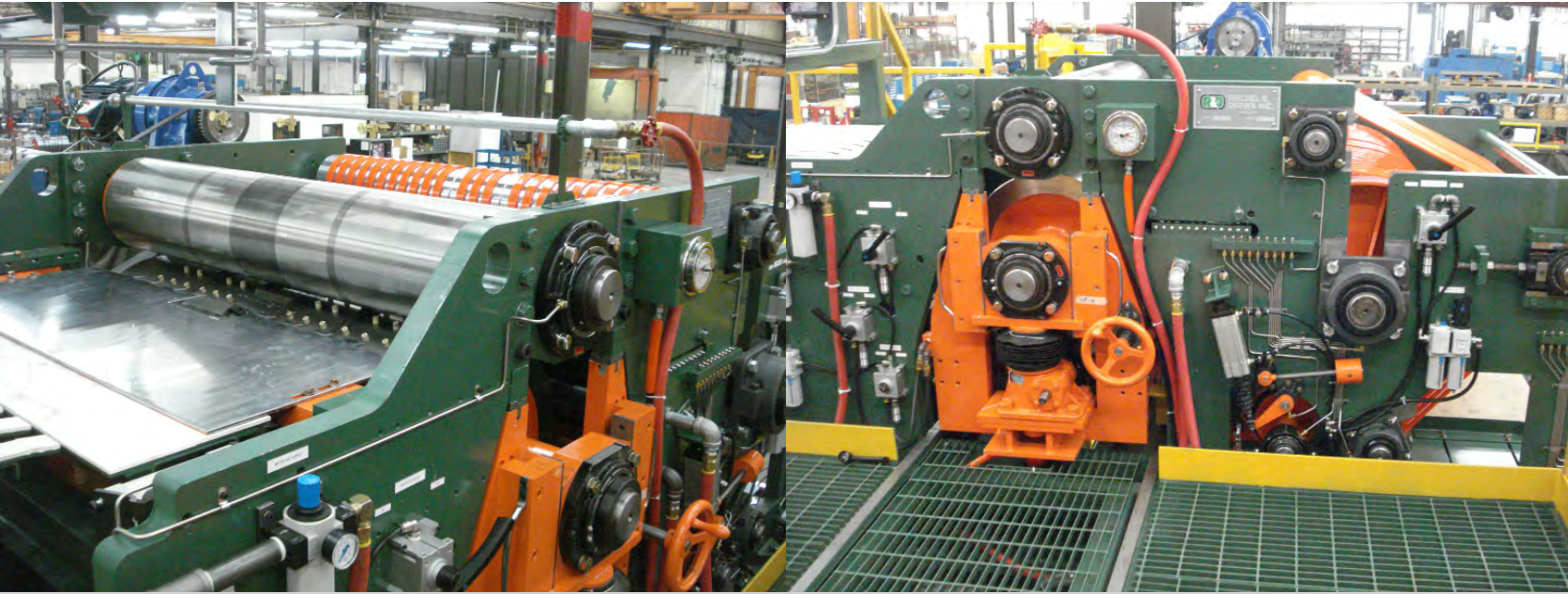


# Cutting Systems



Advanced cutting systems for precision high speed production of shingles. Various Cutter models are available depending on the type of shingle to be produced.

# Performance Driven Cutters

## Pattern Cutters

Measuring drum or measuring roll Pattern Cutters accurately cut just about any shingle pattern at speeds of up to 1000 fpm (305 mpm). Features include a roll-in, roll-out cutting cylinder carriage which makes knife replacement and cutting cylinder change out quick and easy. The carriage incorporates 2" (50 mm) thick side frames for maximum rigidity necessary at high speeds and inertias. Entry guide roll with independent flange adjustment or tandem movements.



## Cut To Length Cutters

When it comes to accurate, reliable cut to length cutting of laminated shingles nothing outperforms the Reichel & Drews CTL Cutter. The CTL cutter utilizes an advanced independent laminated sheet, feed and alignment system for precise length control at speeds of up to 1000 fpm (305 mpm). Features include a roll-in, roll-out cutting cylinder carriage which makes knife replacement and cutting cylinder change out quick and easy. Driven exit nip roll for consistent spacing, delivery and downstream diverter detection.

## Strip Shingle Cutters

For the production of the more basic strip shingles three different models of cutters are available.

### HD Model

Our HD model series of Strip Shingle Cutters is designed for high-speed continuous duty applications. Servo driven measuring rolls provide precise length control. The HD series features roll-in, roll-out cutting cylinder carriages for quick change over between patterns and 2" (50 mm) side frames for rigidity at high speeds and inertia's.

### SD Model

For lower speed applications we offer the SD model series which has a fixed cutting module with precision roller bearings mounted on a welded structural steel tubular frame. The cutting module incorporates manually operated hand wheel gap adjustment between the cutting cylinder and anvil roll. An optional quick-change cutting module feature is also available.

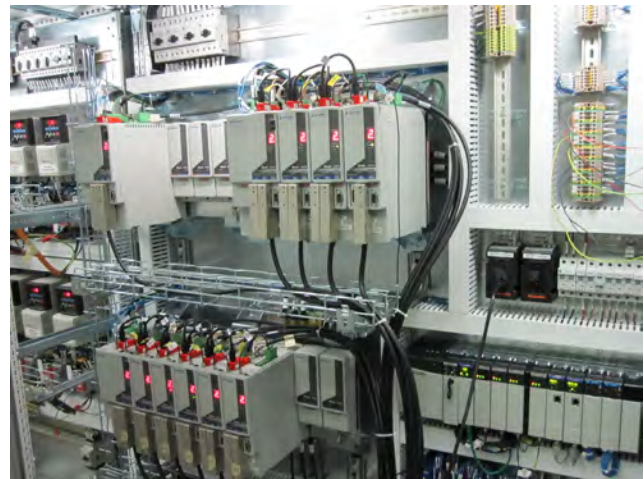
## LD Model

For companies just entering the shingle manufacturing market and looking for a low cost investment we offer our LD model series which has a fixed cutting module with bronze bushing style bearings and jack screw adjustment of gap between the cutting cylinder and anvil roll. In addition, a catch pan is incorporated into the design for manual counting of the cut shingles.

## Drives & Controls

All of our cutters utilize the latest in drives and control technology

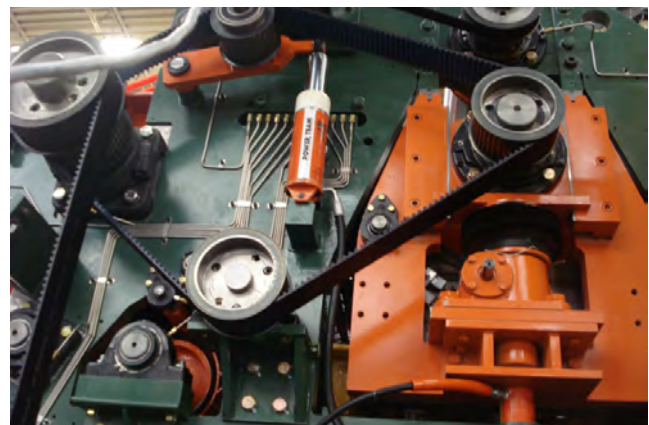
- Allen Bradley ControlLogix PLC with Ethernet and Profibus cards or Siemens S7 PLC with Ethernet and Profibus cards
- Allen Bradley or Siemens servo motors and amplifiers
- Profibus for servo drive communication
- Remote I/O with Ethernet communication
- Panelview Plus 1000 or Siemens MP 277, 10" color touchscreen for main operator interface
- Air-conditioned control panel
- Completely wired and factory tested



## Advanced Cutter Jam Detection

The advanced jam detection capabilities of our control system reduce down time.

- Cutter jam is detected with photo eyes at the exit of cutter
- Jammed Cutter will come to an immediate stop
- Pattern Cutter and Laminator Sections will ramp down with their process stop time
- Measuring and Marriage Rolls will automatically open
- After a jam is cleared, the operator closes the Measuring and Feed Rolls with HMI pushbutton
- The fault will be cleared from the HMI control pushbutton and the line can then be restarted



## Automatic Knife Gap Adjustment

The optionally available automated knife gap adjustment system reduces the need for human intervention and improves overall reliability of the cutting process.

- Cutting Cylinder will have the ability to adjust the height of the knives through the use of two servo drives/motors.
- Servo motors replace manual carriage adjustment.
- A preprogrammed circuit monitors the rotation of the cylinder and periodically raises the cylinder during cutting operations. Manual override of the system is standard for carriage setup.

## About Us

In 1902, inventor Hugo Reichel and machinist Fred Drews combined their considerable talents and experience and started a company with a guiding principle that remains as firm today as it was then: A blend of quality products, innovative solutions and customer service to help our clients improve productivity and profitability.

In the competitive marketplace of the 21st century, Reichel & Drews is the global leader for asphalt and modified bitumen roofing production machinery, not just because of the unrivalled quality of the equipment we manufacture, but because of our focus on customer service as well. We act as our customers' partner in productivity from beginning to end. Is it any wonder that we're honored by such a distinguished list of long-time customers?

What's our secret? Simple. We listen to our customers, then utilize our team of experts in equipment design, control systems, manufacturing and installation to develop and build solutions that help our customers increase uptime, reduce costs and maximize both quality and production speeds... in short, consistently improving customer productivity and profitability. We achieve this by utilizing today's most advanced technology, today's most inventive problem-solving methods and today's most visionary thinking.

From complete shingle and roll production systems to individual machines, we stand behind our products, our service, and most of all, our customers.



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