Machinery and Control Systems for the Roofing and Waterproofing Industry
Since 1902

Count on Reichel & Drews

The experts at Reichel & Drews have been designing and building efficient, reliable and easy to maintain systems with advanced integrated control technologies that allow roofing material and waterproofing manufacturers to meet their customers’ needs by consistently producing high quality, products.

Each of our systems and individual machines are designed to provide maximum value through increased productivity and reduced maintenance requirements. Our understanding of the manufacturing processes, our superior control system designs and our responsiveness to customer’s needs is what makes Reichel & Drews the clear choice for improving your productivity.

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. We act as our customers partner in productivity from beginning to end.

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. 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.
For over 110 years Reichel & Drews has been innovating better machines and processes for asphalt shingle and modified waterproofing membrane production. Our goal is to create competitive advantages for our customers through innovation and technological leadership. Our contributions to the industry have resulted in lower production costs, improved production quality, increased safety and a reduced impact on our global environment.

Some of our many innovations and contributions include:

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<th>Year</th>
<th>Innovation</th>
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<td>Shingle Cutter</td>
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<td>1938</td>
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<td>1962</td>
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<td>2003</td>
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<td>2008</td>
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<td>2011</td>
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Automatic Chip Board Feeder for Pallets

Cutting Module for Carbide Knives
Whatever shape, size, thickness, texture or look you’re planning, our team of design, control and sales engineers stand by you every step of the way, committed to excellence of product and productivity.

**Granule Blenders**

Bottom line benefits of superior blended-color shingles:
- Unique customized granule blenders and handling processes
- Flexibility, cost reduction, more efficient granule application
- Capability of quicker changeovers between products

**Cooling Systems**

Efficient cooling is the key to maximizing production output, and our cooling sections utilize the high efficiency of vaporized cooling to do the job quickly and cost-effectively.
- Water-cooled rolls
- Precision spray nozzles and air knives to cool the membrane
- Proper granule adhesion through our exclusive, pneumatically-controlled press roll assembly

**Shingle Cutting**

Shingle-cutting is one of the most crucial steps in the manufacturing process. Our cutting cylinders and shingle knives are the most precision-manufactured and dependable in the industry.
- Almost any pattern, shape and size can be cut
- Cutting cylinders made of 1045 forged steel for maximum wearability
- Precision fit and interchangeability of parts
- Assembled by master craftsmen
- Fast and easy replacement of parts
Bundle Palletizing Systems

We’ve been an industry leader for decades in shingle bundle palletizing system design. Our newest Bundle Palletizer features:

- 50 bundles per minute
- Precision servo control
- Durability, consistency and reliability
- Fewer parts and reduced maintenance
- Lower operating costs, simplified installation

Laminated Shingle Manufacturing Systems

You can enjoy complete freedom of designing, producing – with full or partial underlays – any combination of thicknesses, cuts, sizes or patterns without the need to replace machinery.

- Replicate the look of wood, slate or tile
- Precision servo control
- Reliable, repeatable synchronization
- In-line system, convertible, offline, and differentiated layer technology systems

Shingle Stacking Systems

We offer a wide range of stacking systems designed for the particular production process.

- Near-Far systems for both Laminated and 3-Tab Production
- Configurable Systems from 3 to 4 lane production
- Catcher-Flipper-Stacker Systems for West Coast Packaging
- Dual star wheel catcher for improved reliability and increased up time
- Production rates up to 1000 feet per minute
- Low maintenance
- Latest servo drive technology
- Robust design for longevity
Our mixing systems make it easy and economical for any supplier to modify bitumen with polymer in order to meet today’s demanding specifications.

Reichel & Drews offers Modified Membrane systems with versatile production capabilities to enable a mix of product types, line speed and membrane quality. This is why we offer the most manufacturing flexibility and quality for such applications as flat roofs, pitched roofs, curved roofs, shed roofs, roof gardens, roofing detail, plaza decks, parking decks, metal decks, sub-flooring-waste management, reservoirs, road resurfacing, tunnels, subways, bridges, foundations and more.

Whatever the magnitude of the job, we’re ready with the right equipment and the strong support team to cover the smallest process details to complete production facilities.

What makes our Modified Bitumen Membrane systems stand out? An outstanding set of highly advanced and rigorously-tested features.

First, our state-of-the-art mixing technology has been developed to accommodate your membrane design requirements and production rates. Then, our exclusive computerized mixing process control system produces consistent, top quality compound, batch after batch. That’s because weight, temperature, time and compound-flow are strictly and accurately monitored, controlled and recorded by the mixing control system.

Next is our unique saturation and coating process, which forms a uniform membrane with adjustable and accurate mat placement so that varying product requirements are easily accommodated. Top and bottom coating thicknesses are precisely controlled. Finally, our uniquely designed custom edge scrapers form smooth, clean membrane edges of uniform thickness to the membrane mass.
For the production of high quality carrierless membranes and specialty membranes, Reichel & Drews offers its exclusive System 3000 Cooling Belt and Coating Box Technology.

With this advanced multi layer coating system it’s easy to produce a wide assortment of carrierless, multi-carrier and self-adhesive membranes that cannot be produced on standard modified membrane production lines.

With our exclusive system you can produce:

- Carrierless membranes
- Multi-carrier membranes
- Single coating membranes
- Multi-coating membranes
- Application of self adhesive layers
Reichel & Drews impregnation technology offers many advantages over traditional systems.

- Increased penetration of impregnation bitumen
- Optimal pressing out of the impregnation bitumen
- Reduced thermal stress
- Reduced volume
- Reduced energy usage
- Modular design
- Ability to combine multiple units

**Impregnation/Saturation**

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- Optimal pressing out of the impregnation bitumen
- Reduced thermal stress
- Reduced volume
- Reduced energy usage
- Modular design
- Ability to combine multiple units

**Coating**

With more than a century of experience in developing, engineering and building production systems for the asphalt roofing industry, Reichel & Drews has created exclusive Coating systems that represent state-of-the-art quality and productivity.

Whether you are looking to produce asphalt shingles or modified bitumen membranes Reichel & Drews has the coater to meet your demanding needs.

- Single compound units
- Dual compound units
- Multi layer coating units

All of our coaters offer features that simplify operations, decrease maintenance and produce high quality compounds. These features also include:

- Accurate temperature control of each compound and reduction in volume of compound held in the coating tank
- Reduced energy required to heat each tank provides greater safety to the operator

Our exclusive multi layer coating units offer...

- Application of different compound formulations
- Multiple layers of different coatings on the same side
- Maximum flexibility for manufacturing modified bitumen membranes of many combinations
Roll Wrapping

For production applications requiring the wrapping of wound rolls in paper rather than tape, Reichel & Drews offers a Roll Wrapper that handles a wide variety of roll diameters and paper wrap widths.

- Vacuum table system that eliminates paper control problems
- Innovative combination of driven belts feed the wound roll
- Use of vacuum technology provides superior cut paper control
- Effects of wrap curl, twisting and skewing are all eliminated, providing a reliable wrap
- Handle up to a 1.37m (54") diameter preprinted roll.
- Hot melt adhesive technology

Core Inserters

Our state-of-the-art Core Inserters automatically place a cardboard core into the center of the wound roll of modified bitumen product, thereby eliminating manual operation, increasing production throughput and improving product stability for palletization.
Bitumen Mixing Systems

Our entire line – from the largest to the smallest capacity of mixing systems for both roofing and road paving (e.g. high-capacity stationary systems, medium capacity pre-assembled systems, mobile and rental systems) – concentrates on preassembled equipment with the ability to produce a large number of polymer and additive combinations. In addition, our modified bitumen premixing systems reduce mix times by up to 30% and improve the quality of the final compound.

Roll Palletizers

Reichel & Drews’ fully electric Roll Palletizers gently place rolls onto each pallet, helping reduce roll toppling (and the downtime associated with it). Each unit is configurable to individual applications and has low maintenance requirements.
**Winding**

The Reichel & Drews RW20-Series Roll Winder features:
- Advanced AC servo drive technology
- Tightly-wound rolls with tight length control
- Optimum performance and dependability
- Speeds of up to 15 rolls per minute
- Length tolerance as tight as 10mm (±3/8”)

**In-Line Taping Units**

Our advanced In-Line Taping systems allow:
- Taping of wound rolls separate from the winding operation
- Freeing up the Winder to begin winding the next roll while the previous roll is being taped

Unlike taping on the Winder mandrel, our In-Line Taping unit feeds the tape onto the roll, providing for more consistent taping regardless of the wound roll surface finish. This also minimizes poor adhesion problems often associated with the taping of sandy rolls.
In addition to the best shingle and modified membrane production equipment in the world, Reichel & Drews is also an automation systems solution provider. Our drives and control systems provide engineered solutions for optimum process control.

Reichel & Drews works with each customer in the initial design stages to understand and determine the customer’s requirements. This insures that we accurately meet customer expectations.

**Reichel & Drews offers expertise in the following areas:**

- PLC systems from simple to complex systems consisting of several thousand I/O’s
- Drive solutions from single motor to complex multi drive systems
- Industrial networking

**HMI and SCADA systems**

- WonderWare
- Intellution
- Factory Link
- WIN CC
- RS View
- VB, C++

**Choice of Control Platforms**

- Allen Bradley
- Siemens
- And others

**Control Architectures**

- Localized Control
- Centralized Control
- Distributed Control

Available control system features include set point control and display, automated configurations, recipe management, centralized intelligent alarm management, data acquisition, and statistical process control.
Replacement Parts & Upgrades

Reichel & Drews has developed an unequaled program for replacement parts, upgrades and assemblies. After all, by its very nature, the manufacture of roofing material (with all its moving, sliding, cutting, rolling and stacking of abrasive material) makes equipment vulnerable to wear.

Our program—with thousands of precision-made, readily-available parts—helps you stay prepared for all contingencies, so your production lines continue to run seamlessly and your uptime remains consistent.

Guaranteed Performance

Because we manufacture the parts—as well as maintain a complete history of all our machinery components—we are uniquely positioned to guarantee proper material, machining and heat-treating, and thus, exact fit and function of all replacement parts.

Incomparable Value

When you have the peace of mind that accompanies superior quality, prompt delivery and the assurance of parts manufactured to original specifications — all in one package — it all adds up to value that nobody else can match.

Expert Upgrade Service

When it comes to improved productivity and dependability, Reichel & Drews offers all the help you’ll ever need.

First, we’ll keep you constantly informed of the newest, performance-enhancing upgrades available. Our design and engineering team can visit your facility to evaluate your equipment and recommend upgrades that will improve your productivity and cost-efficiency. What’s more, we provide installation and start-up support along with 24/7 emergency service.
Our reputation for helping customers save time and money is rooted in our years of consulting services in shingle, roll roofing and waterproofing experience.

Among the many consulting services we offer:

- Locating and eliminating production and equipment problems
- Identifying and solving bottleneck issues
- Improving product quality
- Reducing maintenance costs
- Eliminating waste

No matter the situation or circumstance, our experienced, skilled team of specialists is ready, willing and able to offer you the fast and reliable technical service you need.

Thanks to our equipment design, manufacturing, testing, installation and start-up capabilities, we can help you fine-tune your line so that it meets or exceeds your production expectations. We can provide the most qualified specialist to perform your in-plant service, whether it’s a process issue, a maintenance task you haven’t been able to fit into your employees’ schedules or a project beyond the range of your in-house capacities.

Another service we offer is the planning, consultancy and supervision of specific jobs. We can help your organization realize savings by arranging for an OEM expert to support plant personnel and local contractors in the most efficient manner possible. Among the many projects we can provide assistance with our blender, cutter and winder rebuilds; servo, stacker and palletizer upgrades; laminator tune-ups; asphalt mixing systems; and cutting-cylinder maintenance.

Our Service Guarantee

If we fail to improve your operation as agreed before the service visit, you will not pay the service-call daily rate.

Engineering Consultation

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