

# HSU, HSUL & JCU Submersible Pumps



## HSU, HSUL, JCU

#### Model HSU

Hydro-solids pumps. Recessed impeller easily accomodates large, stringy and fibrous solids without clogging. Because it is completely submersible, the HSU can be used in virtually any sump application.

- Capacities to 295 m<sup>3</sup>/h (1,300 USgpm)
- Heads to 27 m (90 feet)
- Temperature Range 90°C (194°F)
- Pressures to 690 kPa (100 PSIG)
- Solids to 152 mm (6 in)

#### Solids Type

Will handle large, stringy, fibrous and abrasive solids.

#### **Materials**

- Cast Iron
- 28% Chrome Iron (HC600)
- CD4MCu
- 316 Stainless Steel

#### Features

- Recessed Impeller
- Concentric Casing
- Integral Support
- Heavy Duty Adapter
- Integral Discharge Elbow

#### **Materials**

Cast Iron

#### Model HSUL

Submersible recessed impeller pumps easily handle any solid up to its suction/discharge size. Versatile mounting allows pump to stand or to be mounted on an optional slide rail arrangement.

- Capacities to 636 m<sup>3</sup>/h (2,800 USgpm)
- Heads to 43 m (140 feet)
- Temperature Range 90°C (194°F)
- Pressures to 690 kPa (100 PSIG)
- Solids to 152 mm (6 in)

#### Solids Type

Will handle large, stringy, fibrous and abrasive solids.



#### Materials

- Cast Iron
- 28% Chrome Iron (HC600)
- CD4MCu
- 316 Stainless Steel

#### **Features**

- Recessed Impeller
- Concentric Casing
- Flanged Suction and Discharge
- Interchangeability with Horizontal & Vertical Models
- Mounting Flexibility

#### Model JCU

Submersible pumps for handling tough abrasive slurries. Impeller design offers optimum combination of solids handling ability, wear resistance, and efficiency. Optional slide rail assembly available for ease of maintenance.

- Capacities to 910 m<sup>3</sup>/h (4,000 USgpm)
- Heads to 67 m (220 feet)
- Temperature Range 90°C (194°F)
- Pressures to 1,380 kPa (200 PSIG)
- Solids to 152 mm (2 in)

#### Solids Type

Will handle all types of abrasive solids

#### Materials

- Cast Iron
- 28% Chrome Iron (HC600)
- CD4MCu
- 316 Stainless Steel

#### Features

- Heavy Duty Slurry Design
- Replaceable Suction Liner
- Integral Strainer
- Mounting Flexibility
- Interchangeability with Horizontal & Vertical Models



GOULDS PUMPS

2 HSU, HSUL & JCU

#### Submersible Hydro-Solids Pumps

Designed to handle large, stringy, fibrous and abrasive solids

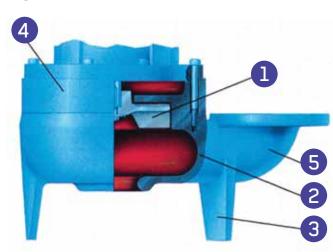
#### Services

- Waste Treatment Plants
- General Service Sumps
- Sewage Wet Wells
- Reclaim Sumps
- Power Plants
- Industrial Waste Sumps
- Sludge Pits

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- Drainage Sumps
- Collection Basins
- Wood Yard Sumps

#### **Design Features**



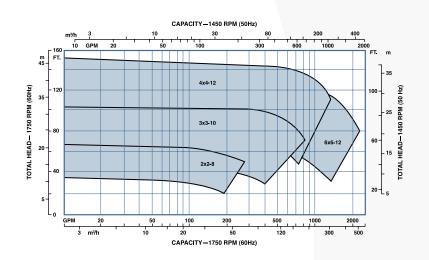
**Fully Recessed Impeller** Allows large stringy or fibrous material to pass through the pumps without binding or clogging.

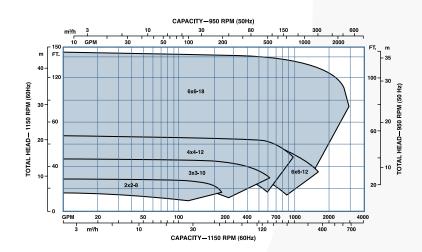
- **Concentric Casing** Concentric design facilitates flow of pumpage and solids through the pump while minimizing loads.
- **3** Integral Support Three cast-in legs provide simple, stable support without additiona parts.
  - Heavy-Duty Motor Adaptor Extra thick in critical areas. Extended shroud encircles impeller and protects casing from wear.
  - Integral Discharge Elbow Cast-in elbow reduces parts and allows easy installation.

#### What Goes In – Goes Out!

Unlike self-priming trash pumps or some other submersibles or vertical pumps, the HSU will pump any solid that enters its suction without clogging. This includes such hard to pump items as rags and string. Avoid costly downtime unplugging your pump with Goulds HSU.

#### Hydraulic Coverage 50 / 60 Hz





### HSUL

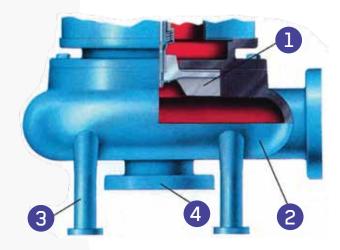
#### Submersible Hydro-Solids Pumps

Designed to handle large, stringy and abrasive solids

#### Services

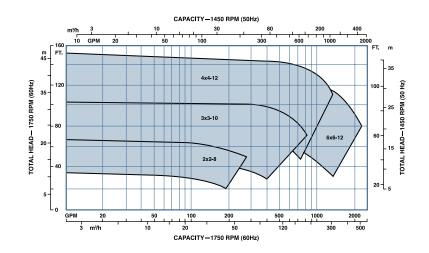
- Waste Treatment Plants
- General Service Sumps
- Sewage Wet Wells
- Reclaim Sumps
- Power Plants
- Industrial Waste Sumps
- Sludge Pits
- Drainage Sumps
- Collection Basins
- Wood Yard Sumps

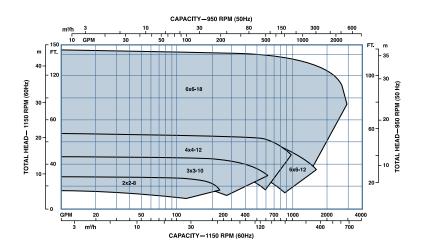
#### **Design Features**

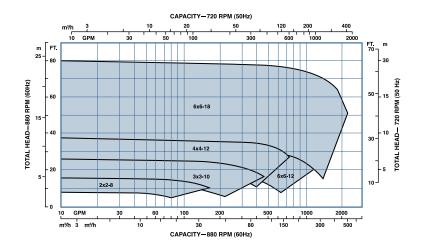


- Fully Recessed Impeller Allows large stringy or fibrous material to pass through the pumps without binding or clogging.
- 2 Concentric Casing Concentric design facilitates flow of pumpage and solids through the pump while minimizing loads.
  - Legs Bolt-on legs provide stability on sump floor.
  - Mounting Flexibility Flanged suction and horizontal discharge allow pump to stand or be mounted on optional slide rail.
- 5 Interchangeability Reduce inventory by sharing parts with Horizontal HS pumps & Vertical Cantilever VHS pumps.

#### Hydraulic Coverage 50 / 60 Hz









#### 4 HSU, HSUL & JCU

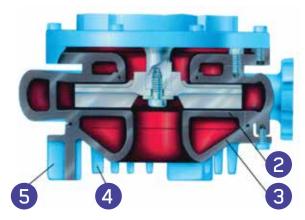
#### Heavy Duty Submersible Slurry Pumps

Designed to handle abrasive sump applications

#### Services

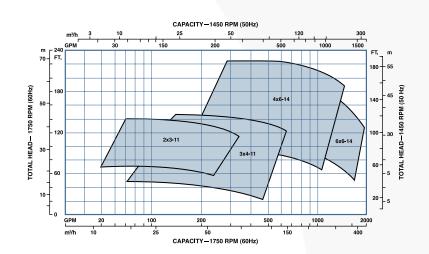
- Fly Ash
- Sand and Gravel
- Chemical Waste Sumps
- Dirty Water Sumps
- Foundry Sand
- Bauxite
- Lime Sumps
- Kaolin Clay
- Mill Scale
- Sludge Pits

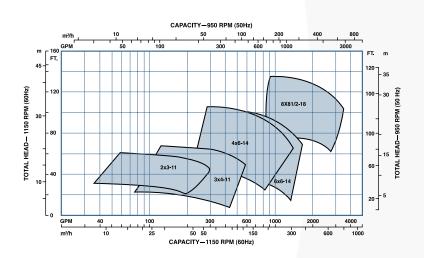
#### **Design Features**

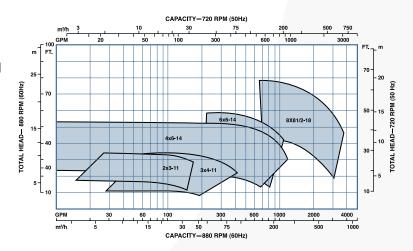


- Heavy Duty Design Extra thick wall sections in high wear areas.
- **Replaceable Suction Liner** Easy to replace protects casing from wear.
- **Suction Cover** Bell shaped intake reduces entrance losses and improves suction characteristics.
- Integral Strainer Suction cover has cas-on vertical tines to prohibit oversized solids from clogging pump.
- **5** Pump Mounting Three cast-on legs give excellent support and stability. Optional slide rail also available to permit easy removal from sump.
- 6 Maximum Interchangeability Suction Cover liner and casing are interchangeable with Goulds Models JC (horizontal) and VJC (vertical cantilever) pumps.

#### Hydraulic Coverage 50 / 60 Hz







### Options

#### For Application Flexibility

#### Slide Rail System

Available on Models HSUL and JCU, Goulds slide rail system provides easy removal of pump unit without disturbing discharge piping. Unique slurry design utilizes a locking cam action with locator lugs and a large O-ring for positive sealing (no leakage) while allowing a tangential discharge for high efficiency. This is an important feature when pumping slurries; if a tight seal is not achieved, leakage can cause rapid and excessive wear of the mating flanges resulting in reduction of performance as well as increased maintenance costs. Goulds slide rail system meets all requirements for toughest slurry devices.



#### **Moisture Detector**

Required on all submersibles for warranty validation. Provides one normally open and two normally closed connection for activating a warning and/or de-energizing the motor.





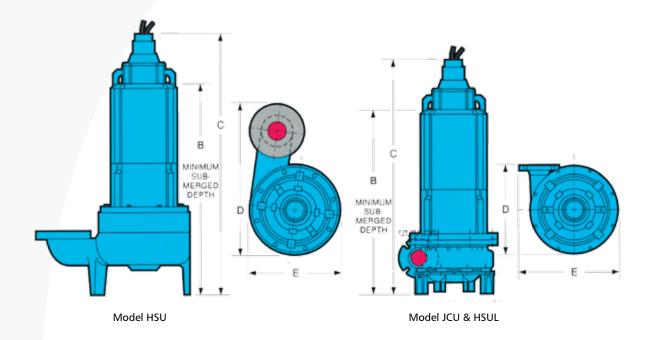
### **Submersible Motors**

Goulds submersible series motors are designe and built specifically for tough slurry pumping. Heavy-duty design features for reliability include:

- UL and CSA Approved Explosion Proof
- Epoxy encapsulated and butt-spliced cable entry system prevents liquid from entering top of motor and provides non-wicking design.
- Permanently lubricated and sealed ball bearings.
- F Class insulation and 1.15 service factor standard.
- Tandem mechanical seals provide complete protection for motor internals.
- Thermal protection standard.
- Dual moisture probes provide early warning of seal failure.
- Conforms to NEMA, IEEE, ANSI and NEC standards.
- High temperature option allows operation to 90°C (194°F)
- 5-year Pro-Rated Warranty



### Dimensions



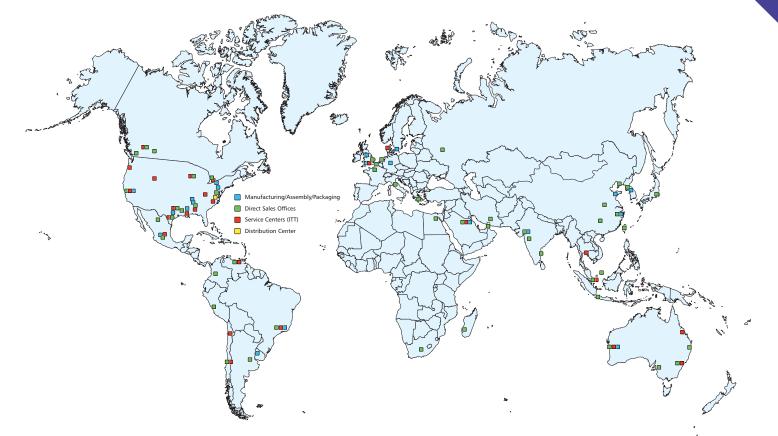
Model	Pump Size	В*	C*	D	E	Weight Lbs. (kg)
HSU	3×3-8	32.3 (821)	39.8 (1010)	22.6 (575)	15.4(391)	470 (213)
	4×4-10	38.3 (972)	48.6 (1235)	28.6 (727)	18.3 (464)	1060 (481)
	6×6-11	45.6 (1159)	53.0 (1346)	32.0 (813)	20.3 (514)	1170 (531)
HSUL	2×2-8	32.0 (813)	40.0 (1016)	14.0 (356)	14.0 (356)	500 (227)
	3×3-10	42.0 (1067)	54.0 (1372)	19.0 (483)	19.0 (483)	1450 (658)
	4×4-12	44.0 (1118)	57.0 (1448)	21.0 (533)	21.0 (533)	1410 (640)
	6×6-12	57.0 (1448)	68.0 (1727)	24.0 (610)	23.0 (584)	1950 (885)
	6×6-18	57.0 (1448)	68.0 (1727)	30.0 (762)	29.0 (737)	2025 (918)
JCU	1×1.5-11	31.1 (790)	39.4 (1000)	19.5 (495)	15.4 (391)	500 (227)
	2×3-11	31.1 (790)	39.4 (1000)	23.1 (587)	17.2 (437)	500 (227)
	2×3-14	36.0 (914)	46.4 (1178)	25.8 (655)	20.3 (514)	900 (408)
	3×4-11	36.0 (914)	46.4 (1178)	26.5 (673)	19.3 (490)	990 (449)
	4×6-14	47.1 (1197)	58.0 (1473)	32.9 (836)	24.2 (614)	1880 (853)
	6×6-14	47.3 (1202)	58.2 (1478)	39.3 (998)	27.3 (692)	2030 (921)
	8×10-18	51.3 (1301)	62.9 (1597)	50.1 (1273)	34.8 (885)	2460 (1116)
	10×12-22	53.6 (1362)	64.5 (1638)	59.0 (1499)	43.1 (1095)	3280 (1488)

\*Dimensions based on largest motor available for the given pump size. All dimensions in inches and (mm). Not to be used for construction.

### Notes

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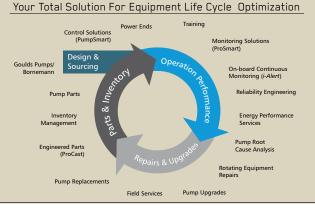
# Wherever you are, we're there too.





#### Reliability has no quitting time.

Building on over 160 years of Goulds Pumps experience, PRO Services provides an array of services focused on reducing equipment total cost of ownership (TCO) and increasing plant output, including predictive monitoring, maintenance contracts, field service, engineered upgrades, inventory management, and overhauls for pumps and other rotating equipment.



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