

# 2024 CUSTOM MADE PUMPING SYSTEMS PRODUCT GUIDE WE SELL EWAT

# WE SELL DEWATERING

HydroTech Mining specializes in the sale, design and production of pumping and dewatering systems for the mining industry. Whether for clear water or slurry dewatering, we have a solution for you!

HydroTech Mining offers a wide array of high-performing submersible pumps and dewatering systems designed for all types of mining operations.

We are committed to finding solutions combining high performance and quality to minimize your operations costs and improve the reliability of your equipment and facilities.









# THE CUSTOM MADE PUMPING SYSTEMS ARE DESIGNED TO ADDRESS THE SPECIFIC NEEDS OF OUR CLIENTS

After a detailed analysis of the type of liquid, solid concentrations, PH level, flow, pressure, physical conditions on site, the HydroTech Mining team will design the right system for the application. The systems are built in factory which makes installation onsite very easy... plug and play! We are present at start-up to insure the systems are up and running in record time. We are also available 24/7 to support and help our clients maintain the system once in operation. Our goal is to move liquid from point A to point B as efficiently as possible therefore lowering pumping cost for our clients!

# UNDERGROUND CUSTOM MADE PUMPING SYSTEMS

TSUNAMI TM series

### **CUSTOM-DESIGNED DEWATERING SYSTEMS**

Maximum capacity:
Up to 2 500 US gpm (570 m³/hr)

Maximum pressure:
Up to 700 m TDH

Designed for solid concentration:
Up to 20%

Victaulic or flanged connections:
4" to 8"



Rating: **Up to 2 500 HP (1 850 kW)** 

The Tsunami™ Series incorporate pumping systems tailored to customer's specific needs. They combine horizontal centrifugal slurry pumps with wear parts made of high chromium to provide added durability, and are customized to adapt to all types of applications. They are designed with a wider space between the impeller vanes for easier movement of water with a high concentration of solid. TSU pumps come with controllers for easier management of pumping operations. The Tsunami™ Series can pump solid concentration up to 20% and ensure a pressure of 700 m TDH. These pumps have a capacity up to 2 500 US gpm (570 m³/hr) and 2 500 HP (1 850 kW).



# TSUNAMI TM series



# **SPECIFICATIONS**

PUMP MODELS	DESCRIPTION	PUMP TYPE	MOTOR OUTPUT [HP - (KW)]	TOTAL HEAD [FT - (M)]	CAPACITY [US GPM - (m³/h)]
TSU500/140T	Underground - portable pump and tank skid	4x3	100 (75)	100 (75) 460 (140)	
TSU1000/140T	Single pump	6x5	250 (185)	460 (140)	1 000 (230)
TSU500/280T	Underground - portable pump and tank skid	4x3	200 (150)	920 (280)	500 (115)
TSU1000/280T	- Duplex (staged)	6x5	500 (375)	920 (280)	1 000 (230)
TSU500/140	Underground - Portable Pump Skid	4x3	100 (75)	460 (140)	500 (115)
TSU1000/140	-	6x5	250 (185)	460 (140)	1 000 (230)
TSU2500/130	Single pump	8x6	500 (375)	425 (130)	2 500 (570)
TSU500/280	Underground - Portable Pump Skid	4x3	200 (150)	920 (280)	500 (115)
TSU1000/280	-	6x5	500 (375)	920 (280)	1 000 (230)
TSU2500/260	Duplex (staged)	8x6	1 000 (750)	850 (260)	2 500 (570)
TSU500/420	Underground - Portable Pump Skid	4x3	300 (225)	1 380 (420)	500 (115)
TSU1000/420	-	6x5	750 (560)	1 380 (420)	1 000 (230)
TSU2500/390	Triplex (staged)	8x6	1 500 (1110)	1 280 (390)	2 500 (570)
TSU500/560	Underground - Portable Pump Skid	4x3	400 (300)	1 840 (560)	500 (115)
TSU1000/560	-	6x5	1000 (750)	1 840 (560)	1 000 (230)
TSU2500/520	Quadruplex (staged)	8x6	2 000 (1480)	1 700 (520)	2 500 (570)
TSU500/700	Underground - Portable Pump Skid	4x3	500 (375)	2 300 (700)	500 (115)
TSU1000/700	-	6x5	1 250 (9300)	2 300 (700)	1 000 (230)
TSU2500/650	5 pumps (staged)	8x6	2 500 (1850)	2 130 (650)	2 500 (570)

T = Tank

# OPEN-PIT CUSTOM MADE PUMPING SYSTEMS

**HURRICANE** ™ series

# **CUSTOM-DESIGNED DEWATERING SYSTEMS**

Maximum capacity:
Up to 10 000 US gpm (2 275 m³/h)

Standard pressure:
700 m TDH (customizable)

Designed for solid concentration:
Up to 20%

Victaulic or flanged connections:
4" to 16"

Rating:
Up to 5 400 HP (4 020 kW)



The Hurricane<sup>™</sup> Series incorporate pumping systems tailored to customer's specific needs and built for open-pit dewatering. They utilize horizontal centrifugal pumps customized to adapt all types of applications. They are designed and built in a self-contained portable pump box. HUR pumps come with controllers for easier management of pumping operations. The Hurricane<sup>™</sup> Series can pump solid concentrations up to 20% and pressures up to 700 m TDH. These pumps have capacities up to 10 000 US gpm (2 275 m³/h) and power up to 5 400 HP (4 000 kW).



# **HURRICANE** ™ series



# **SPECIFICATIONS**

PUMP MODELS	DESCRIPTION	PUMP TYPE	MOTOR OUTPUT [HP - (KW)]	TOTAL HEAD [FT - (M)]	CAPACITY [US GPM - (m³/h)]
HUR2500/130		8x6	500 (375)	425 (130)	2500 (570)
HUR2500/250E		10x8	800 (600)	820 (250)	2500 (570)
HUR5000/130	Open-Pit - Portable Pump House	10x8	900 (670)	425 (130)	5000 (1135)
HUR5000/190E	Single pump	10x8	1200 (895)	620 (190)	5000 (1135)
HUR7500/150E		12x8	1200 (895)	490 (150)	7500 (1700)
HUR10000/130E		12x8	1 500 (1 110)	425 (130)	10 000 (2 275)
HUR5000/260S	Open-Pit - Portable Pump House - Duplex (staged)	10x8	1 800 (1 340)	850 (260)	5 000 (1 135)
HUR2500/390S	Open-Pit - Portable Pump House	8x6	1 500 (1 110)	1 280 (390)	2 500 (5 70)
HUR5000/390S	- Triplex (staged)	10x8	2 700 (2 010)	1 280 (390)	5 000 (1 135)
HUR2500/520S	Open-Pit - Portable Pump House	8x6	2 000 (1 480)	1 700 (520)	2 500 (570)
HUR5000/520S	- Quadruplex (staged)	10x8	3 600 (2 680)	1 700 (520)	5 000 (1 135)
HUR2500/650S	Open-Pit - Portable Pump House	8x6	2 500 (1 850)	2 130 (650)	2 500 (570)
HUR5000/650S	5 pumps (staged)	10x8	4 500 (3 350)	2 130 (650)	5 000 (1 135)
HUR2500/700S	Open-Pit - Portable Pump House	8x6	3 000 (2 220)	2 300 (700)	2 500 (570)
HUR5000/700S	– 6 pumps (staged)	10x8	5 400 (4 020)	2 300 (700)	5 000 (1 135)

S = Stage

# CUSTOM MADE PUMPING SYSTEMS FOR DEEP PONDS

**OASIS** TM series

# **CUSTOM-DESIGNED DEWATERING SYSTEMS**

Maximum capacity: Up to 10 000 US gpm (2 275 m<sup>3</sup>/h)

Maximum pressure:

Up to 360 m TDH

Designed for solid concentration:

**Up to 5%** 

Victaulic or flanged connections:

6" to 16"

Rating:

Up to 2 000 HP (1 500 kW)

**Optional: Winter proof** 



The Oasis™ Series incorporates pumping systems tailored to customer's specific needs. Built for floating in a pond... It's basically a pumping island. They combine submersible pumps with a floating devise. They can be used in conjunction with the Hurricane™ series so you can achieve greater heads. OAS pumps come with controllers for easier management of pumping operations. The Oasis<sup>™</sup> Series can pump solid concentrations up to 5% and ensure a pressure of 360 m TDH. These pumps have a capacity up to 10 000 US gpm (2 275 m<sup>3</sup>/h) and power up to 2 000 HP (1 500 kW).



# OASIS TM series



# **SPECIFICATIONS**

PUMP MODELS	DESCRIPTION	PUMP TYPE	MOTOR OUTPUT [HP - (KW)]	TOTAL HEAD [FT - (M)]	CAPACITY [US GPM - (m³/h)]
OAS400/35		MAV-620	20 (15)	115 (35)	400 (122)
OAS1000/35		MAV-850HHC	50 (38)	115 (35)	1 000 (230)
OAS1200/60	Raft with submersible pump	MAV-8100HHC	100 (75)	200 (60)	1 200 (270)
OAS2600/70		MAV-10250HHC	250 (185)	230 (70)	2 600 (590)
OAS4000/70		MAV-14400HHC	400 (300)	230 (70)	4 000 (920)
OAS10000/320	Raft with vertical turbine	VXT-2000HHC	2 000 (1 500)	1 180 (360)	1 000 (2 300)

# SOLID HANDLING SYSTEM

**SCREW PRESS** 

# **CLARIFICATION SYSTEMS**

Our fully automated screw press clarification systems are for use in water, wastewater, mining, and industrial applications. With mobile pilot units and the widest range of unit models available, our screw press is the ideal clarification solution for your application.

Dewatering results similar to high-speed centrifuges.

Fifteen models available to handle the widest range of dewatering needs.

Enclosed system provides odor containment.

Low power requirements.

Low/intermittent wash-water requirements.

Slow operating speed ensures no vibration loads.

Machined screens provide tighter tolerance allowing superior performance over other commercially available units.

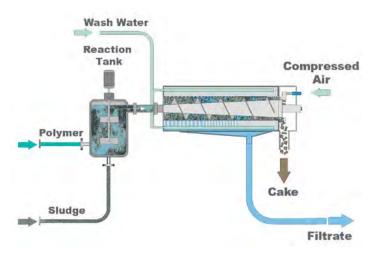
High-performance screen design with largest open area ensuring maximum throughput in smallest footprint.





# **SCREW PRESS**

### THE FEATURES YOU WANT



Low speeds and automated control.

Long lifespan due to slow speeds and robust construction.

All wetted parts are stainless steel.

Split-screen casing to simplify screw removal and minimize footprint requirements.

Sealing lip and screen can be replaced with screw in place.

Dewatering operations do not need to be suspended during cleaning. Cleaning cycle is typically once per day for 3 – 5 minutes.

Unattended operation requires no additional personnel or specialized training.

### **FSP - STANDARD PRODUCTS LIST**

	SCREW PRESS						REA	CTION T	WASHWATER			
MODEL	CAPACITY AEROBIC 2.5% DS (DRY LB/HR)	CAPACITY ANAEROBIC 3.5% DS (DRY LB/HR)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT (LB)	POWER (HP)	MODEL	VOLUME (GAL)	POWER (HP)	WASHWATER (GAL/CYCLE)	WASHWATER PUMP (GPM @ 60-90 PSI)
FPS 302	130	185	107	32	42	1 720	0.74	RT 30	53	0.50	10	5
FPS 403	280	355	151	33	48	3 200	1.5	RT 40	106	0.50	30	15
FPS 502	415	450	164	39	56	4 850	1.5	RT 50	450	0.74	30	15
FPS 503	457	551	196	43	56	5 200	3.0		153		40	20
FPS 602	641	903	189	46	60	6 330	3.0		225	1.5	40	20
FPS 603	735	1 040	225	46	60	7 275	3.0	RT 70			60	20
FPS 703	1 019	1 365	255	57	72	11 640	5.0				70	30
FPS 803	1 376	1 880	279	60	78	14 990	7.4	RT 80	343	2.0	85	40
FPS 903	1 712	2 331	304	64	82	18 960	7.4				105	45
FPS 1002	1 985	2 699	291	68	86	19 180	10	RT 100	100 502	2.0	105	45
FPS 1003	2 069	2 804	304	68	86	22 045	10				130	55
FPS 1102	2 552	3 402	303	74	90	21 605	10	RT 110	0 660	3.0	130	55
FPS 1103	3 014	4 011	358	74	90	27 560	10				155	65
FPS 1202	2 898	3 906	327	81	106	28 660	12.3	RT 120	925	5.0	155	65
FPS 1203	3 245	4 379	398	81	106	34 830	12.3		723	5.0	170	75







# PRESSURE-BOOSTING STATION FOR SHOWERS AND FAUCETS



Our customer needed a booster station and water supply to provide the water and pressure required to run the camp showers at peak times. All this had to be provided in a compact, affordable solution with a fast delivery time.

Our team was able to integrate all the components into a refitted and heated marine container, even including a steel tank with a large volume of water. The customer received a solution that met every one of his criteria.

Space inside the existing buildings was limited, and construction work on a mine site is usually long and expensive. By arriving with a turnkey, factory-prefabricated system of this type, the customer didn't need to undertake any such work.

### **PROPOSED SOLUTIONS**

Booster station integrated inside a converted and heated marine container.

Flow:

200 US gpm (45 m³/h) @ 80 psi

2 months

Fluid:

Clear water

We received the PO on October 15 and the project was delivered on December 15, 2018.

Motors:

Size:

3 motors 7.5 HP

40 Ft (12,2 m) container (High Cube)



# POTABLE WATER STATION WITH WELL PUMP



The customer needed a new source of industrial water for its new treatment plant. To achieve this, they chose to draw water from a river adjacent to the mine site. However, there were many environmental constraints, as it was not possible to build on or alter the river's riparian zone. In addition, there was a significant difference in elevation between the river level and the shoreline, which precluded the use of self-priming pumps.

# **PROPOSED SOLUTIONS**

To solve this problem, a pumping station was installed at a distance of 100 ft from the riparian strip. To reach the river, two HDPE pipes were installed using directional drilling to reach the river from the pumping station. Inside these HDPE pipes, submersible cart pumps were inserted and slid down to the river. As a result, the riparian zone remained intact. In addition, an environmentally-friendly strainer was installed using divers at the end of the HDPE pipe, so that the suction of the pumps would not harm aquatic fauna.

Flow: 511 US gpm (116 m <sup>3</sup> /h)	Time limit: 4 months
Fluid:	Year of design and time to complete:
Clear water	The order was placed in June, and by October the system had been installed.
Motors:	
150 HP motor	
Size:	
236,22 Ft (72 m)	



# RESPONSIBLE EXPERT HUMAN

Provide the most comprehensive and durable mine dewatering solution on the Canadian market.

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