

SLURRY MIXING TANKS

HEAVY DUTY, BELT DRIVEN MODEL

SINCE THE CREATION OF SHELL-O-MATIC, WE HAVE BUILT NEARLY 1000 SLURRY TANKS SO WE KNOW THERE IS MUCH MORE TO IT THAN A SIMPLE ROTATING DRUM WITH A PADDLE.

First, we pay attention to providing our customer with rugged and reliable driving mechanisms to ensure their tanks never stop. Second, we know that slurry material is expensive and probably the most important and sensitive component of the shell building system, so we provide you with all available options to measure, control and maintain the slurry quality.

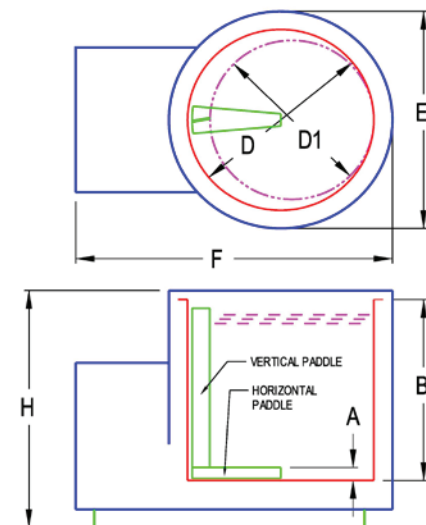


This includes:

- » Level sensing and control of the robot to maintain constant dipping depth
- » Rotating speed adjustment
- » Real-time viscosity sensing
- » Temperature sensing and control through a water-cooled paddle
- » Automatic cover that opens only when parts need to be dipped
- » Vacuum slurry tanks if needed

To ensure ease of cleaning we can also provide a variety of plastic covers and liners, including one-piece plastic liners for the tank interior. Furthermore, all wetted parts of the tank are made of high-quality stainless steel.

We can also provide turntables that can hold many tanks and position the one needed for the robot area, thus allowing a smaller envelope robot to access a plurality of tanks. If you need to move the tank around, we can build it on an air cushion, making it easy for an operator to displace it.



**As per customer's request, special diameters and tank depths can be supplied

TANK SIZE D	D1	A	B	E	F	H	SLURRY VOLUME	
							LITER	US GAL
36" 915 mm	31" 785 mm	3" 75 mm	33.12" 840 mm	40" 1016 mm	58" 1475 mm	44" 1118 mm	540	142
41" 1040 mm	36" 915 mm	3" 75 mm	33.12" 840 mm	45" 1140 mm	63" 1600 mm	44" 1118 mm	700	185
43" 1090 mm	38" 965 mm	3" 75 mm	33.12" 840 mm	46" 1170 mm	63" 1600 mm	44" 1118 mm	772	204
48"-L 1220 mm	42" 1067 mm	3" 75 mm	33.6" 854 mm	51" 1295 mm	63" 1600 mm	44" 1118 mm	960	254
48"-H 1220 mm	42" 1067 mm	3" 75 mm	37.4" 950 mm	51" 1295 mm	75" 1905 mm	44" 1118 mm	1070	281
54"-L 1370 mm	48" 1220 mm	3" 75 mm	31.5" 800 mm	57" 1448 mm	78" 1980 mm	44" 1118 mm	1111	293
54"-H 1370 mm	48" 1220 mm	3" 75 mm	36" 915 mm	57" 1448 mm	78" 1980 mm	49.2" 1250 mm	1295	342
60"-L 1525 mm	54" 1370 mm	3" 75 mm	31.5" 800 mm	63" 1600 mm	81" 2060 mm	44" 1118 mm	1370	361
60"-H 1525 mm	54" 1370 mm	3" 75 mm	40.2" 1021 mm	63" 1600 mm	81" 2060 mm	49.2" 1250 mm	1597	422
62"-L 1575 mm	56" 1425 mm	3" 75 mm	34" 865 mm	66" 1675 mm	98" 2475 mm	46" 1175 mm	1529	402
62"-H 1575 mm	56" 1425 mm	3" 75 mm	47" 1195 mm	66" 1675 mm	98" 2475 mm	59" 1500 mm	2172	572
67" 1700 mm	60" 1525 mm	3.5" 90 mm	42.5" 1080 mm	71" 1803 mm	102" 2590 mm	59.25" 1504 mm	2160	568
72" 1830 mm	64" 1625 mm	7" 180 mm	52" 1320 mm	80" 2030 mm	109" 2770 mm	74.5" 1890 mm	3274	862
75"-L 1905 mm	66.5" 1670 mm	4" 100 mm	48.5" 1232 mm	81" 2057 mm	105" 2667 mm	54.75" 1390 mm	2700	710
75"-H 1905 mm	66.5" 1670 mm	4" 100 mm	60" 1525 mm	81" 2057 mm	105" 2667 mm	71.8" 1825 mm	3700	975
88" 2235 mm			**	95" 2415 mm	125" 3175 mm			
100" 2540 mm			**	106" 2695 mm	138" 3505 mm			

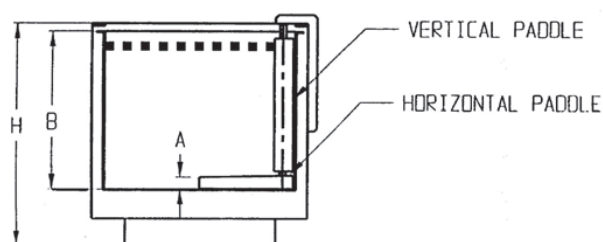
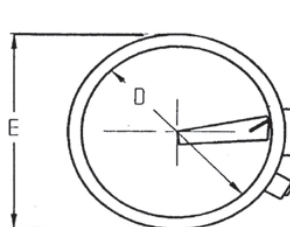
SLURRY MIXING TANKS DIRECT DRIVEN MODEL

STANDARD FEATURES

- » Removable, L-shaped paddle
- » On/off switch
- » Overload protection

Options

- » Variable speed
- » Slurry level sensing
- » Remote start/stop
- » Automatic cover
- » Water cooling
- » Plastic liner
- » Temperature controls
- » Full plastic tank
- » Zero speed detection (alarm)



TANK SIZE D	E	A	B	H	SLURRY VOLUME	
					LITER	US GAL
24" 610 mm	28" 710 mm	2.5" 64 mm	27" 685 mm	37.75" 960 mm	185	49
30" 760 mm	34" 870 mm	2.75" 70 mm	28" 710 mm	38.75" 985 mm	300	78
32" 810 mm	36" 910 mm	2.75" 70 mm	29" 735 mm	40" 1015 mm	353	93
36"-L 915 mm	40" 1016 mm	3" 75 mm	25" 635 mm	38.75" 985 mm	380	100
36"-H 915 mm	40" 1016 mm	3" 75 mm	30" 762 mm	43.5" 1104 mm	465	122
47.5" 1200 mm	52.7" 1340 mm	3.8" 96 mm	41.6" 1056 mm	57.5" 1460 mm	1085	285

SLURRY MIXING TANKS OPTIONS/VARIANTS

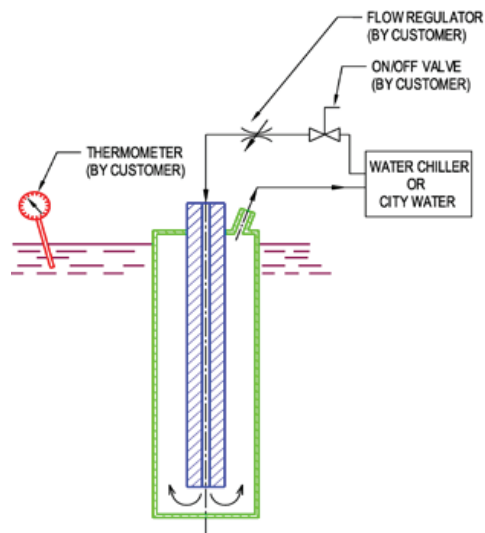
VERY LARGE TANK

88"-2235 mm dia.

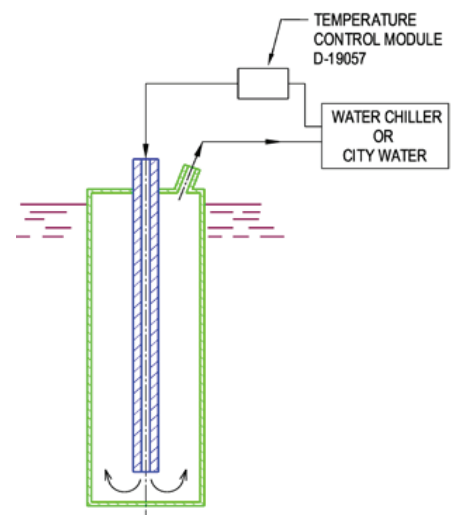
Mobile unit with on-board drive



**VACUUM
SLURRY TANK**



**WATER COOLING
MANUALLY CONTROLLED**



**WATER COOLING
AUTOMATICALLY CONTROLLED**

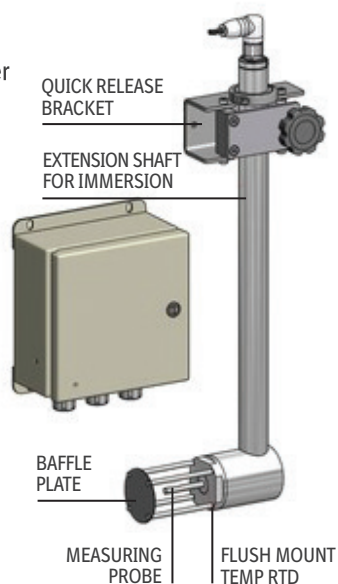
SLURRY MIXING TANKS OPTIONS/VARIANTS

VISCOMETER

The AST-100IPRI Viscometer is inserted into the slurry and outputs continuous measurement of viscosity and temperature. The instrument enables automatic viscosity control and improved quality assurance over cup method.

Benefits:

- » Correlates with lab viscometer and cup measurement
- » Enables continuous logging of viscosity and temperature
- » Alarms for “off-spec” slurry condition
- » Improves stucco coverage and optimizes drying time
- » Reduces cracking, excess metal, burn in and penetration
- » Minimizes operator involvement



Features:

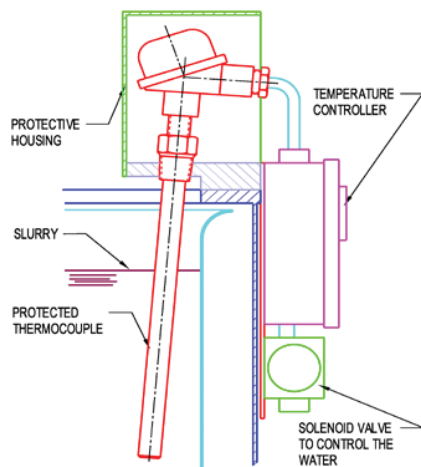
- » 316SS construction with baffle plate for abrasion protection
- » Easy cleanable design with no moving parts
- » Internal RTD eliminates slurry build up
- » Viscosity & temperature outputs as 4-20mA, RS-485 & RS-232
- » Fully tested for future QC checks

Options:

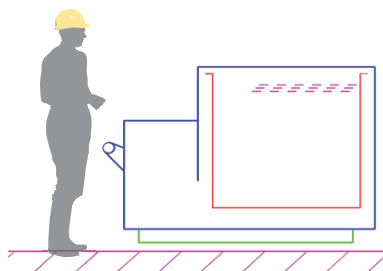
- » AST-310SY-420 controller for closed loop viscosity control
- » Quick release bracket for inspection and cleaning
- » Manual and wireless data logging options
- » 115VAC, 230VAC or 24vdc power input options

SLURRY PH SENSOR

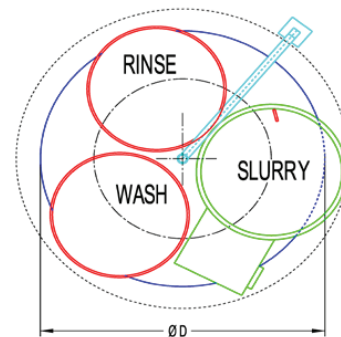
- » RADEL with double O-ring front end - 3/4" back end MNPT
- » -5 °C to 105 °C
- » Immersible and submersible
- » Double junction
- » High capacity KYNAR reference
- » Acid/fluoride resistant
- » Ammonia, chlorine and sulphide gas resistant
- » Proprietary toughened glass
- » 6 m cable
- » Plug & Play sensor has a quick connect fitting
 - Teflon silicon sealing option
 - For dealing with solvents add - \$ per sensor



Water Cooling Control
Module D-19057



Mobile Slurry Tank
On Air Cushions



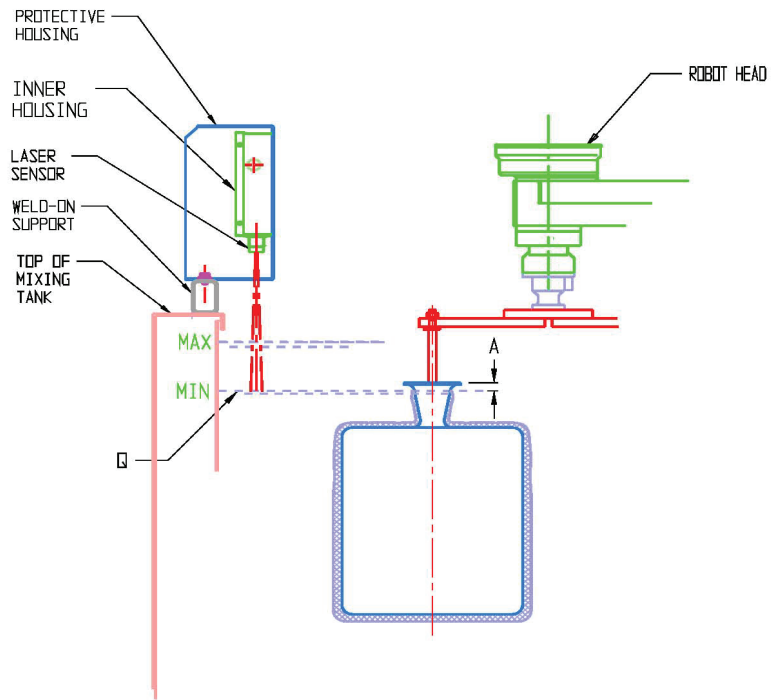
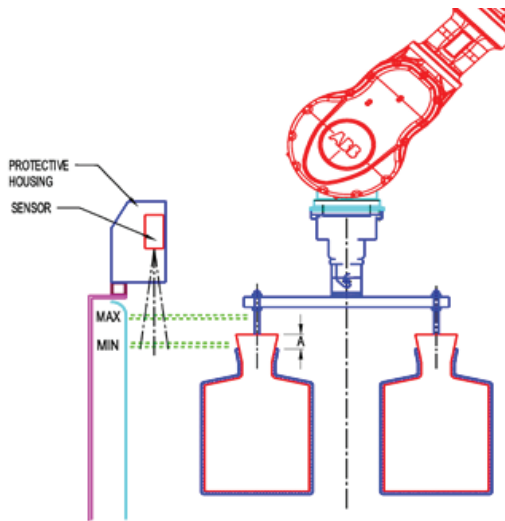
Turntable, Powered
» Size 1 - 90"
» Size 2 - 100"

AUTOMATIC SLURRY LEVEL SENSING

The robot follows the slurry level and maintains a constant shell dimension “A”.

When the minimum slurry level “Q” is reached, the robot will stop at the end of the cycle and give an alarm signal.

The operator then adds slurry to max level (using a pump, by gravity or manually).



SLURRY LEVEL SENSOR



SLURRY TRANSFER PUMP