

## **Hutchison Hayes Separation Inc.**

## HH 1448



The HH Horizontal Decanting centrifuge has a vast field of applications in various Processes where liquid phases of different specific gravities and a solid phase have to be continuously separated.

## How a decanter works.

The centrifuge is fed through a stationary pipe, which is inside a hollow shaft connected to the screw conveyor (scroll.) There it enters a feed compartment (inside of the conveyor) and is accelerated through feed slots into the inside of the bowl. Once inside the bowl, centrifugal forces accelerate the solids. They are then collected on the inside diameter bowl wall and the liquid forms a concentric annulus and fills the bowl to the level of the effluent dam/weirs.

The screw conveyor, which is connected through a coupling to a gearbox, turns slightly slower than the bowl. Since it is turning slower and the helix is angled toward the small diameter (conical end) the solids are then conveyed along the inside diameter of the bowl to the solids discharge end.

The liquid flows around the screw conveyor and exits through effluent dam/weirs located on the large

diameter (cylinder) end of the bowl. Solids, which do not settle to the inside diameter of the bowl (floaters), are carried out with the liquid through the effluent weirs.

Effluent dams/weirs that are adjustable control the amount of liquid inside the bowl. The maximum volume (pool) forms an annulus diameter, which is smaller than the solids discharge diameter.



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TECHNICAL DATA SHEET			
MODEL HH-1448			
MAXIMUM RATED CAPACITY	200 GPM	Bowl	
Minimum temperature	30°F	Diameter	14"
Maximum temperature	212°F	Length	48"
		Conical section	10 <sup>0</sup>
Recommended throughput:		Conveyor pitch	4"
Mud weight 13 PPG	30 GPM		
Mud weight 11 PPG	60 GPM	Gear box	
Mud weight 10PPG	100 GPM	Ratio	1:52
		Torque	18000 Lbs
Recommended settings			
Barite recovery RPM	< 2250 RPM	Materials	
Conveyor differential	42 RPM	Bowl & Conveyor body	SS 316
G- force	1000 G	Frame	Cast iron
		Covers	SS 316
Polishing RPM	3250	Paint	Ероху
Conveyor differential	61 RPM	Conveyor tips	TC tiles
G- force	2100 G	Solids discharge	TC saddles
Run up time	5 minutes	Shipping Data	
Run down time	15 minutes	Net weight	4500 Lbs
		Gross weight	5200 Lbs
Maximum RPM allowed	4000 RPM	Volume	128 Cu. Ft.





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