

TSURUMI PUMP

SUBMERSIBLE CUTTER PUMPS

C SERIES • CUTTER IMPELLER



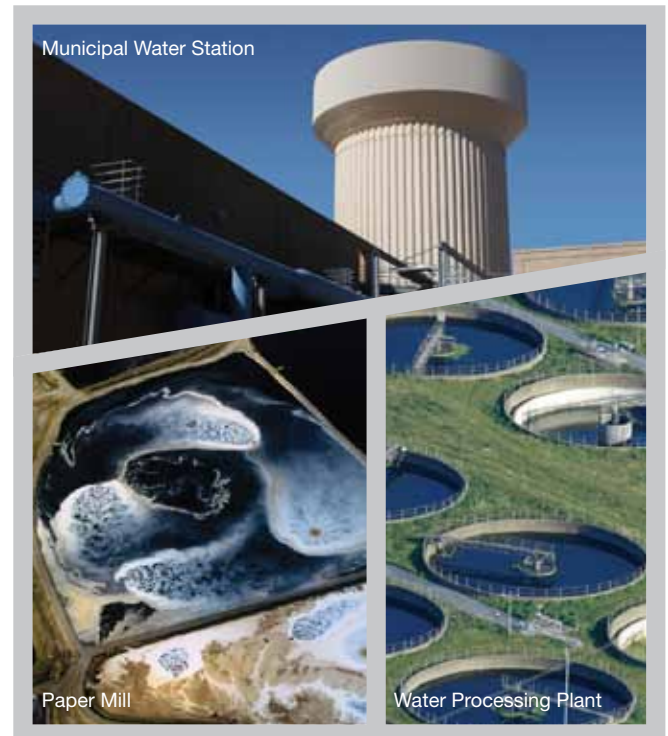
The Tsurumi C Series Cutter Pump



The Tsurumi C Series cutter pump was designed to resolve the all-too-common issue of clogging due to ragging. With more and more hygiene and cleaning products being considered “flushable,” these costly clogging issues are becoming more prevalent in municipal wastewater applications. However, the C Series have also been found to be extremely reliable in industrial, agricultural, processing plants, and many other markets as well.

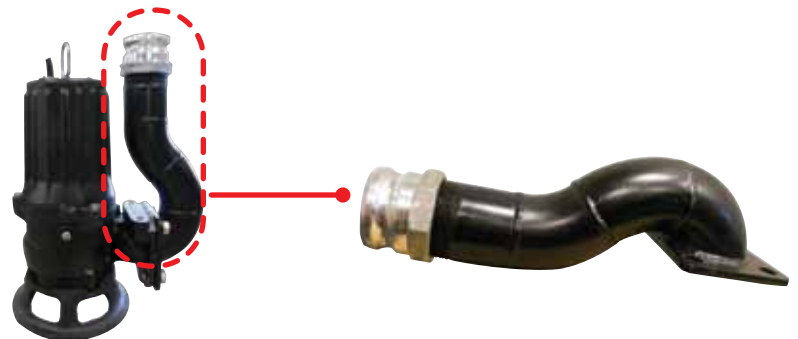
Applications:

- ✓ Municipal Wet Well Lift Stations
- ✓ Municipal Dry Pit Stations
- ✓ Retail Stores / Restaurants
- ✓ Sewer Bypass
- ✓ Nursing Homes / Housing Developments
- ✓ Prisons
- ✓ Hospitals
- ✓ Pulp and Paper Mills
- ✓ Industrial Processing
- ✓ Oil Refining
- ✓ Food Processing
- ✓ Farming
- ✓ Campgrounds
- ✓ Hotels



Optional Discharge with 3" & 4" discharge size

Reduced overall width allows pump to be used in confined areas, including sewer bypass applications. Please contact factory with specific applications.



The **C Series** utilizes a tungsten carbide cutter attached to its impeller, and a serrated high chrome cutter plate to cut materials and provide clog-free pumping.

Cable Entry

Cables are designed with an anti-wicking block at motor entry where each conductor insulation is window cut and the exposed stranded wire is encapsulated in molded rubber or epoxy which eliminates moisture from wicking into the motor.



Motor

The air filled, continuous duty motors are designed to accommodate a normal liquid temperature of 104°F. Higher temperature option is available upon request.

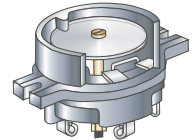
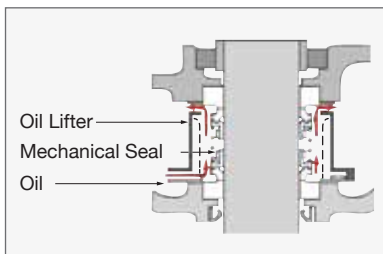
Mechanical Seal

Design utilizes two silicon carbide seal faces, located within the oil chamber. The advantage being two-fold: eliminating corrosion, abrasion or fouling of the spring and seal faces due to contamination, and allowing constant cooling and lubrication of the seal faces, even in run-dry conditions. These are common points of failure in designs where the seal is lubricated by the pumpage.



Oil Lifter (Exclusively Patented)

The Oil Lifter, utilizing centrifugal force, supplies lubricating oil to the upper seal faces even if lubricant falls below the rated volume, or pump is oriented horizontally.



Motor Protector

A Circle Thermal Protector (CTP) integrated in the motor housing directly cuts the motor circuit if excessive heat builds up or an overcurrent caused by an electrical or mechanical failure.

In pumps 15 HP and larger, a Miniature Thermal Protector (MTP) is embedded in



each winding of larger motors. Should the winding temperature rise to the actuating temperature, the bimetal strip opens to cause the control panel to shut the power supply.

Moisture Sensor

An optional external sensor is available to detect the intrusion of water into the oil chamber and when wired to a control panel, alerts operator of this condition. An internal moisture sensor is standard for all pumps 30 HP and larger.

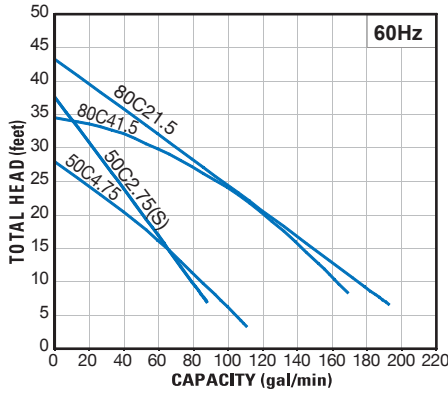


Impeller & Cutter Plate

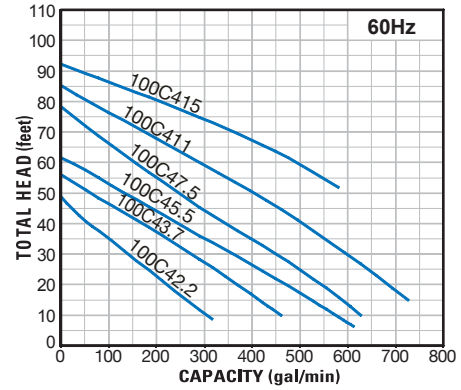
A tungsten carbide cutter is brazed onto the impeller vane, and rotates along the serrated entry of the cutter plate. Incoming fibrous matters are cut up which prevents clogging.

Performance Curves

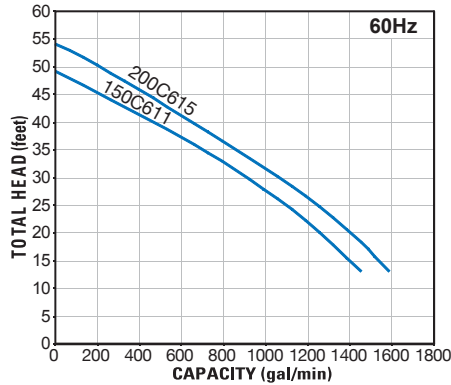
Discharge Size: 2" - 3"



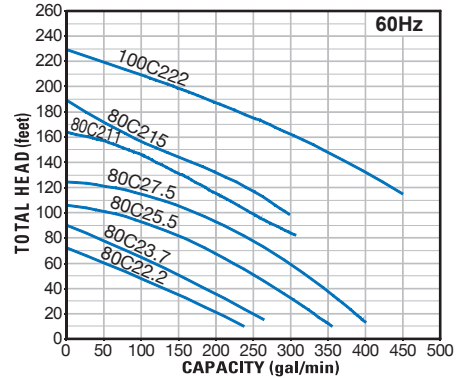
Discharge Size: 4"



Discharge Size: 6" - 8"



High Head Models



Specifications

	Model	MOTOR OUTPUT		VOLTAGES AVAILABLE / AMPERAGE - RATED CURRENT						RPM	DISCHARGE CONNECTION (Inches)
		HP	Kw	Single Phase		Three Phase					
				115V	230V	208V	230V	460V	575V		
C SERIES 2" - 3"	50C2.75S	1	0.75	11.7	5.9	-	-	-	-	3455	2
	50C2.75	1	0.75	-	-	3.5	3.5	1.8	1.4	3380	2
	50C4.75	1	0.75	-	-	3.6	3.5	1.8	1.5	1690	2
	80C21.5	2	1.49	-	-	6.5	5.9	3.1	2.3	3400	3
	80C41.5	2	1.49	-	-	6.6	6.4	3.2	2.6	1670	3
C SERIES 4"	100C42.2	3	2.24	-	-	9.4	8.5	4.3	3.5	1700	4
	100C43.7	5	3.73	-	-	15.0	13.8	6.9	5.4	1690	4
	100C45.5	7 1/2	5.59	-	-	22.6	20.5	10.3	8.1	1731	4
	100C47.5	10	7.46	-	-	28.8	26.6	13.4	10.8	1748	4
	100C411	15	11.19	-	-	42.2	39.2	19.5	15.7	1733	4
C SERIES 6" - 8"	150C415	20	14.91	-	-	56.4	53.2	26.6	21.6	1739	4
	150C611	15	11.19	-	-	43.0	40.0	20.0	16.0	1150	6
C SERIES HIGH HEAD	200C615	20	14.91	-	-	58.0	52.0	26.0	21.0	1150	8
	80C22.2	3	2.24	-	-	10.0	9.8	4.9	3.8	3490	3
	80C23.7	5	3.73	-	-	14.4	13.6	6.8	5.3	3410	3
	80C25.5	7 1/2	5.59	-	-	22.3	21.4	10.7	8.3	3545	3
	80C27.5	10	7.46	-	-	26.9	25.6	13.0	10.2	3545	3
	80C211	15	11.19	-	-	40.8	39.2	19.6	15.4	3525	3
	80C215	20	14.91	-	-	54.0	50.0	25.0	20.0	3465	3
100C222	30	22.37	-	-	-	-	35.0	28.0	3490	4	



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We reserve the right to change the specifications and designs for improvement without prior notice.

TAI-C-Series-MAY2014