

# Cold Planers



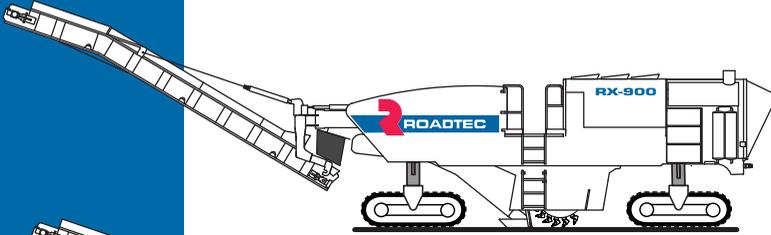
# ROADTEC

an Astec Industries Company

# Model Range

## Roadtec Cold Planers: High Productivity & Low Cost of Ownership

Powerful and well-balanced, Roadtec cold planers will outwork the competition. Designed and built in the U.S., Roadtec cold planers offer you solid design features, systems that are simple to troubleshoot, and parts that are non-proprietary and cost less. Plus you get exclusive features like our 60° conveyor swing to either side, choice between 3 or 4-tracks, and the famous 24-hour Roadtec customer support.



### Roadtec RX-900

Equipped with a 950 hp (708 kW) Caterpillar® engine, this machine cuts up to 14 ft. (411cm) wide and 14" (35.5cm) deep. The RX-900 is the best choice if you do lots of full-lane, high-production milling. Power's the name of the game here.

### Roadtec RX-700

Featuring a 700 hp (522 kW) Caterpillar engine and capable of cuts up to 10ft (3 m) wide and 14" (35.6cm) deep the RX-700 is a good choice for the contractor who is looking for high output in a half-lane planer.

### Roadtec RX-500

If machine weight concerns and maneuverability are high on the agenda, the RX-500 is the machine for you. It comes with a 630 hp (470 kW) Cummins engine and can cut up to 7'2" (218cm) wide and 13" (33cm) deep.

### Roadtec RX-400

The most compact planer in the line up has a rear-mounted drum, four tracks, and right-hand flush cut. Tailor-made for commercial applications and narrow projects such as road shoulders, the RX-400 cuts up to 5' (152cm) wide and 12.5" (31cm) deep. It features a 325 hp (242 kW) Caterpillar engine.



## Advantages You Gain by Milling

Milling an uneven pavement before repaving will make resurfacing easier and will assure you the best possible situation for achieving smoothness, especially if your cold planer is equipped with automated grade and slope controls. Plus, you can turn the removed material into money by recycling it in your own asphalt plant or selling it to an asphalt producer.

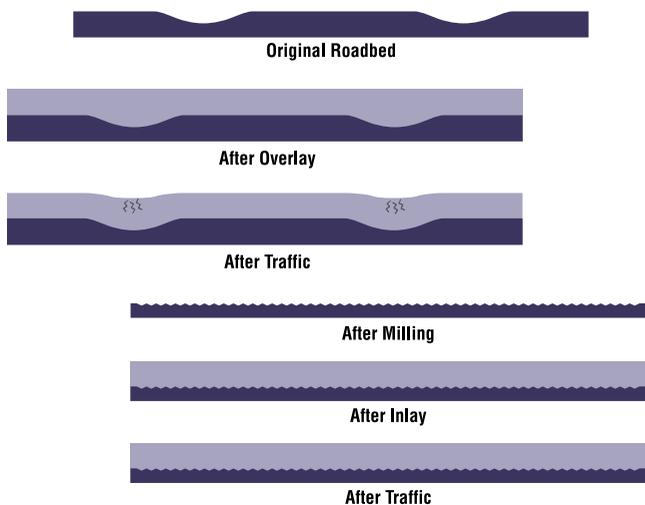
## Cold Planers as Mining Machines

A 30,000 ton pile of RAP with an average 6% liquid AC content is the equivalent of about 28,200 tons of clean aggregate plus 420,000 gallons of liquid asphalt! This material can replace virgin materials in new mix. The recycled materials are as good as virgin rock or AC. For more information on how to use RAP as a money maker see the Astec Technical Paper T-127. Go to [astecinc.com](http://astecinc.com) and click on "Literature."

## Milling for Smoothness

When smoothness of the finished pavement is important, it's good to start with a level milled surface. Then the paver has every opportunity to get it right. Today's cold planers with their extremely accurate grade and slope controls can be used to level the road in longitudinal and transverse directions. Using current grade and slope control technology will result in a much smoother surface, and many states now require smoothness measurements on milled surfaces.

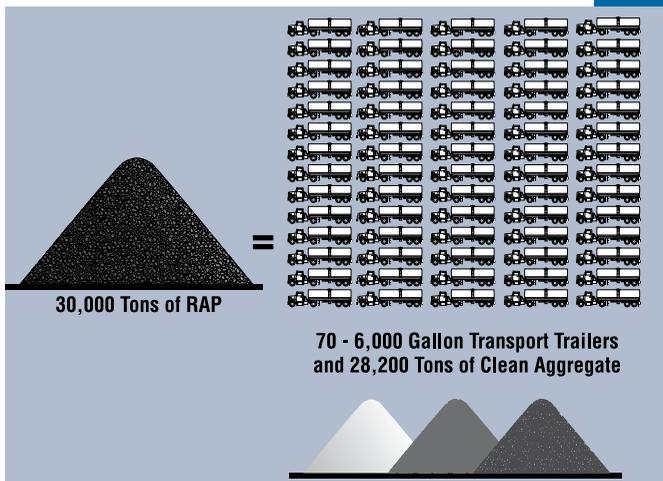
Roadtec offers both Moba™ and Topcon™ grade and slope technology. These devices scan the surface 40 times per second and produce a signal which automatically adjusts the leg tubes of the cold planer so the resulting milled surface will conform to your specification.



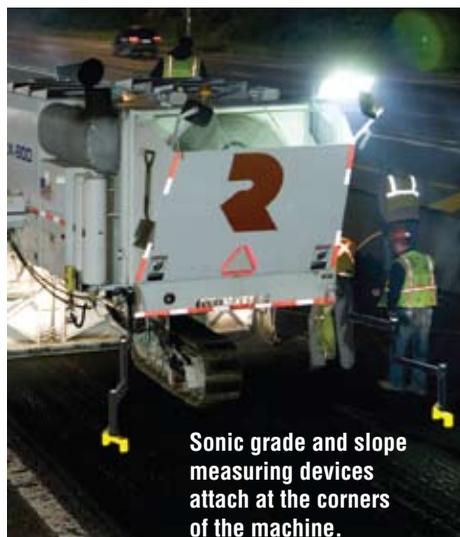
Overlays can crack and re-rut but milling and then inlaying the pavement prevents re-rutting and also provides better density numbers.

## Roadtec SmoothMill™ for Ease of Use

Optional Roadtec SmoothMill grade and slope control automation for RX-500, RX-700 and RX-900 cold planers is designed especially for milling. It features plug-in connections and internal cable routing, two dual control boxes for ground personnel, each capable of controlling both sides of the machine, and also provides the operator (driver) with a separate control box. Moba technology is standard, other systems can be supplied.



It pays to recycle old pavement.



# Smoothness

# Features

## The Right Balance of Power, Maneuverability and Weight

A cold planer needs to be heavy enough to perform in the cut, yet easy to transport to the job site. The kind of work the machines have to do requires a powerful engine and the ability to follow trucks through tight turns or in adjacent lanes. Roadtec has worked to properly balance these requirements in its cold planer model line.



Machine Frame

## It Starts with a Strong Frame

One-piece side sheets running the entire length of the machine are made from extremely strong A656 grade 80 steel. *This steel has twice the yield strength as the mild steel used in other machines on the market.* Roadtec frames are very strong and rigid without adding unnecessary weight.

## Higher Horsepower Engines

You'll find that Roadtec cold planers feature the highest horsepower in their class. We use Caterpillar® and Cummins® engines that have proven to be efficient and reliable. Please see spec sheets for the individual model engine specifications.

## Choose Either Three or Four Tracks

With the RX-500, RX-700 and RX-900 you can select either three or four tracks. Each type has its advantages.

Cold Planers with three-track suspensions are more maneuverable, lower in weight, and have slightly less maintenance, while four-tracks machines provide greater traction and flotation.



4-track RX-900 cold planer



RX-900 cold planer in the 3-track version

## Strong, Agile & Productive

Rated working speeds for Roadtec cold planers are the fastest in the industry (128 to 172 feet per minute/39 to 52 meters per minute). What's more, Roadtec cold planers are among the most maneuverable, thanks to excellent turning capability. Even the biggest model, the RX-900, has a turning radius of only about 8 1/2 feet (2.6 meters). The cutter housing with its angled moldboards won't let material accumulate that could bog down the machine.

With their high degree of mobility, powerful engines, cutter housing design, and all the other Roadtec details, our cold planers are the most productive in the world.

## Conveyor Swings to Load Right or Left

The front conveyor on Roadtec cold planers has the ability to swing left or right 60 degrees. This allows the machines to follow trucks through tight turns and to easily fill trucks in adjacent lanes. Conveyors feature infinitely variable speed and self-cleaning pulleys.

## Safe & Functional Operator Platform

The operator platform is conveniently accessed from the right or the left side. Two control stations allow machine operation from either side.

A joystick controls both front and rear tracks.

Optional bi-directional controls also allow operation in the rear-load mode.

## Auto Exchange: Easy Stop & Resume

RX-500, RX-700 and RX-900 cold planer have the Roadtec Auto Exchange function. You can pause for truck switch-out or other stops with the flip of a switch, easing down propulsion, conveyors and water systems to a stop. When you're ready to resume operation, simply flip the switch again and the machine will come up to the same speed as before.



Various coordinated steering modes for maximum maneuverability.



Front conveyors can swing 60° to the right or left.



Dual operator stations on a vibration-isolated platform.

# Features



At Roadtec we are always happy to work with our customers on special requests such as these outriggers supplied for work on a sloped racetrack.

# Cutters

## Cutter Drum and Cutter Housing Features Maximize Productivity

Roadtec gives you choices. Our customers are able to choose from Kennemetal, Sollami, Keystone, or Sandvik cutting systems for their cold planers. Only Roadtec gives you the option of a machine that can upcut or downcut, so you can use your Roadtec cold planer for more than standard milling.



Simple-to-install, one-piece cutter housing



Replaceable, chromium-clad wear plate covers all potential wear areas (shown shaded blue). Front and rear mold board are entirely made from abrasion-resistant steel with a Brinell hardness of 500. Bolt-on Tungsten Carbide scraper blades at the rear mold board add to the housing's toughness.



Adjustable endgates with replaceable shoes at the high-wearing front and rear corners.



Gear box has "break-away" shear coupling

## Cutter Drum Options

Cutter drums are balanced and concentrically machined for smooth machine operation. You can choose the tooth spacing pattern depending on your needs, including profiling patterns.

## Tough, Single Assembly Cutter Housing

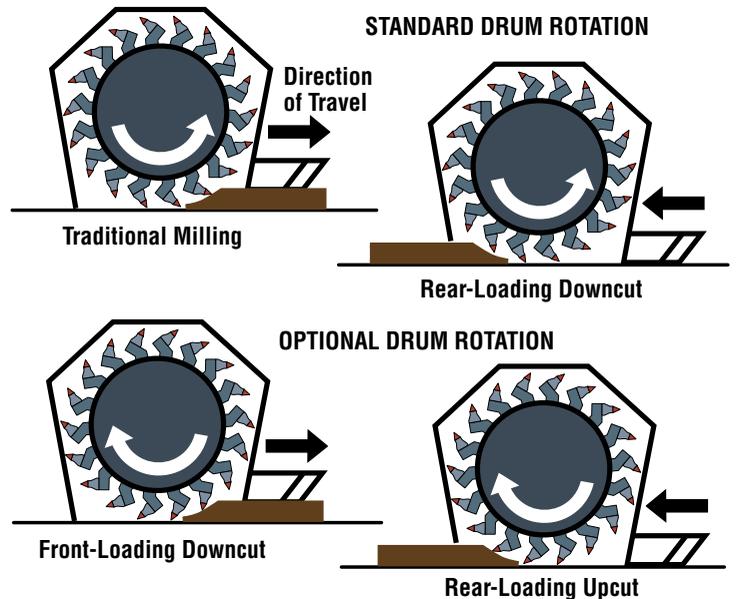
Constructed of T-1 steel and lined with replaceable, abrasion-resistant steel, Roadtec cutter housings are made to withstand abuse. The self-contained cutter housings attach to the frame with self-aligning bolts. When you change out the drum, the cutter housing comes off in one piece and easily re-installs.

## Cutter Drum Gearbox Protects the Engine

Heavy-duty, high-torque gearboxes transfer power from the drive belts to the cutter drum. Shear couplings are also used. If the drum strikes a buried obstruction that would damage the engine, the shear coupling will separate the input shaft from the gear box to protect the engine.

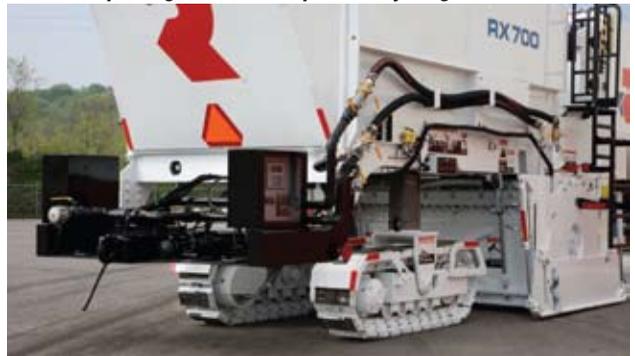
## Bi-Directional Drum Can Do More

With the bi-directional option, you can use the machine as a downcut and upcut pulverizer, in addition to traditional milling work. A cold-in-place recycling package can be added.



**FOR MORE INFORMATION ON COLD-IN-PLACE RECYCLING OPTIONS, PLEASE SEE THE ROADTEC CIR BROCHURE.**

Emulsion package for cold-in-place recycling.



## Adjustable Moldboards Give You Options

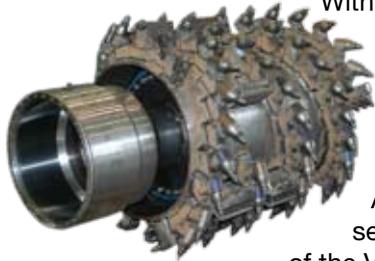
The front moldboard can be set to float with the elevation, or in a fixed position. Height of the rear moldboard is fully adjustable. Raise the rear board completely to easily access the drum and cutter teeth. When the moldboard is fully raised the engine is shut down for safety.

Both the rear and front moldboard on Roadtec cold planers are angled in toward the drum by 10°. This allows less material to accumulate around the drum, which means increased component life, production rates, and efficiency.

## Roadtec's Exclusive VCS™ System

The Roadtec VCS™ Variable Cutter System allows the RX-500 and RX-700 models to cut at widths of 24", 36" and 48" (60cm, 91cm, and 121cm).

The VCS systems for the RX-400 supplies widths of 26", 36", and 48" (66cm, 91cm, and 121cm). You don't have to remove the cutter housing to change widths.



With the VCS the primary conveyor is shifted over 8 inches (20cm) so that even the narrowest drum has "visibility" of the discharge belt, making material removal much better.

A hydraulically adjustable, segmented rear moldboard is part of the VCS package. It easily adapts to any of the three cutting widths.

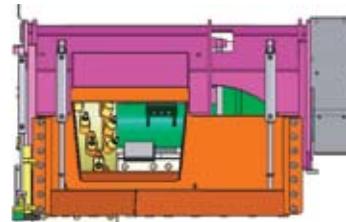
**TO SEE AVAILABLE CUTTER DRUM & HOUSING CHOICES FOR ALL MODELS, PLEASE TURN TO THE LAST PAGE.**



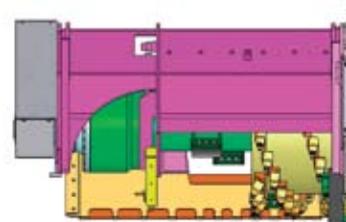
Raisable rear moldboard



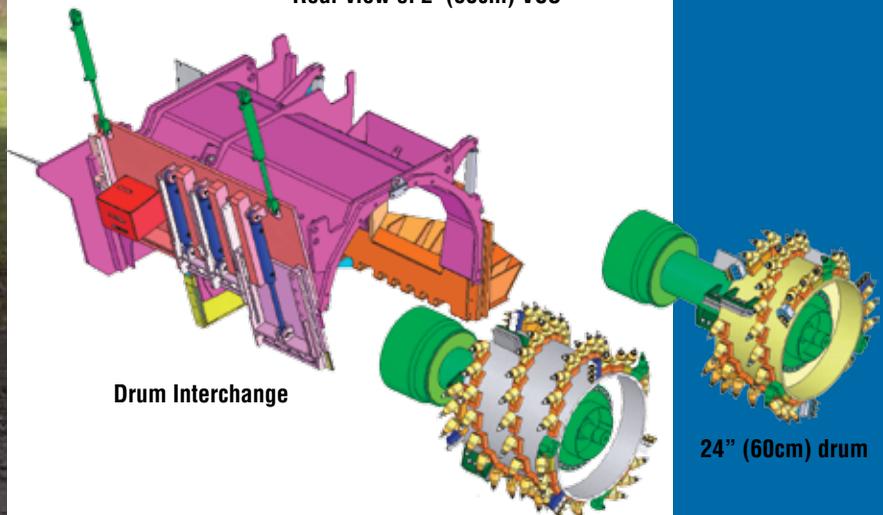
A material brace on the front moldboard applies even pressure to the front edge of the cut for excellent material sizing.



Front view of 24" (60cm) VCS



Rear view of 24" (60cm) VCS



Drum Interchange

24" (60cm) drum

36" (91cm) drum



RX-500 using the VCS system

# Cutters

## Extra Features to Make the Work Go Smoother

You'll enjoy thoughtful features that can make the work day go better. From better dust control to better noise and vibration control, Roadtec strives to give you what you need so you have the best possible conditions for productivity and profitability. Please see the last page for all options.



Water system valve manifold



Vibration Isolator



Air tanks



Wash-down hose reel

## Front & Rear Spray Bars Instead of One

Two independent stainless steel spray bars in the cutter housing provide much better dust reduction and keep cutter tools cooler, thus extending the life of the cutting teeth. The system's water tank is completely lined and can be filled on the fly from three different fill positions.

## Vibration Isolators for Comfort

Rubber vibration isolators eliminate destructive vibration throughout the cold planer and also help to make the machine more quiet. Rubber mounts under the operator platform provide additional comfort.

## Easy Clean-Up with Wash Down Hose

At the end of the day the standard high pressure washdown system helps to keep the machine looking and running like new. The system includes wash down bars at conveyors and plenty of hose to reach all points of the machine.

## On Board Air Compressor Included

RX-500, RX-700 and RX-900 models come with a standard compressed air system. Two storage tanks and a compressor let you use your air tools for service and maintenance tasks.

## Light Package Is Supplied

All models come with lights to illuminate key areas of the machine and two halogen magnetic work lights. Additional work lights are available.



RX-400 cold planer with optional segmented rear moldboard and VCS™ system.

## Straight-Forward and Easy to Work on

The design of Roadtec cold planers makes for easy trouble-shooting and maintenance and avoids costly downtime and expensive repairs. Often minor issues can be fixed right in the field because Roadtec machines don't require complicated computer diagnostics. You can buy many maintenance parts straight off the shelf.

## Engine Access Couldn't Be Easier

Roadtec cold planers offer the best engine access in the industry. Two gullwing style covers raise hydraulically for complete access. Additional access doors are found at each service point.

## Lube Quickly from Central Location

All lubrication points are centralized at the four corners of the machine. They are clearly marked with recommended applications, making routine maintenance even easier.

## Belt Tensioning Made Simple

Each end of the belt on each conveyor can be independently tensioned. Keeping the belt tensioned correctly ensures proper belt tracking and greatly improves belt life.

## Easily Reach the Cutter Drum

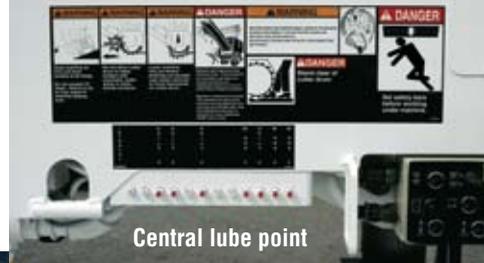
Simply raise the rear moldboard all the way to access the drum. When the moldboard is in the up position the drum is disengaged for safety.

## Bolt-On Track Pads

This standard feature allows quick and easy replacement of worn pads.



Gull wing engine covers raise and lower hydraulically



Central lube point



Independent belt tensioning



Drum access



Bolt-on track pads



# Serviceability

# Options



## Choose from these Options and More

In addition to the options below, we also offer specialized customization depending on your needs. Let us know the requirements of your special application, so we may propose a solution for you.

Tracks
RX-500, RX-700, RX-900: 3-track or 4-track
AUXILIARY POWER
4KW 60 Hz Continuous Duty Hydraulic Generator
4KW 50 Hz Continuous Duty Hydraulic Generator
15KW 60 Hz Continuous Duty Hydraulic Generator
15KW 50 Hz Continuous Duty Hydraulic Generator
ADDITIONAL LIGHTING (Generator Required)
Night Work Package – Includes four 500W, 120V lights w/ brackets and mounting hardware
GRADE AND SLOPE CONTROL
Roadtec Hydro-Mechanical Grade Control. Dual Controls.
Roadtec SmoothMill™ Digital Grade and Slope Control System for operator and ground man (featuring MOBA components).
Digital Base System. Traditional Dual Control Boxes for ground man. Topcon Automation.
Sonic Averaging Ski Package with one or two skis.
Rear Leg Control System. Sonar Grade Control for rear elevation.
CUTTER SYSTEMS
Kennametal, Sollami, Keystone, and Sandvik Systems available. See table below.
Profiling or Micro-Milling Drums
VCS Variable Cutter Systems for RX-400, RX-500, RX-700
COLD-IN-PLACE RECYCLING
Dual Control Package For Bi-Directional Operation (not available on RX-400)
Cutter Housing Bi-Directional Package
Emulsion Additive Sytem
Hydraulic Tow Hitch for RT-500 Cold Recycling Trailer
MISCELLANEOUS
Operator Station Canopy - Hydraulic or Manual
Belt Scale Package with Optional Printer
Hydraulically Folding Secondary Conveyor
Lincoln QuickLub Automated Lubrication System

### STANDARD CUTTER DRUM WIDTHS OPTIONS (custom widths can be supplied)

	26" 66cm	36" 91cm	48" 122cm	6'3" 191cm	6'7" 201cm	7'2" 218cm	8'2" 249cm	10' 305cm	12' 366cm	12'6" 381cm	13' 396cm	VCS
RX-400	•	•	•									•
RX-500				•	•	•						•
RX-700					•	•	•	•				•
RX-900						•	•	•	•	•	•	





RX-400 cold planer. 325 hp/ 242 kW.



RX-500 cold planer. 630 hp/470 kW.



RX-700 cold planer. 700 hp/522 kW.



RX-900 cold planer. 950 hp/ 708 kW.