

HD-PR01 Programmable Portion Cutter

Semi-Automatic Exact Weight Wedge Cutting

INCLUDED FUNCTIONS SCALE, EXACT WEIGHT WEDGE CUTTER

*Machine yields precise portions per your input:
simply select how many wedges you want
the wheel cut into or the weight
you want your wedges to be!*

Precision Cutting Action

Get exact weight wedges from your cheese wheels by utilizing this compact, stainless steel electro-pneumatic cutting machine. It pre-weighs, centers, stabilizes and precision cuts cheese wheels (from hard Parmesans to soft blues).



Three Cutting Programs

1. Exact Weight Wedges (with trim)

- ▶ One Off-Weight Wedge (you can specify as under- or over-weight)
- ▶ $\pm 3\%$ Tolerance for Wedge Weight (affected by cheese density)

2. Average Weight Wedges (no trim)

- ▶ Zero Waste (the weight of the trim piece is averaged out into the wedges)
- ▶ $\pm 3\%$ to $\pm 5\%$ Weight Variance (between individual "similarly sized" wedges)

3. Number of Wedges (no trim)

- ▶ Zero Waste (cuts exact number of pieces entered)

Maximize Yield, Minimize Giveaway

Less trim (waste) when using a Rotary Portion Cutter – because this cutter is not restricted to making an even number of cuts, there is a greater range of wedge weights. Centering arms position the cheese, centering cone lowers to stabilize and center the cheese during cutting. A blade then performs the operator's pre-programmed series of individual radius cuts where blade is aligned to the center point, cutting the radiuses of the cheese wheel (i.e. the circle).

Trust HART Automation

Ergonomic machines come equipped with standard safety features, including an emergency stop button and a physical cage guarding the cutting bed with only one access point which is protected by safety light curtains. Equipment programming reliably and cost-effectively protects personnel from entering the hazardous cutting area; when cutting, the blade will stop if an object enters the safety light curtain.

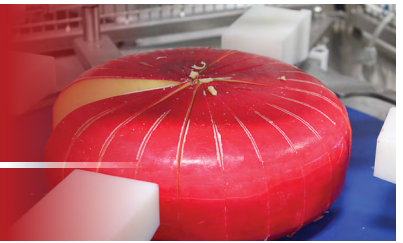
Benefits

- ▶ **Repeatable Portion Control**
- ▶ **Effectively Manage Variations in Cheese Weights**
(pre-weighing system)
- ▶ **Accurate, Superior Cut Quality**
(centering and stabilization systems)
- ▶ **Improved Performance, Reduced Waste**
(radius cutting uniquely allows an odd number of cuts)
- ▶ **Excellent Visibility** (throughout cutting process)
- ▶ **Low Maintenance, Easily Cleaned**



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Easy, Accurate Operation

An integrated scale allows the HMI to obtain pre-cut wheel weight, it is located alongside the caged rotary cutting bed.

An intuitive 5" touch screen interface allows operators to effectively navigate programs and input settings, the cutter control panel also includes easily identifiable physical buttons.

WEIGH	Simply place the wheel to be cut on the scale for weighing (not required for "Number of Wedges" program)
CHOOSE	Select 1 of the 3 cutting programs on the HMI (touch screen)
INPUT	Specify your desired wedge weight or number of wedges
PLACE	Move cheese wheel from scale, place onto center of cutting bed
START	Press CYCLE ON (green button); PR01 side paddles center the cheese, then stabilize it by lowering slotted centering cone (sized per your cheese) and a fixed stainless blade makes individual radius cuts
CUT	After each cut, both the blade and cone raise, the cutting bed then rotates the cheese into position for the next cut; process repeats until all cuts are made

Technical Data

Cheese Specifications

STYLES/FLAVORS	Hard or Soft Cheeses (handles a wide variety)
WHEEL DIAMETER	17.5 in (450 mm)
MAX. WHEEL HEIGHT	~ 6.5 in (165.1 mm)
MAX. PRODUCTION SPEED	45-50 wedges/min. (operator & product dependent)
CUT WEDGE WEIGHT TOLERANCE	± 3%

Utility Requirements

ELECTRICAL	220 V single phase (alternatives available)
COMPRESSED AIR	90 PSIG (6 bar)

Design

INPUT METHOD	Manual Loading
OUTPUT METHOD	Manual Unloading
CONSTRUCTION	Sanitary
STATIONARY/MOBILE	Mobile (easy handling, in-plant positioning); (2) Locking Swivel Casters, (2) Stationary
OVERALL DIMENSIONS	Footprint 35.43 x 59.06 in (900 x 1500 mm); height 78.74 in (2000 mm)
WORKING AREA HEIGHT	Countertop 39.37 in (1000 mm)
MOTION(S)	Servo-Controlled Rotary Cutting Bed, Air-Operated Knife Blade & Centering System
WEIGHING SYSTEM	Integrated Mettler-Toledo Bench Scale (for throughput and accuracy in manual production) 16" x 20" platform 100lb capacity stainless steel load cell with IND570 Weighing Terminal (fast updating discrete I/O and PLC communication to take control of a process)
CONTROLS	Human Machine Interface (HMI) 5" Touch Screen with 3 Cutting Programs for Operator Input and Pushbutton Start, Stop, and Emergency Stop (E-Stop)
CENTERING SYSTEM	Centering Arms with Custom Paddles (curved or rectilinear/angular styles per your cheese) and Stabilizer Cone (two custom centering cones included; diameter & depth sized per your cheese wheel)
BLADE GUARD	Protect personnel and equipment from accidental injury/damage, when not in use this incredibly sharp blade must be kept isolated from contact with foreign objects to ensure optimal long-term performance; incorporate guard-use into your procedures to ensure the guard is in place whenever PR01 is not in operation
CLEANING	Easily cleaned using foam! Touch screen has ingress IP65 protection. However, as always with electrical components & enclosures, we recommend covering electrical enclosures during washing to protect from direct spray (handwashing separately, as you do with other equipment).
INSTRUCTION MANUAL	Included

Accessories & Alternative Solutions

Horizontally Cut Cheese Wheels Into 2 Halves (Discs)

- ▶ **HD-TMF01** Pneumatic Disc Cutter for Non-Hard Rind Wheels
- ▶ **HD-DSG01** Rind Engraving Disc Cutter for Hard Rind Wheels

Alternatives: Ranging From Basic To Fully Automated

- ▶ **HD-PS01** Fixed Portion Cutter (wires or blades)
- ▶ **HD-LPR08** Automatic Wheel Cutting Line with Packaging Line
Auto-Feed: Corer, Disc Cutter & Programmable Portion Cutter

Special Options for High Moisture Cheese

- ▶ **TEFLON COATING** reduces sticking on stainless steel blade
- ▶ **PRU01 ULTRASONIC PROGRAMMABLE PORTION CUTTER** Alternative Model with Ultrasonic Cutting System (includes titanium blade)

Construction

MATERIALS	Stainless Steel AISI 304 & Food Grade
OPERATION	Electro-Pneumatic
ELECTRICAL COMPONENTS	Allen-Bradley (incl. PLC)
PNEUMATIC COMPONENTS	Festo
SAFETY COMPONENTS	SICK/Balluff
WEIGHING COMPONENTS	Mettler-Toledo
OPTIONAL ADDERS	Teflon Coated Blade
	Other Customizations (available by special request)