



# Hutchison Hayes Separation Inc.

## HH 5500



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.

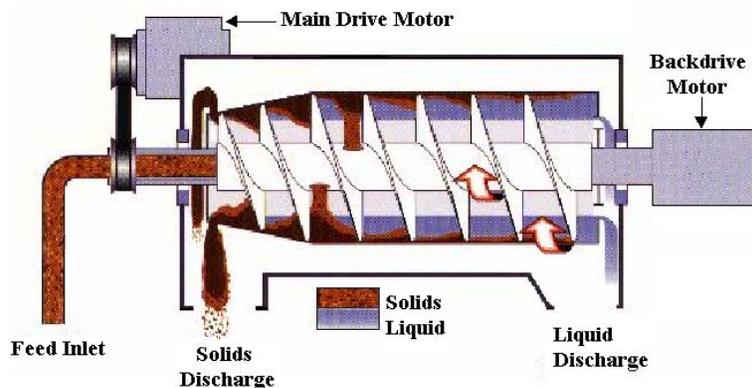
### How a decanter works.

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:

Max. Bowl Speed	3750 RPM
Centrifugal Force	3150 G's
Differential Speed	4 – 65 RPM
Run Up time (Y-D)	2 – 3 minutes
Bowl Dimensions	16" (405mm) Diameter x 55" (1400mm) Long
Wetted Parts	316 Stainless Steel
Base Assembly	Cast Iron
Gearbox	Two Stage Planetary Gear Box

## POWER:

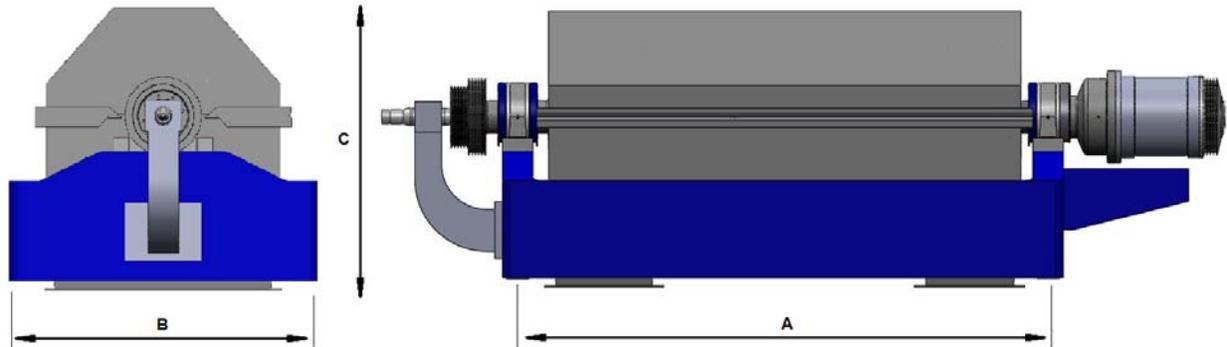
Main Drive	25 – 45kW	230/460VAC/50/60HZ
Back Drive	7.5 - 15kW	230/460VAC/50/60HZ

## PROCESS CAPACITY:

Maximum flow	52	M <sup>3</sup> /hr	230	GPM
Maximum solid cap	5.5	Ton/hr	12000	Lbs/hr

## DIMENSIONS:

A	1830 mm	72"
B	1041 mm	41"
C	890 mm	35"



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