

DR - Mechanical Dewatering

Industrial and Municipal Process Equipment Packages

Develop

 process solutions partnerships to find efficiencies on new or existing process.

Design

 machines for solids recovery, liquid clarification, and minimize water consumption.

Deliver

• project specific solutions for better economic, and environmental process performance.



Doc# DECANTER-1703-R00



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Capacity up to 484 GPM 110 m³/h

MANUFACTURE

DRYCAKE's technical department is able to develop all the required design activities from feasibility to as-built. Process Validation can be validated using our lab or on-site pilot services.

Our equipment is manufactured in high quality Stainless Steel , and is fully customizable according to project requirements and needs.

The production team is composed by assemblers and certified welders, experts in TIG (Tungsten Inert Gas) welding, a process of arc welding with consumable electrode (Tungsten), under protection of inert gas. After the welding processes, the Stainless Steel is passivated by our operators.

Quality control during the entire design process guarantees the compliance with Customer's technical requirements, good manufacturing practices and compliance with UL and CSA, ASMI, ANSI Standards and certifications.

All equipment is subject to 3rd party witnessed factory acceptance test prior to shipment.



OPERATION

DRYCAKE high-performance decanter centrifuge represents a new generation of machine. Whereas previous generations might use only 35-50% of the bowl volume and operate at a lower G-force, a high-performance decanter is distinguished by higher G-force and the use of the entire bowl volume resulting in larger process capacity using a smaller diameter bowl than a traditional centrifuge. The use of this technology allows you to have a physically smaller decanter with higher capacity, and also higher cake dryness.

DRYCAKE machines are equipped with a hydraulic or electric back drive system for variable speed control of the differential between the bowl and the scroll. The performance efficiency of our system allows us to install smaller electric motors with much higher energy savings.

All functions are managed via our touch screen HMI and can interface and integrate with external PLC or SCADA using modern industrial communication protocols. Through a remote control function we can diagnose, change parameters and update the entire software.



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FEATURES

- ✓ Automatic Operation
- ✓ High Quality Construction
- ✓ Heavy Duty Application
- ✓ Highest Torque for every differential speed
- ✓ Open Scroll Construction
- ✓ Independent Solids Scraper
- ✓ Easy removable section covers



Systems can be Provided Complete with Cake Discharge Solutions based on Pump, Screw or Belt Conveying Technologies





PLUG AND PLAY SKID

Capacity up to 484 GPM

110 m³/h

STARTUP READY SKIDS

- ✓ Hydrostatically tested
- ✓ Fully piped, wired, engineered and tested prior to shipment
- Fully Assembled:
- Only 3 inlet connections:
 - Electrical 1.
 - 2. Water
 - Sludge 3.
- ✓ Polymer System and flow meters on board.

With his high reliability, the **DRYCAKE** Decanter Centrifuge is the perfect solution for your dewatering needs





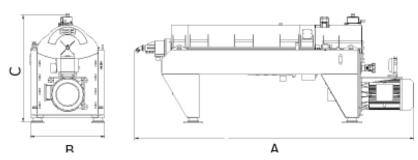






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MODEL & DIMENSION



DRYCAKE Decanter Centrifuge Size

The state of the s											
Model *	Motor		Bowl		Α		В		С		
	kW	HP	mm	in	mm	in	mm	in	mm	in	
DR250E	7.5+5.5	10+7.4	220	9	2,100	86	610	24	1,010	40	
DR300E	11+5.5	15+7.4	290	11	2,550	104	800	31	1,250	49	
DR300LE	15+5.5	20+7.4	290	11	2,760	113	800	31	1,250	49	
DR400H	18.5	25	380	15	3,250	133	1,110	44	1,560	61	
DR400LH	22	30	380	15	3,570	146	1,110	44	1,560	61	
DR450LH	30	40	420	17	3,870	158	1,110	44	1,560	61	
DR500H	45	60	505	20	4,000	163	1,220	48	1,780	70	
DR500LH	55	74	505	20	4,600	188	1,220	48	1,780	70	
DR650H	75	101	650	26	4,750	194	1,470	58	1,820	72	
DR650LH	90	121	650	26	5,250	214	1,470	58	1,820	72	
DR800H	132	177	795	31	6,400	261	1,960	77	1,930	76	
DR800LH	160	215	795	31	6,900	282	1,960	77	1,930	76	

Capacity for references, Performance vary with sludge characteristics

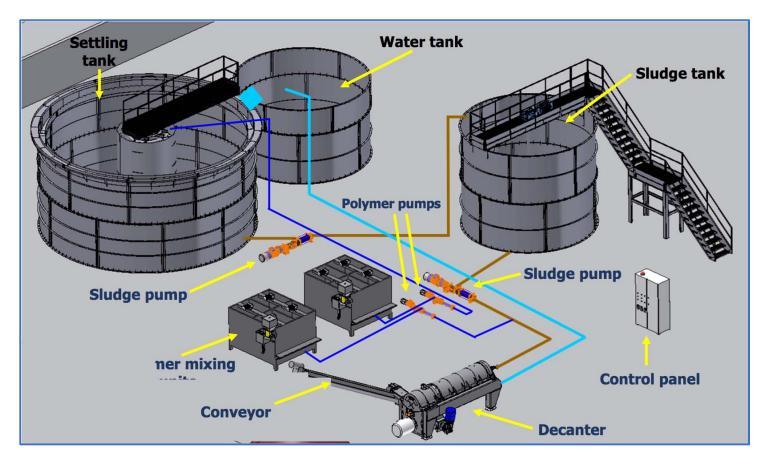
		GPM	Dry Solids/hour at										
Model *	m3/h		1%		2%		3%		4%		5%		
			kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	
DR250E	2.5	11	25	55	50	110	75	165	100	220	125	275	
DR300E	7	30.8	70	154	140	308	210	462	280	616	350	770	
DR300LE	8	35.2	80	176	160	352	240	528	320	704	400	880	
DR400H	12	52.8	120	264	240	528	360	792	480	1,056	600	1,320	
DR400LH	22	96.8	220	484	440	968	660	1,452	880	1,936	1,100	2,420	
DR450LH	27	118.8	270	594	540	1,188	810	1,782	1,080	2,376	1,350	2,970	
DR500H	30	132	300	660	600	1,320	900	1,980	1,200	2,640	1,500	3,300	
DR500LH	35	154	350	770	700	1,540	1,050	2,310	1,400	3,080	1,750	3,850	
DR650H	45	198	450	990	900	1,980	1,350	2,970	1,800	3,960	2,250	4,950	
DR650LH	55	242	550	1,210	1,100	2,420	1,650	3,630	2,200	4,840	2,750	6,050	
DR800H	90	396	900	1,980	1,800	3,960	2,700	5,940	3,600	7,920	4,500	9,900	
DR800LH	110	484	1,100	2,420	2,200	4,840	3,300	7,260	4,400	9,680	5,500	12,100	

^{*} Other configuration available on demand



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PROCESS & INSTRUMENTATION







Process Solutions for a Better World

EQUIPMENT RANGE

Mechanical Dewatering

- Decanter Centrifuge
- High Speed Centrifuge
- Gravity Belt Press Thickener
- Belt Press
- Scrudrain: Screw Thickener
- Screw Press
- DRAIMAD Dewatering bag skid

Thermal Systems

- Sludge Dryers
- Evaporators

Screening

- Multi-Rake Bar Screens
- Perforated Plate Screens
- Internally Fed Drum Screens

Grit and FOG Removal Systems

Solid Waste

 Material Sorting & Screening

Polymer Preparation

• Dry & Liquid polymer systems

Materials Handling Systems

- Shaftless ScrewConveyors
- Belt Conveyors
- Live Bottoms
- Silos
- Sorting Lines
- Shredders

Pumping

PC Pumps

APPLICATION FIELD

By PROCESS

- Aggregates conveying
- Biomass drying
- Biomass gasification wastewater treatment
- Biosolids reduction
- Biosolids stabilization (Class A)
- BOD reduction
- Cogeneration
- Dewatering:

Aerobic sludge
Anaerobic sludge
Lime & Alum sludge
Mixed industry sludge
WAS sludge

- Evaporation
- Enzymatic Inactivation
- Fish processing

- Flour enhancement
- Head works
- Heat treatment
- Kelp processing
- Bulk materialsHandling
- Leachate treatment
- Oil separation
- Paper sludge de-inking
- Plastics separation
- Pump station screening
- Pulp Recovery

By INDUSTRY

- Biomass gasification
- Cement factory

Airports

- Dairy Industry
- Die Casting Industry
- Flour Mill
- Landfill
- Municipal WWTP
- Paint Factories
- Petro-chemical refinery
- Pulp & Paper industry
- Potato plant
- Rendering plant
- Slaughtering plant
- Tar Sands
- Quarries