

Vulcan HDS Heavy Duty

Submersible Slurry Pumps

for Industrial Applications



vulcanpumps.com

The Vulcan HDS delivers continuous, heavy-duty performance with a full range of design options. **Built to handle your toughest applications!**

MINING/STEEL

- Kaolin Clay
- Red Mud Decanting
- Magnetite Recovery
- Clarifier Sludge
- Waste Water and Basement Sumps
- Coal Pile Runoff
- Slag Pits
- Scale Pits
- Swarf Boxes
- Flume Flushers
- Interceptor Pumps

POWER GENERATION

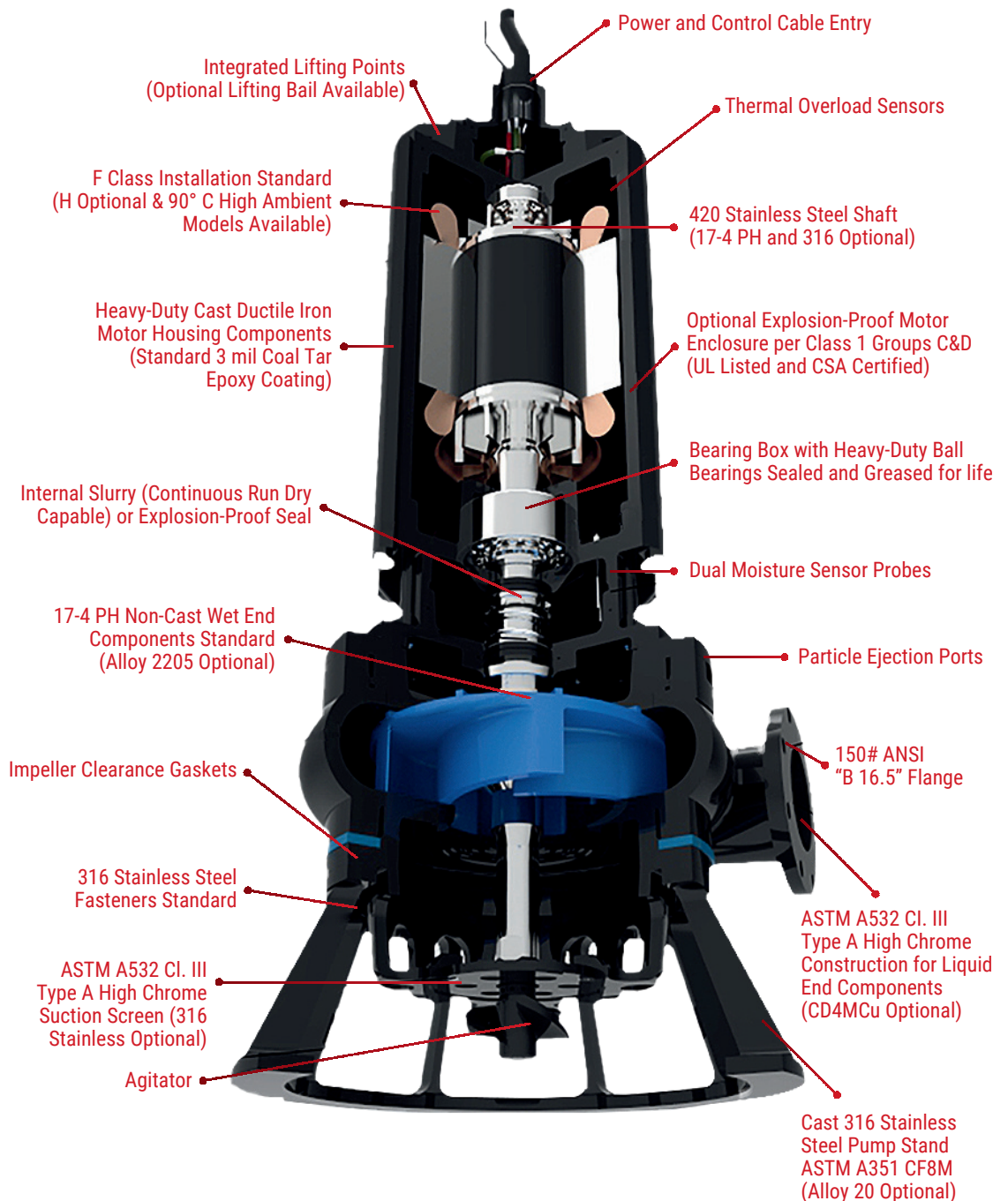
- Coal Pile Runoff
- Coal Slusher Sumps
- Coal Tunnel Sumps
- Coal Fines Recovery
- FGD Blowdown Sumps
- Bottom Ash Transport
- Fly Ash Sumps and Ponds
- Waste Water and Basement Sumps

SAND & GRAVEL

- Weir Overflow
- Dust Suppression
- Recycle Water
- Wheel Wash Pump
- Cyclone Feed
- Dredging
- Barge Unloading

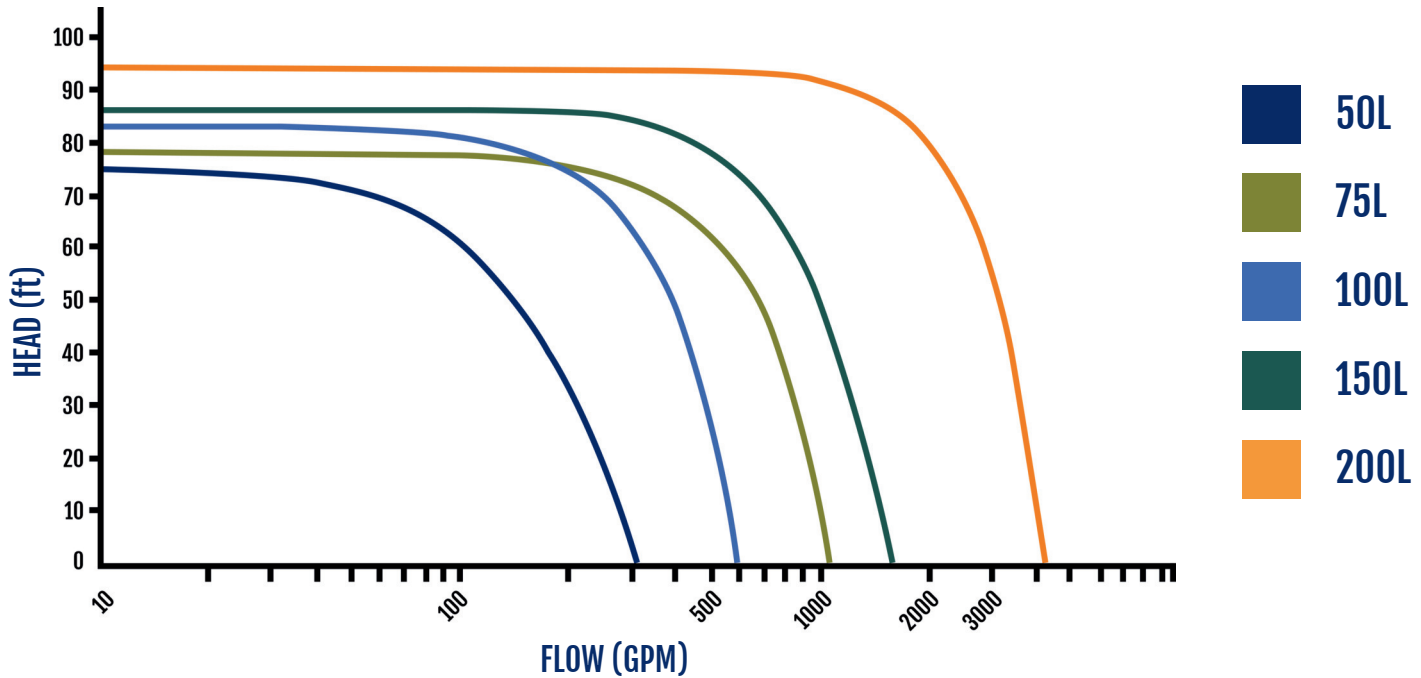
OIL & GAS

- Drilling Mud Reclamation
- Tripping Tank
- Fracking
- Tar Sands
- Washdown Sumps
- Transport Unloading Sumps



Standard Features:

- 316 Stainless Steel Hardware
- High Chrome Iron Construction
- Particle Ejection Ports
- Agitator
- Internal Slurry Seal
- High Strength Cast Stand



VULCAN HDS LOW – HEAD HYDRAULIC PERFORMANCE

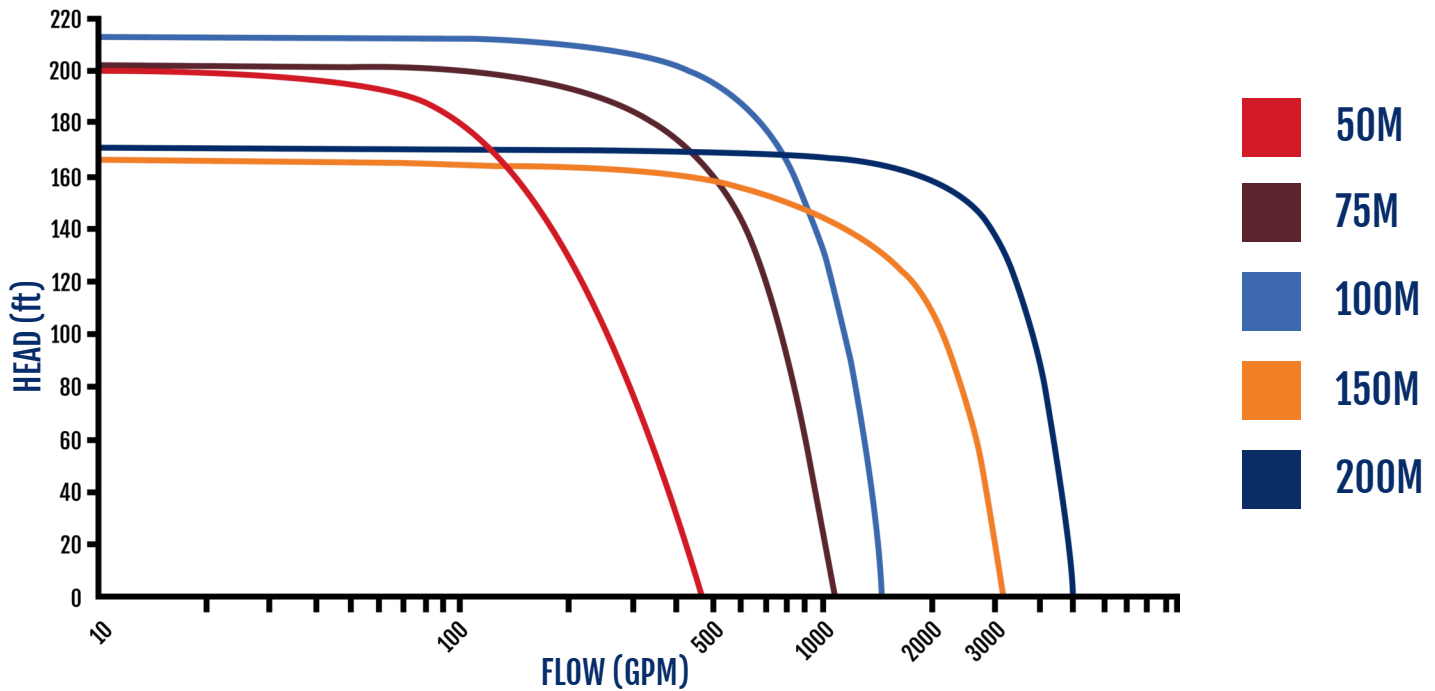
	Discharge Size [in. (mm)]	2" (50)
	Impeller Diameter [in. (mm)]	8.46" (215)
	Min. Impeller Diameter [in (mm)]	6.77" (172)
	Max Solid Size in. (mm)	0.63" (16)
HDS 50L	Motor Frame Size	180TY / 210TYS
	Motor Power HP ¹	5 / 7.5 / 10 / 15 / 20
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	349 (159)

	Discharge Size [in. (mm)]	3" (75)
	Impeller Diameter [in. (mm)]	8.46" (215)
	Min. Impeller Diameter [in (mm)]	6.77" (172)
	Max Solid Size in. (mm)	0.86" (22)
HDS 75L	Motor Frame Size	180TY / 210TYS
	Motor Power HP ¹	5 / 7.5 / 10 / 15 / 20
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	371 (168)

	Discharge Size [in. (mm)]	4" (100)
	Impeller Diameter [in. (mm)]	9.05" (230)
	Min. Impeller Diameter [in (mm)]	7.24" (184)
	Max Solid Size in. (mm)	1.26" (32)
HDS 100L	Motor Frame Size	180TY / 210TYS
	Motor Power HP ¹	5 / 7.5 / 10 / 15 / 20
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	403 (182)

	Discharge Size [in. (mm)]	6" (150)
	Impeller Diameter [in. (mm)]	9.84" (250)
	Min. Impeller Diameter [in (mm)]	7.82" (200)
	Max Solid Size in. (mm)	1.26" (32)
HDS 150L	Motor Frame Size	250TY / 320TYS
	Motor Power HP ¹	25 / 30 / 40 / 50 / 60 / 75
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	1058 (482)

	Discharge Size [in. (mm)]	8" (200)
	Impeller Diameter [in. (mm)]	14.76" (375)
	Min. Impeller Diameter [in (mm)]	11.81" (300)
	Max Solid Size in. (mm)	1.58" (32)
HDS 200L	Motor Frame Size	320TY / 360TYS
	Motor Power HP ¹	40 / 50 / 60 / 75 / 100 / 125 / 150 / 200
	Freq [(Hz) / (RPM)] ¹	60 / 1170
	Voltage	460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	2015 (916)



VULCAN HDS MEDIUM - HEAD HYDRAULIC PERFORMANCE

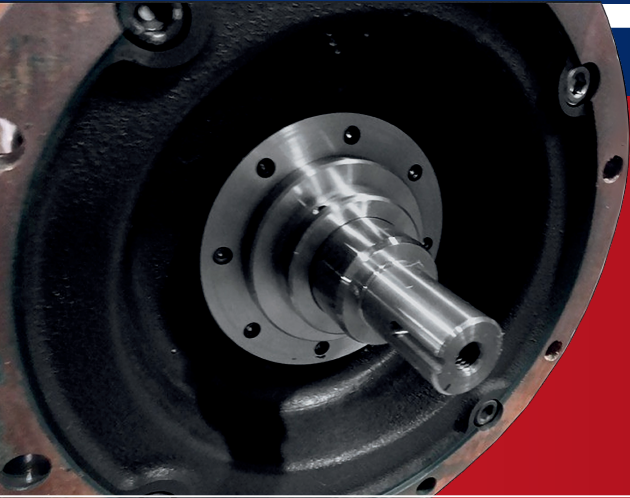
	Discharge Size [in. (mm)]	2" (50)
	Impeller Diameter [in. (mm)]	13.38" (340)
	Min. Impeller Diameter [in (mm)]	11.34" (288)
	Max Solid Size in. (mm)	0.79" (20)
HDS 50M	Motor Frame Size	250TY
	Motor Power HP ¹	20 / 25 / 30
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	727 (340)

	Discharge Size [in. (mm)]	3" (75)
	Impeller Diameter [in. (mm)]	13.38" (340)
	Min. Impeller Diameter [in (mm)]	10.70" (272)
	Max Solid Size in. (mm)	1.38" (35)
HDS 75M	Motor Frame Size	250TY / 320TYS
	Motor Power HP ¹	25 / 30 / 40 / 50 / 60 / 75
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	747 (340)

	Discharge Size [in. (mm)]	4" (100)
	Impeller Diameter [in. (mm)]	13.38" (340)
	Min. Impeller Diameter [in (mm)]	10.70" (272)
	Max Solid Size in. (mm)	1.56" (40)
HDS 100M	Motor Frame Size	250TY / 320TYS
	Motor Power HP ¹	25 / 30 / 40 / 50 / 60 / 75
	Freq [(Hz) / (RPM)] ¹	60 / 1750
	Voltage	230 / 460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	790 (359)

	Discharge Size [in. (mm)]	6" (150)
	Impeller Diameter [in. (mm)]	16.93" (430)
	Min. Impeller Diameter [in (mm)]	13.60" (345)
	Max Solid Size in. (mm)	2.16" (55)
HDS 150M	Motor Frame Size	320TY / 360TYS
	Motor Power HP ¹	40 / 50 / 60 / 75 / 100 / 125 / 150 / 200
	Freq [(Hz) / (RPM)] ¹	60 / 1170
	Voltage	460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	2216 (1007)

	Discharge Size [in. (mm)]	8" (200)
	Impeller Diameter [in. (mm)]	18.50" (470)
	Min. Impeller Diameter [in (mm)]	14.80" (376)
	Max Solid Size in. (mm)	2.36" (60)
HDS 200M	Motor Frame Size	320TY / 360TYS
	Motor Power HP ¹	40 / 50 / 60 / 75 / 100 / 125 / 150 / 200
	Freq [(Hz) / (RPM)] ¹	60 / 1170
	Voltage	460 / 575
	Insulation ²	F / H / High Ambient
	Weight ³ [lbs. (kg)]	2333 (1056)



STANDARD HDS FEATURES

INTERNAL SLURRY SEAL

- **Mechanical Seal Configuration** designed for prolonged motor operation in severe duty slurry applications.
- **Double Mechanical Seals** operate in an oil chambers - Components are isolated from the pumped slurry
- **Carbon-Ceramic face (upper) and Silicon Carbide lower face**



PARTICLE EJECTION PORTS

- Expels solids to extend seal life
- Maintains minimum flow during closed valve operation



HDS AGITATOR

- Provides agitation to suspend solids for cleaner sumps

OPTIONAL HDS FEATURES



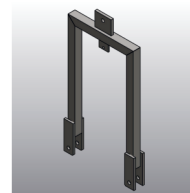
MOISTURE DETECTOR

- Prolongs pump performance
- NEMA 4 enclosure
- Motor safeguard
- Signals early seal failure to avoid costly repairs



STAINLESS STEEL SPRAY RING

- Extra agitation when required for heavy solids



HDS LIFTING BAIL

- Fabricated from 304SS or 316SS
- Provides a central lifting point



RUBBER SLURRY HOSE

- Abrasion resistant rubber tubing with a stainless connections
- Allows pump to be moved around without piping modifications



SUPER SLURRY SEAL

- The seal solution for the most demanding applications
- Suitable for both standard and explosion proof motors
- The Super Slurry Seal feature duplex stainless construction, silicon carbide faces, and encapsulated spring design to operate in the most severe environments



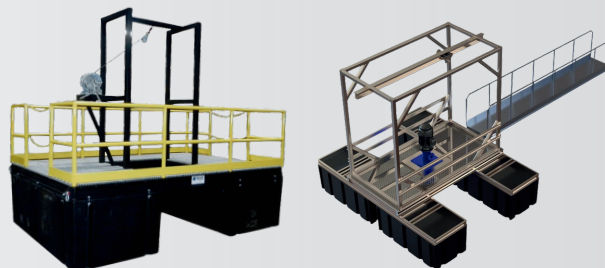
CONTROL PANEL

- Simplex/Duplex
- Built-In thermal overload and moisture detector



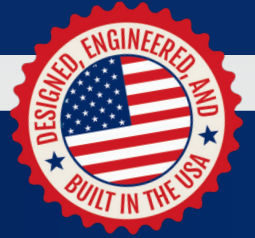
BARGES & FLOATING PUMP PACKAGES

- Custom pontoon-mounted floating pump packages are available to meet almost any performance requirements.



CALL OR CLICK TODAY!

Learn more about how Vulcan float package can benefit your operation.



HDS 250L & 300L SUBMERSIBLE SLURRY PUMP

Your Answer for Heavy-Duty Slurry Applications



- CHROME IRON CONSTRUCTION (650 BHN)
- CAST 316SS PUMP STAND
- CENTER-LINE DISCHARGE FOR SLIDE RAIL CAPABILITIES
- MOISTURE AND THERMAL OVERLOAD MOTOR SENSORS
- INTERNAL SLURRY MECHANICAL SEAL WITH SILICON CARBIDE ACES AND VITON ELASTOMERS
- 50' OF POWER AND CONTROL CABLE
- 316 SS HARDWARE
- 17-4 PH PUMP COMPONENTS
- DEFLECTOR AND PARTICLE EJECTION PORTS

HDS 250L

Discharge Size [in. (mm)]	10 (250)
Impeller Diameter [in. (mm)]	20.5 (520)
Min. Impeller Diameter [in (mm)]	19 (483)
Max Solid Size in. (mm)	2.5 (62.5)
Motor Frame Size	440TY
Motor Power HP	100 / 125 / 150 / 200
Freq [(Hz) / (RPM)]	(60) / 1200 / 900
Voltage	460V
Insulation ²	F / H / High Ambient

HDS 300L

Discharge Size [in. (mm)]	12 (300)
Impeller Diameter [in. (mm)]	24 (610)
Min. Impeller Diameter [in (mm)]	22 (559)
Max Solid Size in. (mm)	3 (75)
Motor Frame Size	440TY
Motor Power HP	150 / 200 / 250 / 300
Freq [(Hz) / (RPM)]	(60) / 900
Voltage	460V
Insulation ²	F / H / High Ambient

VULCAN'S MOST DURABLE PUMP – NOW IN 10" & 12" DISCHARGE

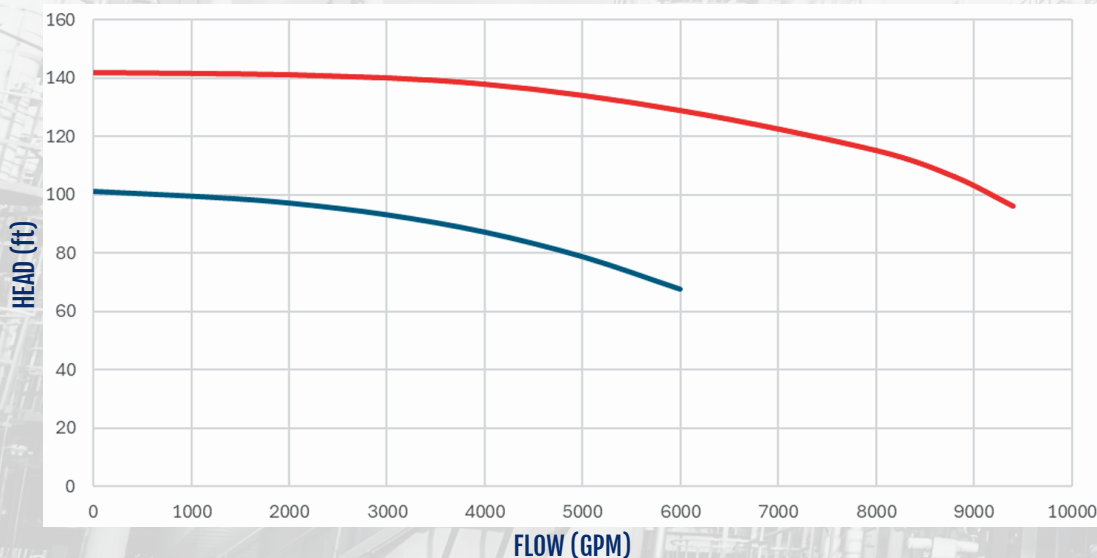
HDS SUBMERSIBLE SLURRY PUMP

Your Answer for Heavy-Duty Slurry Applications



MATERIALS OF CONSTRUCTION

Casing	A532 Cl III Type A (28% Chrome Iron)
Impeller	A532 Cl III Type A (28% Chrome Iron)
Suction Liner	A532 Cl III Type A (28% Chrome Iron)
Agitator	A532 Cl III Type A (28% Chrome Iron)
Machined Parts	A564 Gr. 630 (17-4 PH)
Stand	316 Stainless Steel
Hardware	316 Stainless Steel
Seal faces	SilCar / SilCar
Motor Shaft	420 Stainless Steel
Motor Housing	Ductile Iron



 HDS 250L

 HDS 300L

VULCAN HDSS

VULCAN'S MOST POPULAR PUMP
- NOW IN **STAINLESS STEEL!**

*Introducing the all-new **HDSS Corrosive Slurry Pump**, your answer to the harshest corrosive and abrasive slurry applications.*

MATERIALS WE CAN OFFER:

- CD4MCUN
 - ALLOY 20
 - 316SS
 - 2205 DUPLEX STAINLESS
 - 2507 SUPER DUPLEX STAINLESS
- and others upon request*