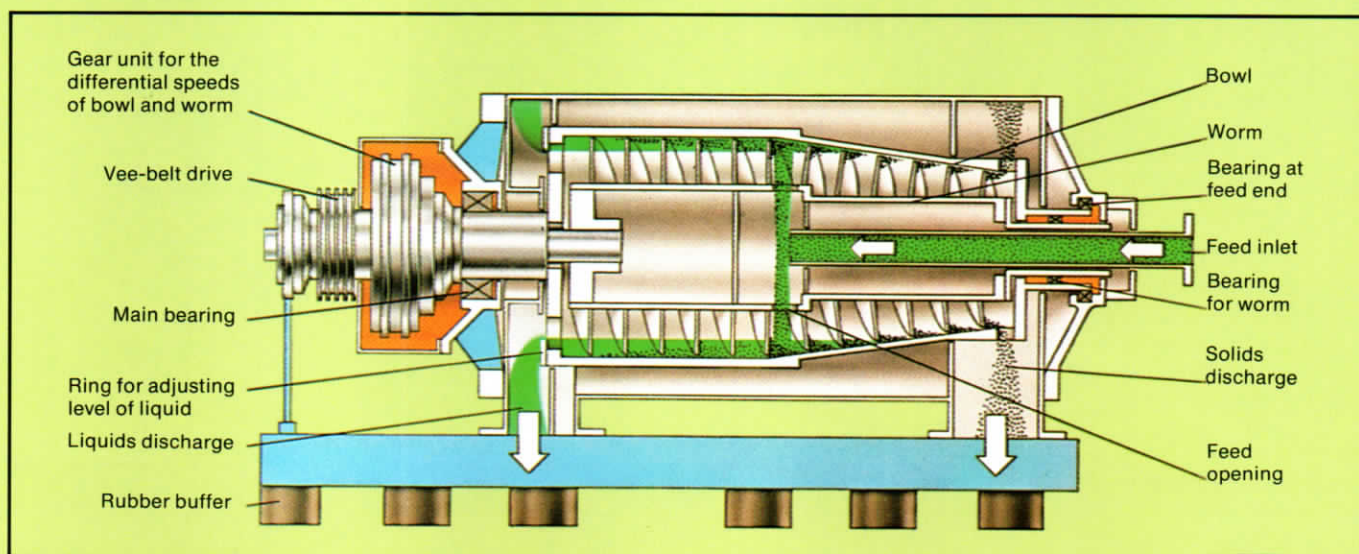


# Decanter Centrifuges

● TS ● TSE ● TSS



## Description

Often the solids are too fine to be dewatered satisfactorily in the filtering screen/worm centrifuge. They can then be separated in solid bowl centrifuges provided their sedimentation speed in the mother liquid is sufficient. The sinking speed which is determined by particle size, particle shape, difference in density between solids and liquids as well as their viscosity, can be decidedly improved by conditioning e.g. by heating or adding flocculation agents.

In decanter centrifuges the clearing of the liquid takes place in the cylindrical part whereas the dewatering of the solids by filtration or compression of the filter cake takes place in the conical part of the bowl. The geometry of the bowl, especially the relation between length and diameter, must be adapted to each different application. In most cases good results are obtained at a length relation of 2:1, as per our **type TS**. For

difficult problems e.g. the clearing of waste water and dewatering very fine slurry a length relation of about 1:2.8 as per our **type TSE**, is required.

Apart from clearing liquids and dewatering solids, decanters can also be used for wet classification of small particles in the range of 1–10 microns. By controlling the flow speed of the liquids between the worm flights and the centrifugal force, the particle split is variable in a wide range.

When very low final moistures are required our Decanter Centrifuges can, in certain cases, be fitted with a screening area, as per our **type TSS**. This execution is generally known as a Screen/Bowl Centrifuge. The screen portion can be fitted with segments that are interchangeable without dismantling the centrifuge.

## Standard executions

Type		140 F	210 F	360 F	300	360	420	500	600	710	850	1000
Feed capacity <sup>1)</sup>	abt. m <sup>3</sup> /h	1	2	10	10	20	25	35	45	65	95	140
Drive motor	abt. kW	2.2	5.5	15–22	10–22	18.5–30	18.5–45	22–55	30–90	45–110	55–160	120–200
Length TS	abt. mm	800	1000	1650	1450	2000	1850	2010	2800	3000	3500	4570
Length TSE, TSS	abt. mm				1700	2350	2200	2510	3300	3500	4000	5370
Width TS, TSE, TSS	abt. mm	800	1000	1600	1150	1500	1450	1700	1800	2500	2700	3160
Height TS, TSE, TSS	abt. mm	520	700	1050	750	980	950	1100	1150	1250	1600	1660
Weight TS	abt. kg	200	500	1500	900	1200	1800	2500	2900	5000	7000	10000
Weight TSE, TSS	abt. kg				1100	1500	2100	3000	3400	6000	8300	12000

<sup>1)</sup> The actual capacities depend on the properties of the material and their separation characteristics.

We reserve the right to make changes which serve technical progress.