



Serving the Animal Feed Industry Worldwide Since 1976!

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R & R Machine Works, an employee owned and operated company, located in the heart of the cattle feeding industry, is known worldwide for our machine expertise. Established in 1976, R & R specializes in Roller Mill and Steam Chest Manufacturing, replacement parts, mill services, as well as Roll Grinding and Corrugation. R & R also provides Automation for our Flaker and Cracker Mills, as well as Steam Chests and is the only manufacturer of Kan-Roll Mills. Our professional attitude and reputation for dependability and quality service has made us a leader in the field of manufacturing roller mills, corrugating rolls, and providing complete service for all of your mill needs. R & R Machine Works has parts and service from the bottom of roller cabinets to the top of the steam chest.

We are located on 10 acres in Dalhart, TX. Our facility is equipped to service new equipment sales. Our state of the art equipment

and highly trained personnel offer unmatched service and quality. Our facilities and equipment are designed for servicing rollers and mills in the most efficient, productive, and cost effective manner.

Service

All feed yard records of roll sizes, work completed and work in process are kept on computer file. Your equipment is labeled and stored in our shop. Inside storage prevents rust buildup on your rolls. All machine work is done in-house under stringent guidelines and close supervision. R & R is one of the few shops to have the ability to corrugate the smallest sizes of cracker rolls or up to a 24" x 56" roll!

We keep you Rolling!



Flaker Mills

24 x 56 Flaker Mill

This massive Flaker Mill is commonly used for large feed yards processing large capacities and/or multiple grains. Built to last, with durable metals and stainless steel, this machine will last for an extended time. If your need is to supply large volumes of flaked grains this flaking mill will meet your demands. This flaker mill can be designed with complete automation, adding energy efficiency and nutrition precision.

22 tons/hr — Milo	
30 tons/hr — Corn	
32 tons/hr — Wheat	

24 x 48 Flaker Mill

The industry's leading and most common machine, this mill is built with stainless steel inside and out. This Flaker Mill is just a smaller version of the 24 x 56 mill. Automation is used to reduce cost and improve efficiency in man power and utilities.

19 tons/hr — Milo	
24 tons/hr — Corn	
26 tons/hr — Wheat	

20 x 36 Magnum Flaker Mill

The 20 x 36 is our new mill. It produces upwards of 4 tons per hour more than the old standard 18 x 36 mills. Extremely conventional and economically designed, using dual motors to lower your expenses even more.

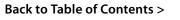
10 tons/hr — Milo	
14 tons/hr — Corn	
16 tons/hr — Wheat	

18 x 36 Flaker Mill

We still offer this workhorse of the industry. These mills are great for smaller yards or feed mills.

7 tons/hr — Milo	
10 tons/hr — Corn	
14 tons/hr — Wheat	







R & R can add Automation to your mill!

Features

- Dual-Drive or Conventional-Drive Packages
- R & R Adjustable Motor Mounts
- Type-304 Stainless-Steel Roll Housing Covers
- Type-304 Stainless-Steel Roll Housing Center Section
- High-Quality Double-Row Spherical-Roller Main Bearings
- Heavy-Duty Cast Iron Bearing Housings for optimal heat dissipation
- Heavy Duty Square Block Housing for Precision Flake
 Weight Adjustments
- Heavy-Duty Tension Springs and Hydraulic Accumulator Roll Protection
- Hydraulic Roll Open/Close System
- Type-304 Stainless-Steel Peg Feeder with AC Variable-Speed Drives
- Fully Automated Optional
- Leg Stands
- Electronic Valves

Efficient Mills - Output Increased 15 - 25%



Easy to adjust and maintain, R & R Cracker Mills are built to last!



Cracker Mills

12 x 52 Cracker Mill

Mostly used for cracking grains at very high tonnage. Sturdy for daily use at any feed yard or large farm/ranch that needs a large volume of grain rolled, cracked, or ground fine. Easy to adjust and maintain, R & R Cracker Mills are built to last a lifetime.

30 tons/hr — Dry Milo 65 tons/hr — Dry Corn 70 tons/hr — HM Corn

12 x 36 Cracker Mill

This mill is the most common for all users. Built with same qualities as the 12 x 52 mill to include heavy duty pillow block bearings, totally enclosed guards, feeder bar magnet, and either a manual lever or worm-gear hand-wheel roll adjustment system.

33 tons/hr — Dry Milo

One-, Two- or Three-pair High Grinder Mill

Most commonly used for hog & dairy cattle, the High Grinder is energy efficient and produces a much better grind, with fewer fines than a hammer mill (which uses a larger motor).

10 x 20 Cracker Mill

The smallest cracker mill R & R makes, the 10x20 is still built with the same heavy duty materials as the larger mills. We can custom build these mills to suit your needs, whether you need it motor driven, PTO driven, on a trailer or combined with input/ discharge augers, R & R can meet your needs.

Our Cracker Mills create a consistent product with the microns you need.

Mill Size	Single COARSE GRIND Motor HP TPH		Two High 750/700 MICRON Motor HP TPH		Three H 450/400 MIC Motor HP	-
10 x 20	20	20	20/25	9	20/25/25	4
10 x 30	25	30	25/30	13	23/30/30	6
10 x 36	30	36	30/40	16	30/40/40	7
10 x 42	40	42	40/50	19	40/50/50	8
12 x 36	40	45	40/50	21	40/50/50	10
12 x 52	50	65	60/75	30	60/75/75	15
12 x 72	75	90	75/100	40	75/100/100	20

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Steam Chest

R & R Flaker Mills are made even better with R & R's specially designed stainless steel round steam chests. With over 40 years of manufacturing flaker mills and steam chests, R & R does not skimp on materials – using only the heaviest and most reliable materials to produce our equipment. Maintaining quality allows for a long lasting product that will withstand all high-moisture environments.

- Internal plumbing for efficiency and clean design.
- Round chest to aid in continuous flow of large amounts of grain.
- Large distributors with steam tubes located inside of the chest, provides consistent, even cook.
- Steam distribution inside chest creates maximum distribution of steam for a better consistent cook.
- Non-corrosive, strong, curved stainless steel flanged sections for easy installation.
- Durable and accessible service doors.
- Complete stainless steel chest.
- Stainless steel outer protective skin.
- All insulated plumbing, to conserve energy and provide safety.
- Water repellent, improved rigid insulation with higher density.





Steam Chest Supports

Supporting your chest is critical. Making the wrong decision could cause the chest to slightly drop and create a great amount of stress on your mill machine.

R & R provides you the with high quality craftsmanship and support you can count on!

Advantages:

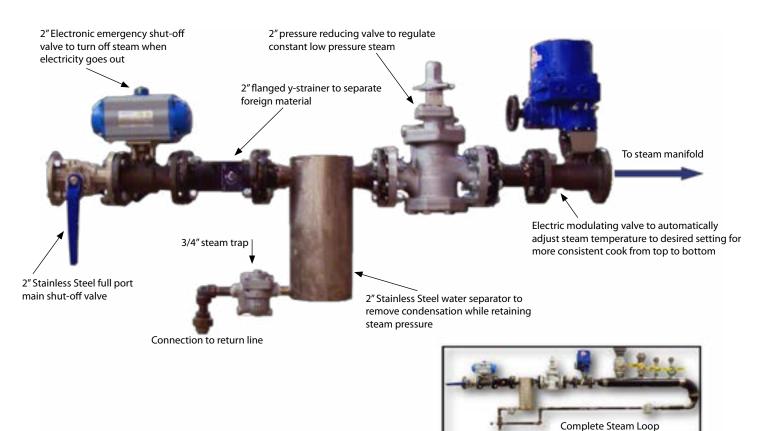
- Available to locate anywhere on chest to suit your existing structure.
- Helps support your chest to reduce movement due to heat expansion.
- Supporting chest from the bottom also reduces stress on mill.

Materials:

Completely Stainless Steel Construction



Steam Loop with Automation Options

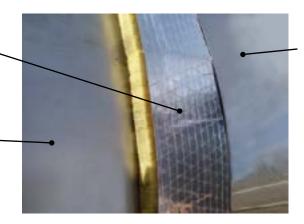


Increase energy efficiency up to 60% using R & R's complete steam valve assembly on your steam chest!

Insulation

High Dense Insulation (Water repellent & retains chest heat which in returns keeps heating cost low)

10ga Stainless Chest Structure -



Outer Protection 20ga Stainless Steel Skin (Prolongs insulation's life)



Kan-Roll HIGH MOISTURE ROLLER MILL

Customized One to Seven: 12' x 52' Mill Units

To make money feeding animals, you need to have good feed utilization and efficiency in operations and that is why Kan-Roll Roller Mills are the perfect solution for any high volume feeding operation.

You choose the desired roll in feed rations, and R & R Machine Works manufactures Kan-Roll Roller Mills keeping labor costs to a minimum. We use high quality, extra heavy duty parts.

Not only does Kan-Roll give you the best, consistently cracked grains, but they are also high efficiency.

We get the job done quickly for two reasons.

- 1. Kan-Roll is built for trouble free operation. Ask someone who owns one. They'll tell you Kan-Roll Mills are very low maintenance. *Built to work, not work on!*
- 2. We utilize the best technology available for processing feed grains. Kan-Roll Mills are made with 12" x 52" chill cast iron solid rolls and corrugated in a spiral cut.

PROVEN ADVANTAGES OF ROLLED HIGH-MOISTURE GRAIN

The Kan-Roll High Moisture Roller Mill eliminates the cost of artificial drying. That means high-moisture corn can be harvested two to three weeks earlier than corn harvested for dry storage.

Your field loss can be decreased by 3% - 8% compared to dry storage increasing potential for use of the remaining residue. It is also more economical to purchase corn early before field loss occurs.

Using Kan-Roll improves feeding efficiency and the cost per pound of weight gain is lower when rolled high-moisture corn is included. Kan-Roll Mills provide higher volume for less labor. They handle 2,500-3,800 bushels of high moisture corn per hour, per mill, with approximately 1% whole grain and 3% fines.

Kan-Roll 12'x 52' High Moisture Mills are available starting at \$82,500 with:

Single to Seven Mills Gearbox included Conveyor with gearbox & belting Conveyor Belting (Priced by foot) *All Mills include Conveyor **All Mills exclude Motors/Engines

**Recommended 100 HP per mill





Features:

- All units have slots for side boards to increase hopper capacity.
- Built with a single mill up to seven mills.
- All portable units have built-in leveling jacks.
- Feed control is adjusted with a hand lever at the bottom of each hopper.
- High power magnets trap junk metal keeping it out of the mill and rations.
- Roll hoppers have a screen top to deflect large objects.
- No motors which means less maintenance. We use extra heavy duty gear boxes that are CNC machined.
- All mills are made with manufactured cast build specific R & R parts.
- Each mill unit has its own roll clearance control lever. Quick adjustments can be made with this lever. The clearance is also adjusted at the front and back of each roller.
- A special sprayer can be installed to add additional moisture as the grain leaves the conveyor. By using the sprayer, dust can be held down in dry corn or other grains, and the moisture level can be balanced in high-moisture grain.
- Power requirements: Each mill requires an estimated 100 HP of power.
- One-two unit mills can be PTO driven and threeseven can be motor driven.

Built to work, not work on!

KAN-ROLL PARTS & SERVICE

Call for Domestic and International pricing 12 x 52 Rolls with Journals Grinding & Corrugating 5 Cut Spiral 4 Cut Spiral Chase to Sharpen Gearboxes Motor: A115 PTO: A130

New!

R & R Grain Cleaner

The R & R Grain Cleaner is the newest addition to the R & R Family of Machines serving the animal feeding industry.

R & R Machine Works equipment is known worldwide. R & R Machine Works has perfected the process of grain cleaning. With outstanding efficiency, our cleaners remove fines and oversized particles by means of precision screening. R & R Machine Works moves grain gently through a rotary system of screens to economically remove any foreign material.

Cleaning is thorough, and handling is gentle because of the unique rotary screen/auger design. As the drum rotates, three processes occur. First, the grain moves the length of the drum to the discharge end. Second, it moves laterally across the diameter of the drum. Third, it is constantly stirred so the grain passes over the screen repeatedly while it is moving directionally. Trash and fines are thoroughly removed from the grain with the fines being separated from larger screenings and grain and are deposited in separate chutes.

The R & R Machine Works grain cleaner can be installed anywhere since it is a non-vibrating cleaner. R & R Machine Works utilizes the highest quality materials and workmanship and each cleaner is fully enclosed to allow for dust control and weatherproofing.

Whether it is for a feedlot, an independent processor, or production-oriented grain elevator/terminal, the R & R Machine Works grain cleaner provides a safe and effective means of cleaning.

Mill Service

Roll Change	•
Mill Repair	
Gearbox	
Repair	
Shafts	

Mill Service can be provided On-Site



Features:

- Cleans 30 tons per hour
- Removes dirt, fines and grain scalping
- Variable Speeds
- Proven Design multiple screens for fines removal and scalping.
- Precision feed control.
- Cleans efficiently at less cost.
- Heavy-duty, all steel construction with aluminum access covers.
- Easy access for maintenance and screen replacement
- 36-inch diameter screen/auger cleaning surface
- Multiple options of screen sizes for specific grains
- Variable rotation speeds for optimum cleaning production.
- High impact surfaces are covered with UHMW polyethylene to prolong the life of the system.
- Reduces costly dockages for foreign material (broken kernels, dirt and dust) in the grain mass.
- Reduces downtime due to damage of flaking and rolling equipment from foreign materials entering the process.

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R & *R* Automation is the ONLY one in the industry that can automatically control Flake Weight by set points.

R & R 1000

Controls:

- Able to Set Flake Weight
- Start/Stop Feeder Cabinet Control
- Start/Stop Roll Motor Control
- Auto Feeder Cabinet Control speed up and down and shut off if empty
- Open/Close Rolls
- Safety Set Points Motor Overload to shut down motors
 on over amp
- Control Flake Weight Automatically
- Multiple Pre-set Flake Weights
- Controls Roll Gap Side-to-Side
- Auto control Steam Modulation Valve
- Auto Steam Shut-Off During Power Failure
- Bearing Temperature Monitoring

Features:

- 12" Full Color Touch Screen
- Monitors Roll Motor Amps
- Monitors Flaking Time
- Bypass Capable for Manual Control
- Alarm Light or Audible During Faults
- Emergency Shutdown Safety Button
- Logs Motor and Steam Chest Trends
- Optional Auto Control of Steam Modulation Valve
- Web Enabled for Remote Monitoring and Control

We also offer training and ongoing automation support consultation.

Automation can reduce labor expenses by 60%!

Advantages:

- Full Operations of Mills and Steam Chest
- Able to set and maintain multiple flake weights for different grains
- Consistent Cook of Grains
- Monitors and logs trends of operations of mill and steam Chest
- Safety Set Points, auto shut down and overrides for safer operations
- Automation can reduce labor expenses by 60%
- Automatic monitoring
- Can be remotely monitored Web enabled Interface can be accessed from a Computer or Phone
- Cost Savings for Utilities
- Spanish/English







Higher quality. more consistent feed!

R & R 500

Controls:

- Start/Stop Feeder Cabinet Control
- Start/Stop Roll Motor Control
- Auto Feeder Cabinet Control speed up and down and shut off if empty
- Safety Set Points motor overload open rolls or shut down motors over amp
- Monitors Steam Temps and Valves
- Monitors Flake Time

Features:

- 6" Touch Screen
- Monitors Roll Motor Amps
- Monitors Run Time
- Bypass Capable for Manual Control
- Alarm Light or Audible During Faults
- Emergency Shutdown Safety Button
- Optional auto control of steam modulating valve

Automated bearing monitoring can save BIG \$\$.

The R & R automated station controls the feeder cabinet and roll motor, which prohibits "over-amping" or waste of electrical power. It is PC compatible, so the mill can be operated by a single employee thereby decreasing human error and increasing productivity. The control station allows for adaptation to accommodate future areas of automation.

These units provide automatic production and control updates. PLC provides for remote control. Our automated grease units eliminate human error and increase bearing life. Safety issues are resolved because actual "Hands On" situations are decreased.



Advantages:

- Open/Close Rolls
- Automation can reduce labor expenses by 60%
- Automatic monitoring
- Automatic Steam Control
- Consistent Cook of Grains
- Consistent Flake Weight
- Safety Set Points, auto shut down and overrides for safer operations
- Spanish/English



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Roll Fabrication

R & R Machine Works services rollers and mills in the most efficient, productive and cost effective manner in the industry. We service all types of mills, offer Steam Chest repair, Grind and Corrugate, and offer one day in/out Service. R & R services ANYWHERE in the US including Mill Start-up and Mill adjustments.

All feed yard records of roll sizes, work completed, and work in process are kept digitally. Your equipment is labeled and stored in our shop. Inside storage prevents rust buildup on your rolls. All machine work is done in-house, under stringent guidelines and close supervision. R & R is one of the few shops to have the ability to corrugate the smallest sizes of cracker rolls up to a 24" x 56" roll!

All operations are completed in-house under strict quality control guidelines. Our facilities include modern machinery to grind your rolls and apply recommended corrugation with computerized corrugators to your specifications.

To assure immediate service, our rolls are ground true and stored in our shop ready.

Roll Frame & Accessories

Stainless Steel Peg Feeder
 Cabinets

Belts & Conveyor Belting

SCR Drives, Controls,

AC Inverter Drives

Reducers

AC Motors

Sheaves

Bearings

Hubs

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- Seals
- Bearing Housings
- Scraper Assemblies
- V-Blocks (Saddles)
- Roll Covers
- Center Sections
- Heavy Duty Motor Mounts
- Automatic Lube Units
- Automatic Roll Control





One day turnaround available!

Grain Rollers

Suppliers of the best quality of rolls:

We can get any size needed. Our suppliers provide the best quality spun chill cast rolls in the world. Rolls are available from both Germany and Spain.

Roll Adjustment

- Complete Air / Hydraulic
 & Central Units
- Fittings, Hoses, and Seal Kits
- Cylinder and pump loaners
- Spring Loaded (eccentrics)
- MAN-CYL (Manual Cylinder patented by R & R)
- Round

- Steam tubes
- Valves
- Sight glasses
- Plumbing
- Millwright installation
- Steam Vents
- Water Separators
- Steam Traps
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R & R has the right hydraulic pump for your needs!

Grease Unit

Reliable and fully automatic, this compact system easily supplies up to 18 lubrication points with NLGI #2 grease. In addition, it is capable of lubricating more points that require low volumes of lubricant.

Advantages

- Able to be mounted anywhere. (Stand included)
- Programmable to suit your needs
- Large, clear reservoir with available capacities of 2, 4 or 8 liters
- Vibration and shock resistant
- Integrated timer with manual override
- Unique, lightweight synthetic housing
- 110v/220v capability

Central Hydraulic Unit

R & R has the right hydraulic pump to suit any application. Whether you need to run several machines or just one individual, we can help.

CENTRAL HYDRAULIC PUMP

Advantages

- Able to be Located Remotely
- Runs Numerous Machines
 - (4) 18/20" Flakers
 - (2) 24" Flakers

Features

- Pvq13 Vickers Piston Pump
- 7-1/2 Horse 220/440 Motor
- 30-Gallon Tank Reservoir
- Manual/Electronic Solenoid 4-way Valve







New, Used & Rebuilt

R & R Machine Works has parts and service from the bottom of the roller cabinets to the top of the steam chest. Listed below are a few items available for all types of mills.

Grain Rollers

Suppliers of the best quality rolls:

- Chilled Casted Rolls
- From 9x12 to 24x56

Roll Adjustment

- Complete Hydraulic & Central Units
- Fittings, Hoses and Seal Kits
- Cylinder and Pump Loaners
- Spring Loaded (eccentrics)
- MAN CYL (Manual Cylinder patented by R & R)
- Complete Automation for Highest Efficiency

Stainless Steel Steam Chest

- Round
- Steam Tubes
- Sight Glasses
- Plumbing
- Millwright Installation
- Steam Vents
- Water Separators
- Steam Traps
- Efficient Automated Modulating Valves
- Emergency Steam Shut Off Valve
- Manhole Doors

Roll Frame and Accessories

- Stainless Steel Peg Feeder Cabinets
- SCR Drives, Controls, Reducers
- AC Inverter Drives
- Belts & Conveyor Belting
- Sheaves
- Hubs
- Bearings
- Seals
- Bearing Housings
- Scraper Assemblies
- V-Blocks (Saddles)
- Roll Covers
- Center Sections
- Heavy Duty Motor Mounts
- Automatic Lube Units
- Automatic Roll Control with Roll Gap set capabilities

Service

- Roll Changes
- Service All Types of Mills
- Grind and Corrugate
- One Day In/Out Service
- R & R Services Anywhere in US
- Mill Start-up
- Mill Adjustments





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Product List

	24 x 56 - This massive Flaking Mill is commonly used by feed mills and large feed yards processing large capacities and/or multiple grains. Because it is built to last with durable metals and mostly stainless steel, this machine will last for an extended time. If your need is to supply large volumes of flaked grains, this flaking mill will meet your high demands. This mill can be designed with complete automation.	22 tons/hr - milo 30 tons/hr - corn 32 tons/hr - wheat
1	24 x 48 - The industry's leading and most common machine is this 24x48 R & R Flaker Mill. This Flaker Mill is just a smaller version of the 24x56. Automation is used to reduce cost and improve efficiency. Designed by R & R Machine Works – the company that performs over 500 roll changes a year!	19 tons/hr – milo 24 tons/hr – corn 26 tons/hr – wheat
	20 x 36 - The new mill. Getting upwards of 4 tons per hour more than the old standard 18 x 36, this new mill is a very conventional and economically designed mill using dual motors to lower your expenses even more.	10 tons/hr - milo 14 tons/hr - corn 16 tons/hr - wheat
-	18 x 36 - We still offer this workhorse of the industry, either new or rebuilt. Since many of these old 18x36 mills are being replaced by larger machines, there are used/rebuilts available at a substantially lower price.	7 tons/hr - milo 10 tons/hr - corn 14 tons/hr - wheat
	12 x 52 - Mostly used for cracking grains at very high tonnage, this mill is sturdy enough for daily use at any feed yard or large farm/ranch that needs a lot of grain rolled, cracked, or ground fine. Easy to adjust and maintain, R & R cracker mills are built to last.	70 tons/hr - HM corn 65 tons/hr - dry corn 30 tons/hr - dry milo
	12 x 36 - A little smaller than the 12x52, this mill is built with all the same qualities. Heavy duty pillow block bearings, totally enclosed guards, feeder bar, magnet and a manual-type lever roll adjustment system make this mill the most common for all users.	45 tons/hr – dry corn 33 tons/hr – dry milo
	10 x 20 - The smallest cracker mill R & R makes, this 10x20 is still built with the same heavy duty materials as the larger mills. We can custom build these mills to suit your needs, whether you need it motor driven, PTO driven, on a trailer or combined with input/discharge augers, R & R can meet your needs.	20 tons/hr – dry corn 12 tons/hr – dry milo
	Single-, Two, or Three Pair High Grinder Mill - These mills are most commonly used for hog feeding and dairy cattle. R & R grinder mills are more energy efficient and produce a much better grind, with fewer fines than a hammer mill (which uses a larger motor). Call R & R to discuss your needs to make sure you get the best grind for your money.	Custom sized to fit your needs.
	Kan Roll Mills - 1 to 7 Mills on one mobile unit, these efficient, high volume, low maintenance, high moisture mills are built on trailer-type frames for mobility. R & R can build from a single mill to a seven mill on the same frame. Built mostly for cracking high moisture grain.	Output: 65-475 ton per machine per hour
	Steam Chests - Our specially designed stainless steel round steam chests are built from the heaviest and most reliable materials, resulting in equipment anyone would be proud to own. With R & R's reputation of standing behind its products, you can rest assured you are buying the best machine available.	Designed according to flaker mill size
	Grain Cleaner - The R & R Grain Cleaner protects your downstream equipment and product quality. Starting at 30 tons per hour, the R & R Grain Cleaner has variable speeds to remove dirt, fines and grain scalping. On top of offering efficiency and ease of operation, the R & R Grain Cleaners are backed by the best support in the industry.	Starting at 30 ton/hr.
	Automators - R & R automation units give you more control over grain output and cost. With two sizes of units to choose from, you control all aspects of flake production, including flake weight, roll gap, speed, steam valves, starting and stopping. Automation eliminates human error, increasing the safety of workers.	R & R 500 R & R 1000





R & R MACHINE WORKS

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