



Chester-Jensen Co., Inc.

# COOKER-COOLER

A versatile  
processor  
that cooks,  
cools, and  
super blends  
any pumpable  
food product  
*...all in one!*



Catalog Section N



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## COOKER-COOLER

The Chester-Jensen 70N Cooker-Cooler is a unique stainless steel processor with the capability to quickly heat, hold, simmer, sauté, brown, braise, mix, melt, super blend and even cool every type of pumpable food product.

Fabricated of polished steel, the Cooker-Cooler is always fully insulated for operator safety. The cone bottom is fabricated as a certified pressure vessel and channeled internally to provide positive directional flow to the heating and cooling media. This feature, together with the unit's scraped surface design and the high ratio of heat exchange surface to volume, assures product heating and cooling in the quickest possible time.

The heavy-duty agitator drive enables the scraper blades to rotate in one direction while the tri-blade center agitator, positioned deep within the vortex and powered independently of the scraper, turns in the opposite direction. This unique assembly together with the rugged fixed position baffle provides the operator with the capability to effectively combine and blend every conceivable assortment of ingredients and produce the most uniform and pleasing finished product possible.



Model 70N10

The Chester-Jensen Cooker-Cooler has over 60 years of proven unmatched performance, durability and efficiency in the food industry. ***We would like to put that experience to work for YOU!***





## STANDARD SPECIFICATIONS

**TANK LINER:** 10-gauge, No. 4 finish. 30° cone bottom type 316 stainless steel, sidewalls type 304 stainless steel.

**CIRCULATING JACKET:** 14-gauge, type 304 stainless steel, dimpled and spot welded to cone bottom. Spiral heat exchange media design, ASME coded for 100 PSIG at 340°F; (2) MPT connections (2" on 70N10 and larger models, 1 1/2" on smaller units).

**INSULATION:** Mineral fiber on sides and cone bottom.

**OUTER JACKET:** 16-gauge, type 304 stainless steel, No. 4 finish on sidewalls and cone bottom.

**LEGS:** (4) heavy duty, type 304 stainless steel with stainless steel adjustable ball feet, No. 4 finish.

**BRIDGE:** 10-gauge, type 304 stainless steel, No. 4 finish; fitted with (1) 1 1/2" ACME threaded probe connection and (2) 2" flared inlet openings.

**OUTLET:** 3" or 4" offset tri-clamp ferrule with integral valve seat for piston type or flush mount ball valve.

**COVERS:** 2-piece, hinged to bridge, removable. Available in type 304 or 316 stainless steel, No. 4 finish.

**SCRAPER AGITATOR:** Full sweep, removable, type 304 stainless steel, No. 4 finish with sectional scraper blades on cone bottom.

**SCRAPER AGITATOR DRIVE:** Single speed stainless steel gearmotor, TEFC, washdown, suitable for VFD applications; attached to a 3:1 multiplier and a heavy duty right angle gear reducer finished with anti-rust/stainless polyurethane paint.

Model 70N2.5	¾ HP	30 RPM Shaft Speed
Model 70N5	1 HP	30 RPM Shaft Speed
Model 70N10	1 ½ HP	20 RPM Shaft Speed
Model 70N20	2 HP	20 RPM Shaft Speed
Model 70N40	3 HP	20 RPM Shaft Speed
Model 70N80	5 HP	20 RPM Shaft Speed

**CENTER AGITATOR:** Tri-blade assembly, removable, reversible, type 304 stainless steel, No. 4 finish.

**CENTER AGITATOR DRIVE:** Single speed stainless steel motor, TEFC, washdown, suitable for VFD applications; attached to a heavy duty right angle gear reducer finished with anti-rust/stainless polyurethane paint.

Model 70N2.5	¾ HP	90 RPM Shaft Speed
Model 70N5	1 HP	90 RPM Shaft Speed
Model 70N10	1 ½ HP	90 RPM Shaft Speed
Model 70N20	1 ½ HP	90 RPM Shaft Speed
Model 70N40	1 ½ HP	90 RPM Shaft Speed
Model 70N80	3 HP	90 RPM Shaft Speed

**AGITATOR DRIVE BASE:** Type 304 stainless steel.

**BAFFLE:** Heavy duty curved style, type 304 stainless steel, No. 4 finish, perforated, removable.

**ELECTRICAL SPECIFICATIONS:** 3 phase, 60 hertz, 230-460 volt AC power as standard; alternate voltage upon request

## OPTIONAL EXTRAS

**316 STAINLESS STEEL INTERNALS:** Upgrade to all product contact parts and surfaces from type 304 to type 316 stainless steel, No. 4 finish.

**PRESSURE SIDEWALL:** An added ASME coded circulating jacket built into the side walls to enhance heat transfer for cooling applications.

**SIDEWALL SCRAPERS:** Vertical extensions with sectional scraper blades installed on the scraper agitator for units with pressure sidewall.

**2ND TIER TRI-BLADES:** Extra tier(s) set of blades added to the center tri-blade agitator.

**QUICK BLADE RELEASE:** Scraper agitator modification with a removable sleeve to allow for easier scraper blade removal.

**UPGRADED SCRAPER BLADES:** UHMW, metal detectable or high-temp scraper blades provided in place of the standard nylon set.

### OUTLET VALVE OPTIONS:

**PISTON TYPE** - Air operated, type 304 stainless steel, available in 3" and 4" sizes with tri-clamp connection. Includes air pressure regulator, filter, gauge and operating mechanism.

**BALL TYPE** - Manual operation with extended handle attached to the outboard leg assembly, type 316 stainless steel, available in 3" and 4" sizes with tri-clamp or IMAD threaded connections. Air operated version also available upon request.

**AGITATOR SPEED CONTROL:** For either or both scraper and tri-blade motors. Variable Frequency Inverter furnished in a NEMA-1, wall mounted enclosure with start/stop and speed control. Provides controlled reduction to within approximately 10% of standard indicated shaft speed. 115 volt AC single-phase input. Motor HP and voltage must be indicated.

### RTD TEMPERATURE PROBE:

Long stem, stainless steel, 3/4" diameter, bulb adapter with hex nut.

**STEAM TRAP:** High capacity combination float and thermostatic type.

### CONTROL PANEL:

Customized motor, temperature and/or outlet valve controls provided in a stainless steel enclosure. Please contact our main office for more details.

**VALVE PACKAGES:** Piping control packages for steam and condensate, ingredient water and chilled water are available upon request.

## LOANER PROGRAM

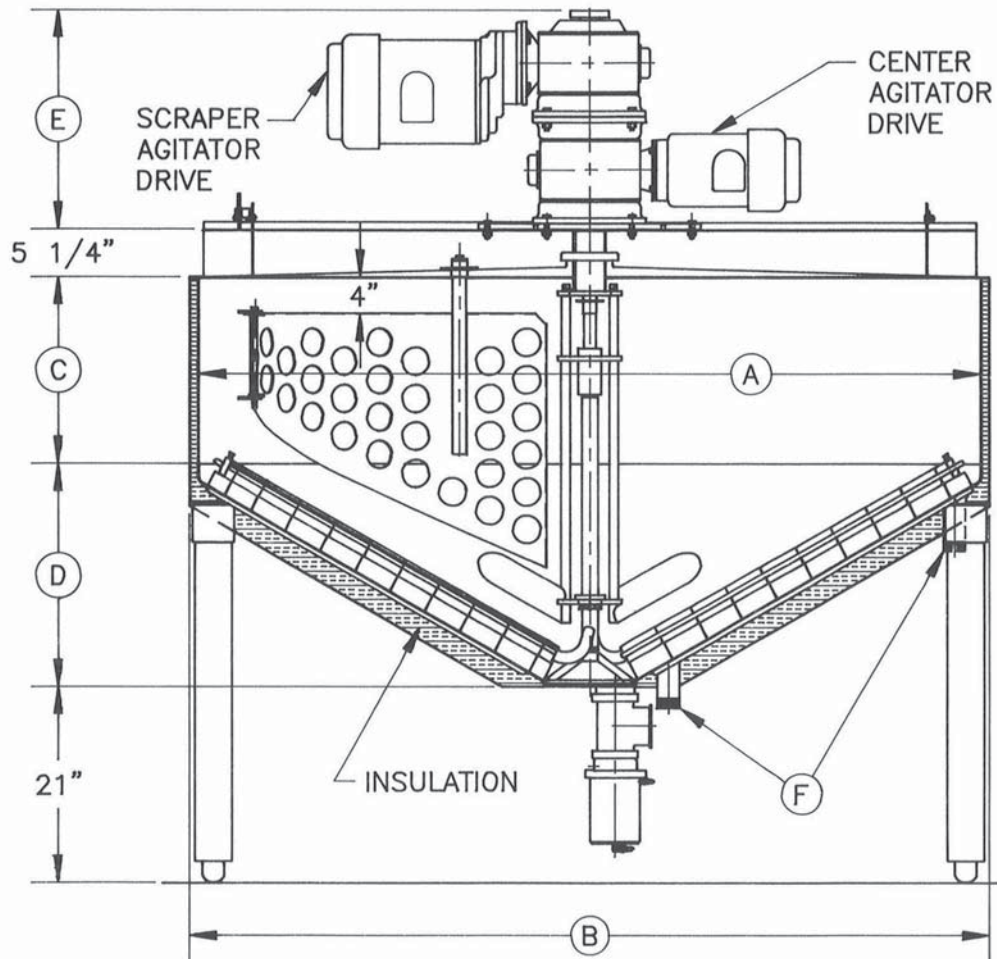
A trial unit can be provided at a no charge for a 30-day period, based upon a contract agreement and availability. Please contact our main office for more information.



## DIMENSIONS, WEIGHTS & SERVICE REQUIREMENTS

MODEL	70N2.5	70N5	70N10	70N20	70N40	70N80
Working Capacity Gal.	25	50	100	200	400	800
Full Capacity Gal.	76	116	206	367	642	1025
A - inches (I.D.)	36	48	60	72	84	84
B - inches (O.D.)	38	50	62	74	86	86
C - inches	14	11	12	15	20	35
D - inches	9 <sup>1</sup> / <sub>4</sub>	12 <sup>5</sup> / <sub>8</sub>	15 <sup>3</sup> / <sub>8</sub>	19 <sup>5</sup> / <sub>8</sub>	23 <sup>7</sup> / <sub>8</sub>	23 <sup>7</sup> / <sub>8</sub>
E - inches	15 <sup>7</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>16</sub>	20 <sup>1</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>8</sub>	23 <sup>9</sup> / <sub>16</sub>	31
F - MTP Size	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	2	2	2	2
Weight - Pounds	850	1760	2150	2450	3560	4300
L.B./H.R. Steam (Nominal)*	200	337	610	1080	2000	2000
Full Load Amps						
230V	5.6	8	11	13	16	23.4
460V	2.6	4	5.5	6.5	8	11.7

\* Start-up requirement = 1.5 times nominal



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