

RK 1

Lab-Size Continuous Processor

Continuous processing is **BIG**...even when the price and size are small!



Ready-to-use out of the box
for **\$39,995**



READCO
KURIMOTO, LLC

Continuous Mixing. Continuous Expertise.

Size does matter! So does price.

Readco Kurimoto, the leader in US-manufactured continuous processors, is moving into the lab with its 1" continuous processor. **RK 1** provides the continuous processing technology that you want...at a price and footprint that works for you.

Research compatible. From research pilot to plant production, **RK 1** allows you to:

- Produce small sample sizes to develop and test.
- Determine recipe optimization, and process analytics and characterization.
- Explore new products and expand product development.
- Simulate production conditions.

The price is right. For as little as \$39,995 your lab can incorporate resource-efficient continuous processing into your mix.

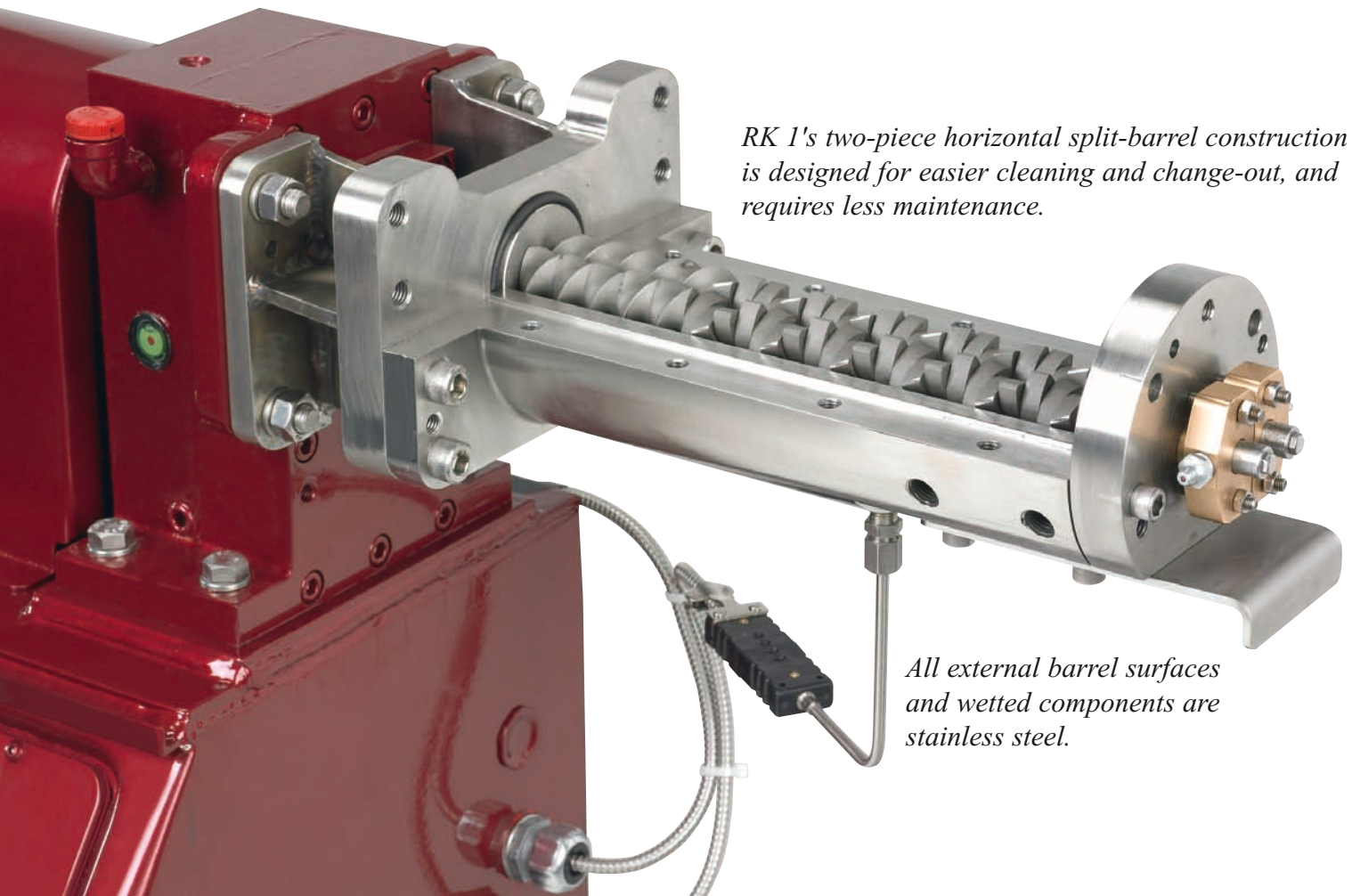
Ready now. **RK 1** is ready-to-use out of the package so you don't have to waste valuable assembly time.

Ethernet-ready. Laptop connection included.

Versatile tool. **RK 1**'s continuous processing technology has proven successful for many industries and products for decades.

Just the right size. **RK 1** fits on a small table or its convenient portable lift table. It is small...but powerful.

Doesn't your facility need an RK 1?



RK 1's two-piece horizontal split-barrel construction is designed for easier cleaning and change-out, and requires less maintenance.

All external barrel surfaces and wetted components are stainless steel.



Other RK 1 features include:

Dimensions	Overall:	45.75 L x 14.75 W x 20.65 H (inches) 116.21 L x 37.47 W x 52.45 H (cm)
	Mixing Chamber:	1" diameter x 10" length 2.54 cm x 25.40 cm
Weight		270 lbs / 122.5 kg
Voltage		220v / 1ph / 60 hz
Horsepower		1.5 hp / 1.2 kw
RPM (Variable Speed)		30 - 434 RPM Infinitely variable to 0.1 increments
Throughput Rates		1 - 10 lbs/hour 0.45 - 4.5 kg/hour
Temperature Range		32 - 500°f / 1.1 - 260°c Cooled by customer-supplied recirculated chilled water. <i>Optional 1.5 kw electric band heater or customer-supplied hot oil heater.</i>
Mixing Elements		Co-rotating twin shaft with surface wiping. Comes with standard configuration. <i>Optional paddle configurations provide higher degrees of mixing, shearing, and conveying.</i>
Liquid Injection Port		One 1/4" NPT
Controls		LCD touch screen interface

RK 1 options:

While **RK 1** is ready to process right out of the box, Readco Kurimoto offers a variety of optional products to customize **RK 1** for your unique needs:



Portable Lift Table

This rolling lift table allows you to move **RK 1** anywhere.

Overall dimensions:
40 x 20 inch
(101.6 x 50.8 cm)
Lift height range:
17 to 39 inches
(43.2 to 99.1 cm)

Feed Chute

This convenient chute will make your product introduction cleaner and more efficient.



Electric Band Heater

This 1.5 kw electric band heater comes with its own pre-wired regulating thermocouple to maintain and control the barrel temperature.

Additional Paddle Configurations

Customize your paddle configurations for varying degrees of mixing, shearing, and conveying capabilities. **RK 1**'s barrel is designed for easy change-outs.

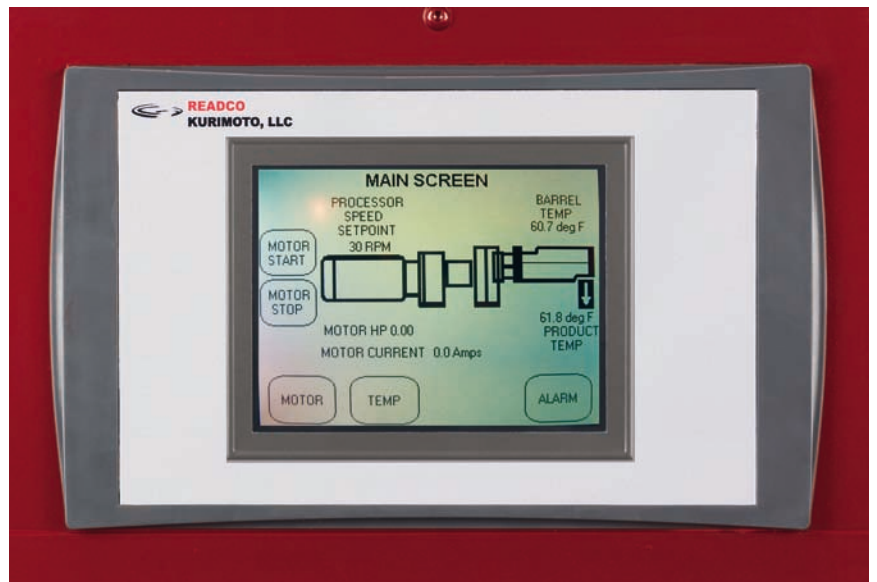
All-Stainless Construction

If you require sanitary continuous mixing, **RK 1**'s optional all-stainless version will meet your special needs.

Isn't it time that you thought **SMALL?**

Contact your Readco Kurimoto Sales Engineer at (717) 848-2801 or (800) 395-4959 toll free.

*Actual size
of RK 1 paddles*



RK 1's touch screen control panel

Advantages of Continuous Mixing

Comparing Batch vs Continuous Mixing

	Batch	Continuous
Consistency of Product Quality	May have batch-to-batch inconsistencies	Can control consistency
Floor Space Required	Usually large area	Small footprint
Time of Actual Mixing	Usually too long	Very short
Clean-up Procedure	Labor intensive and cumbersome	Very quick
Work-in-Process (WIP) Storage	Required	On-demand production
Ability to Adapt to Multi-Stage Process	Usually single-step process	Can accommodate multi-stage process
Utility Costs	Dependent on motor size	Usually smaller motor size
Environmental Issues	Process is usually not contained; may have concerns with process and cleaning	Can be contained and controlled; clean-up process is greatly improved
Scrap Potential	May be subject to sizable scrap	Product loss is small

Process elements that can be done continuously

Shearing	Combining of Operations
Homogenization	Encapsulating
Reactions	Crystallizing
Cooking	Wetting
Grinding	Additions of Fillers
Low-Pressure Extrusion	

Who is Readco Kurimoto?

READCO KURIMOTO, LLC. is a world class producer of continuous mixers and powder blenders. Established in 1906, READCO has consistently been the leader in continuous mixing and powder blending technology. Headquartered in Pennsylvania (USA), Readco Kurimoto manufactures, engineers, and tests continuous mixing and powder blending applications.



Continuous Applications

CHEMICAL

Adhesives
Artificial wood
Batteries
(Lead sulfate, lead oxide, mercury, potassium hydroxide, ni-cad, alkaline cells)
Brake linings
Catalysts
Caulking & sealing compounds
Cellulose Acetate
Ceramics
Chemical reactions/Polymerizations
(Polyurethane, Polystyrene, Polyacetal)
CMC
(Carboxy Methyl Cellulose)
Composites
Countertop material
Crystalline Cellulose
Crystallizations
(See artificial sweeteners)
Drywall compound
Encapsulants
(Semiconductors, insulating material, electrical parts)
Energetics
(Smokeless powder, rocket propellant, air bag propellant, PBX)
Fertilizers
Floor tile
Graphite
(Electrodes, bearings)
Gypsum board
Hazardous waste drying
Inks
Ion exchange resin
(Cooling, cleaning)
Magnetic coating material
(Audio, video)

Magnets
(Motor, automotive, home parts)
Metallic soaps
Molding compounds
Pesticides
(Animal poisons)
Photographic emulsions
Pigments
(Thalo & ultramarine blue, fluorescents, salt grinding)
Plastic compounding
(PE, PP, nylon, PVC)
Play dough
Polymerization reactions
(Addition, depolymerization & condensations)
Powder injection molding
(Tungsten, carbide, silicon carbide, aluminum oxide)
Powdered paint
Radioactive waste solidification/drying
Refractories
(Flame/fire retardant & construction material)
Resins
(Conductive, epoxy, phenolic, polyester, fillers)
Rubber products
(Additives, reclaimed rubber)
Rubber compounding
Sealants
Silicone
(Caulking & glazing compounds)
Soap
(Hard & soft, cleaners, detergents, biodegradable, non-phosphorus)
Toilet bowl deodorizers
Toners
(Color, fax, printer)

FOOD

Artificial cheese
Artificial sweeteners
(Sorbitol, xyloitol, polydextrose)
Candy bars
Cereal
(Rice, wheat products)
Chewing gum & gum base
Chocolate conching & conditioning
(All grades)
Creams
Doughs
(Cookies, biscuits, snacks, gluten, crackers, pretzels, doughnuts)
Grain preconditioning
Malted milk balls
Milk powder
(Fat release)
Meat analogs
Nutrition bar
(Peanut butter, sugar, corn syrup, flour, vitamins)
Pastas
Pastes
Peanut butter
(Regular & low fat)
Pet foods
(Moist/dry, semi-moist, bones)
Pharmaceutical products
(Binders, pastes for pill formulations)
Ravioli filling
Seasonings
Snacks
Taffy

FREE DVD Available Upon Request



Call us today to find out if this state-of-the-art technology is appropriate for you. Allow our Sales Engineers, DVD, and test lab to show you **RK 1's** extraordinary capabilities.



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