#### Chester-Jensen Co., Inc. SMART SANITARY PROCESSES WWW.Rodem.com | (800) 543-7312

# **COOKER-COOLER**

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









## Catalog Section N

# Chester-Jensen Co., Inc. 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.



The Chester-Jensen Cooker-Cooler has over 50 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:** 12 gauge, No. 4 finish. 30° cone bottom is type 316 stainless steel, straight sidewalls are type 304 stainless steel.

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

**INSULATION:** Fiberglass on sides and cone bottom.

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

**LEGS:** Four (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 one (1) 1 1/2" ACME threaded probe connection and two (2) 2" flared inlet openings.

**OUTLET:** 3" or 4" offset tri-clamp ferrule with integral valve seat for piston type valve (valve not included).

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

**SCRAPER AGITATOR DRIVE:** Single speed gearmotor, totally enclosed, fan cooled, suitable for VFD applications, attached to heavy duty gear housing:

Model 70N2.5	3⁄4 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 motor, totally enclosed, fan cooled, suitable for VFD applications, attached to heavy duty gear housing:

Model 70N2.5	34 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:** Heavy structural steel. Drives and base finished with anti-rust stainless/polyurethane paint.

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

**ELECTRICAL SPECIFICATIONS:** Unless otherwise noted motors will be for 3 phase, 60 hertz, 230-460 volt AC power.

**NOTE:** Non-standard units also available. Please consult the factory for additional information.

#### **DETAILS OF OPTIONAL EXTRAS**

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

**DRIVE BASE:** Type 304 stainless steel agitator drive base is place of standard painted steel base.

**SPECIAL MATERIALS:** (A) All product contact parts and surfaces fabricated from type 316 stainless steel, No. 4 finish. (B) 10 gauge, type 316 stainless steel cone bottom in place of 12 gauge for abrasive product applications.

**ENHANCED HEAT EXCHANGE SURFACE:** Additional ASME coded circulating jacket on straight side walls.

AGITATOR MODIFICATIONS: (A) Quick Blade Release (QBR) feature to simplify the removal of scraper blades for cleaning and maintenance. (B) Extra tier(s) of blades for center tri-blade agitator. (C) Vertical extensions on standard scraper blade agitator for side wall scraping. (D) UHMW machined scraper blades in place of standard nylon molded blades.

**OUTLET VALVES:** (A) Piston design, 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. (B) Ball type, manual, includes extended operator's handle attached to leg assembly. Type 316 stainless steel, available in 3" and 4" sizes with tri-clamp or IMAD threaded connections. Also available in air operated configurations.

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

**AGITATOR SPEED CONTROL:** For either or both scraper and tri-blade motors. Variable Frequency Inverter furnished in 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.

**TEMPERATURE CONTROLS:** (A) Long stem, 3/4" diameter, stainless steel RTD bulb with adapter and nut. (B) Motor and temperature control components with or without custom stainless steel enclosures.

**SPECIAL AGITATOR DRIVES:** Super heavy duty drive components for very viscous product applications.

#### **LOANER UNIT PROGRAM**

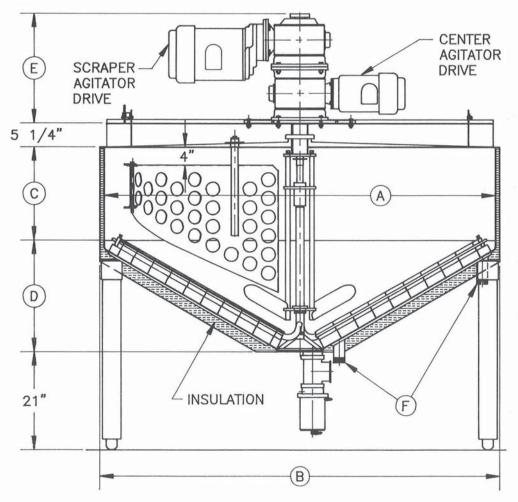
Trial units for testing in your facility are available on a no-charge basis. Consult the factory for details.



#### **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	<b>9</b> 1⁄4	125%	<b>15</b> 3⁄8	<b>19</b> 5⁄8	237⁄8	237⁄8			
E - inches	151/8	<b>20</b> <sup>1</sup> ⁄16	201/8	<b>20</b> 1⁄8	<b>23</b> %16	31			
F - MTP Size	<b>1</b> ½	<b>1</b> ½	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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