

CSI[™] Continuous Duty Vertical Cuttings Dryer

Key Features and Benefits



Engineered Strength With various blade materials and coatings available, Elgin has developed the industry's most durable and precise flights in the market.



Screen Design By using a fully chromed screen, Elgin customers can experience screen life as long as a year. Screens with a slot size between 200 and 800 microns are available.



High Performance By tapering the launder section collected fluids flow more efficiently and significantly lower the risk of a back-up within the VCD.



Inspection Ports Easy access inspection ports for maintanance and cleaning.

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As our industry evolves, we are faced with increasing responsibility to protect the environment in which we operate. Concurrently, government agencies continue to increase pressure toward achieving these goals by placing stringent effluent limitations on the discharge of contaminated drill cuttings to the environment. Elgin has become the leading manufacturer of rugged and easy to use CSI[™] Vertical Cuttings Dryer ("VCD") to support the goals of both the industry and regulators.



CSI-04 Continuous Duty Vertical Cuttings Dryer

CSI[™] is the industry's most recognized & reputable Vertical Cuttings Dryer Centrifuge available in the market. No other brand has achieved more success or recovered more drilling fluid, than the CSI[™] dryer. There have been almost 800 CSI[™] dryers delivered to the market. Every major solids control & waste management service provider in the market operate CSI[™] dryers (Including, but not limited to Baker Hughes[™], Halliburton[™], M-I Swaco[™], Weatherford[™], Ava / New Park[™] and NOV[™]).

Achieving Results

Typical flow-line shaker cuttings maintain a liquid content on average between 15% to 20%. When properly managed, the CSI[™] series dryers can lower the liquid content below 4%, in some cases down to 1%. This can be done while managing up to 80 tons per hour (22.22 kg/s) of drill cuttings.



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Hyper-G Drying Shaker By utilizing a drying shaker prior to injecting the cuttings into the VCD, operators can achieve maximum dryness of cuttings.



Waste Management For low gravity solids removal a decanter centrifuge should be included in a VCD installation.



Screw Conveyor Integrate a 25HP 14" x 24' screw conveyor with abrasion resistant flites.



Control Panel Class 1, Division 1 explosion proof control panel.

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Operation

The VCD is fed via screw conveyor, vacuum system, or rotary-lobe solids pump from the flow-line shaker discharge. Drill cuttings are fed into the hopper, and distributed along the inner wall of the screen with the aid of the flites. The liquid phase, or "filtrate", passes through the screen openings while the vertical scrapers with hardened faces scrape the accumulating cake solids towards the bottom of the VCD for disposal. The centrate gravity flows into a containment tank and pumped to a high speed decanter centrifuge for low gravity solids removal. Upon discharge, the dried cuttings are then safely discharged to the environment, are collected for further treatment, or are staged off-site disposal. CSI™ VCD's significantly improves liquid phase recovery, thereby paying for itself.



Optional Telescoping Stand with Decks

Model Number:	CSI–03	CSI–D3	CSI-04	CSI-D4
Equipment Image:	ELGIN			A CONTRACTOR
Feed Capacity*:	25 to 40 TPH (6.2 to 11.11 kg/s)	25 to 40TPH (6.2 to 11.11 kg/s)	40 to 80TPH (11.11 to 22.2 kg/s)	40 to 80TPH (11.11 to 22.2 kg/s)
Maximum G-Force Sheave Size Denoted in Inches):	460V / 60Hz - 518 (8.0") or 642 G's (9.0") 360V / 50Hz -445 G's (9.0")	460V / 60Hz - 300 to 700 G's (VFD) 360V / 50Hz - 300 to 500 G's (VFD)	460V / 60Hz - 403 (10.5") or 526 G's (12.0") 360V / 50Hz -426 G's (13.0")	460V / 60Hz - 300 to 550 G's (VFD) 360V / 50Hz - 300 to 450 G's (VFD)
Screen Opening Sizes:	0.008" (0.2mm) to 0.04" (1.0mm) [0.02" (0.5mm) Standard]	0.008" (0.2mm) to 0.04" (1.0mm) [0.02" (0.5mm) Standard]	0.008" (0.2mm) to 0.04" (1.0mm) [0.02" (0.5mm) Standard]	0.008″ (0.2mm) to 0.04″ (1.0mm) [0.02″ (0.5mm) Standard]
Gear Box Ratio:	74:1	74:1	71:1	VFD Variable
Lubrication System	Active Oil Pump Circulation	Grease Packed	Active Oil Circulation	Oil Sealed
Rotor Differential Speed:	15.4 RPM	15.4 RPM	12.5 RPM	6 to 20 RPM
Weight (Without Stand):	4,400 lbs (1,995 kgs)	4,100 lbs (1,860 kgs)	7,700 lbs (3,492 kgs)	7,300 lbs (3,357 kgs)
Screen Surface Area:	7.11 sq. ft. (0.661 sq. m.)	7.11 sq. ft. (0.661 sq. m.)	13.3 sq. ft. (1.25 sq. m.)	13.3 sq. ft. (1.25 sq. m.)
Motor Horsepower:	30 hp (22.71 kw)	30 hp (22.71 kw)	75 hp (60 kw)	(1) 60 hp (44.74) & (1) 15 hp (11.19 kw)
Voltage:	460v / 60Hz or 380V / 50Hz 3-Phase (Dual rated Inverter-Duty Motor)	460v / 60Hz or 380V / 50Hz 3-Phase (Dual rated Inverter-Duty Motor)	460v / 60Hz or 380V / 50Hz 3-Phase (Dual rated Inverter-Duty Motor)	460v / 60Hz or 380V / 50Hz 3-Phase (Dual rated Inverter-Duty Motors)
Dimensions (without stand):	7′ (2.1 m) L x 6′ (1.8 m) W x 5′ (1.5 m) H	8.10' (2.5 m) L x 7.3' (2.2 m) W x 5.9' (1.8 m) H	8.10' (2.5 m)L x 7.3' (2.2 m)W x 5.9' (1.8 m)H	8.5' (2.6 m)L x 7.0' (2.13 m)W x 6.5' (2 m)H

Visit us on the web for additional product details and operation video showing how adding a vertical cutings dryer to your operation will save time, money, and the environment. www.elginseparationsolutions.com

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