



ORE TECH INDUSTRIES PVT. LTD.

“We Deliver Quality Products with High Performance”

High Rate Thick

High Rate Thickener (HRT) is a relatively old concept in the world market by now. its unique feed system totally eliminates the conventional free setting stage, overcomes the problems of high polymer consumption and poor process control inherent in other designs thus accounting to maximum water recovery.HRT can be installed easily in an existing sand washing plant or any wet processing system. ORETECH manufactured thickeners from 6mtr diameter to 14mtr diameter



Model	SAND WASHINGS PLANT SPECIFICATIONS				
Capacity (Max)	40 TPH	75 TPH	100 TPH	150 TPH	200 TPH
De-Watering Screen (MM)	1500x2400	1500x2400	1500x3000	1800x3600	1800x3600
Hydro-Cyclome	Dia 360	Dia 500	Dia 350x2	Dia 400x2	Dia 500x2
High Rate Thickener	Dia 6mtr	Dia 8mtr	Dia 10mtr	Dia 12mtr	Dia 14mtr
Fresh water Required	50 (M/hr)	112(M/hr)	183(M/hr)	225(M/hr)	300(M/hr)
Fresh water with thickener in circuit	13 (M/hr)	25 (M/hr)	38 (M/hr)	44 (M/hr)	63 (M/hr)
Power requirement	57 KW	70 KW	86 KW	102 KW	120 KW

KEY BENEFITS

Higher Throughput and Efficiency:

High-rate thickeners can process significantly larger volumes of liquid suspensions, delivering 5 to 10 times the capacity of a conventional thickener of the same size.

Reduced Equipment Footprint:

Their compact design requires less space, which is a significant advantage in industries with limited area.

Significant Water Recovery:

They enable the recovery of a large percentage of water from process slurries, supporting sustainability goals and reducing the volume of wastewater requiring disposal.

Cost Savings:

Lower energy consumption and a reduction in the size of downstream equipment (like filters or centrifuges) lead to substantial operational and capital cost savings.

Environmentally Friendly:

They utilize minimal amounts of flocculant for rapid settling, minimizing their environmental impact.

Denser Underflow:

High-rate thickeners produce a thicker underflow slurry, which requires less volume in disposal facilities or downstream processing equipment.

Versatility:

These units are adaptable and can be used in diverse applications across mining, chemical processing, and various water treatment sectors.

How They Work

High-rate thickeners incorporate an optimized feedwell, often including a special flocculation chamber, to efficiently mix flocculant with the incoming slurry. This promotes the quick settling of suspended solids. The concentrated underflow is then removed from the bottom, and the clarified liquid (overflow) is discharged.



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