



# Liqui-Fuge RDT Rotary Drum Thickener

## Product Information Guide



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# Liqui-Fuge RDT Rotary Drum Thickener

The Liqui-Fuge RDT Rotary Drum Thickener is used for volume reduction of primary, waste activated or digested sludge. The Liqui-Fuge RDT is ideal for reducing hauling costs or increasing digester capacity for municipal or industrial sewage treatment facilities.

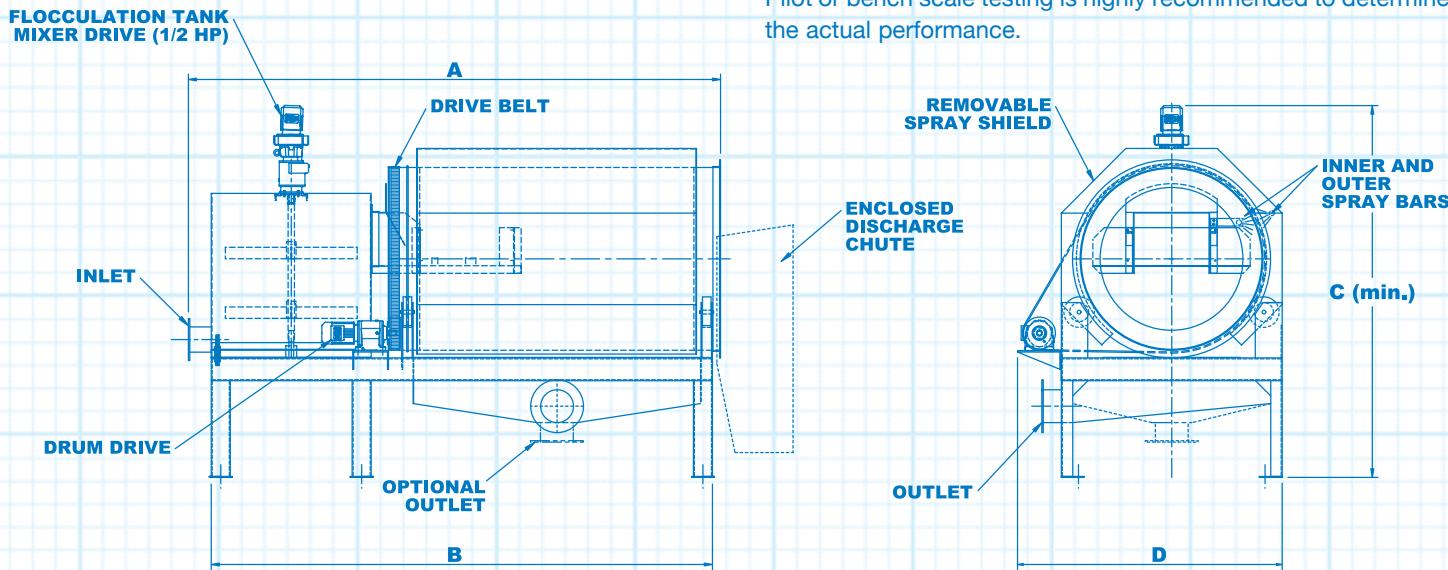
## Construction

The Liqui-Fuge RDT consists of a wedge-wire drum, internal and external spray system, flocculation tank with mechanical mixer, flow distribution tray, support structure with trunnion wheels, drain pan, removable enclosures and drum drive system. The drum drive system consists of a gearmotor and a reliable, low maintenance synchronous drive belt. All wetted parts and the support structure are constructed of either 304 or 316 stainless steel.

## Operation

A suitable polymer is injected into the incoming sludge feed line. This sludge/polymer solution is then blended as it passes through an inline static mixer prior to entering the flocculation tank. Once inside the tank, the sludge/polymer solution is exposed to a low-shear rotary mixer to ensure maximum floccule development. The conditioned sludge then flows onto the distribution tray where it is directed onto the rotating drum. The free water passes through the openings in the drum while the captured sludge remains on the drum surface for further dewatering. Radial flights inside the drum slowly transport the thickening sludge towards the discharge end of the drum. The thickened sludge exits the unit and falls through a discharge chute into a storage tank, pump hopper or other suitable receiving device. Drum speed, mixer speed and spray water cycling is adjustable to ensure maximum performance with minimal polymer and water usage. Sludge can typically be thickened to 5-7% total solids and in some cases up to 15% total solids with up to 99% capture of the feed solids \*.

\* Pilot or bench scale testing is highly recommended to determine the actual performance.



Model	A	B	C	D	Drum Drive Motor	† Max Flow (GPM)
LFST-364	9'-4 1/4"	8'-8"	6'-11"	4'-8"	1.5 HP	75
LFST-365	10'-4 1/4"	9'-9"	6'-11"	4'-8"	1.5 HP	100
LFST-366	11'-4 1/4"	10'-8"	6'-11"	4'-8"	1.5 HP	150
LFST-486	11'-8 1/4"	11'-0"	7'-1"	5'-10"	2 HP	250
LFST-608	14'-8 1/4"	14'-2"	8'-4"	7'-1"	3 HP	350
LFST-6010	16'-8 1/4"	16'-2"	8'-4"	7'-1"	5 HP	400

† Note: Maximum flow rates based on 1.0% - 1.5% TSS of waste activated sludge. Consult factory for sizing.

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