



# SOLIDS CONTROL FOR OIL & GAS DRILLING

### **LETTER FROM THE FAMILY**

Founded by H. William Derrick Jr. in 1951, Derrick<sup>®</sup> Corporation was created to solve some of the most challenging mechanical separation needs of the Mining Industry. At the heart of our present-day offering resides the Integrated Vibratory Motor which was invented by our founder and gave life to an entire line of innovative separation technology. To this day, our pioneering spirit pulses through the organization and inspires development of our leading-edge solutions.

Over the years, we have experienced exponential growth, expanding from our Mining roots to Oil & Gas Drilling, Civil Construction, Industrial, and other challenging industries worldwide. Our robust installed base and expansive network of thousands of cohesive individuals are located across the globe.

Our success is fully dependent on people. Priority one is to serve our global families; our tenured employees, multi-national partners, and surrounding communities. Our unique, close-knit culture and shared, long-term outlook is not only paramount to our success, but to the success of all integral stakeholders.

We thank you for expressing interest in our organization and look forward to being of service to you in the future.







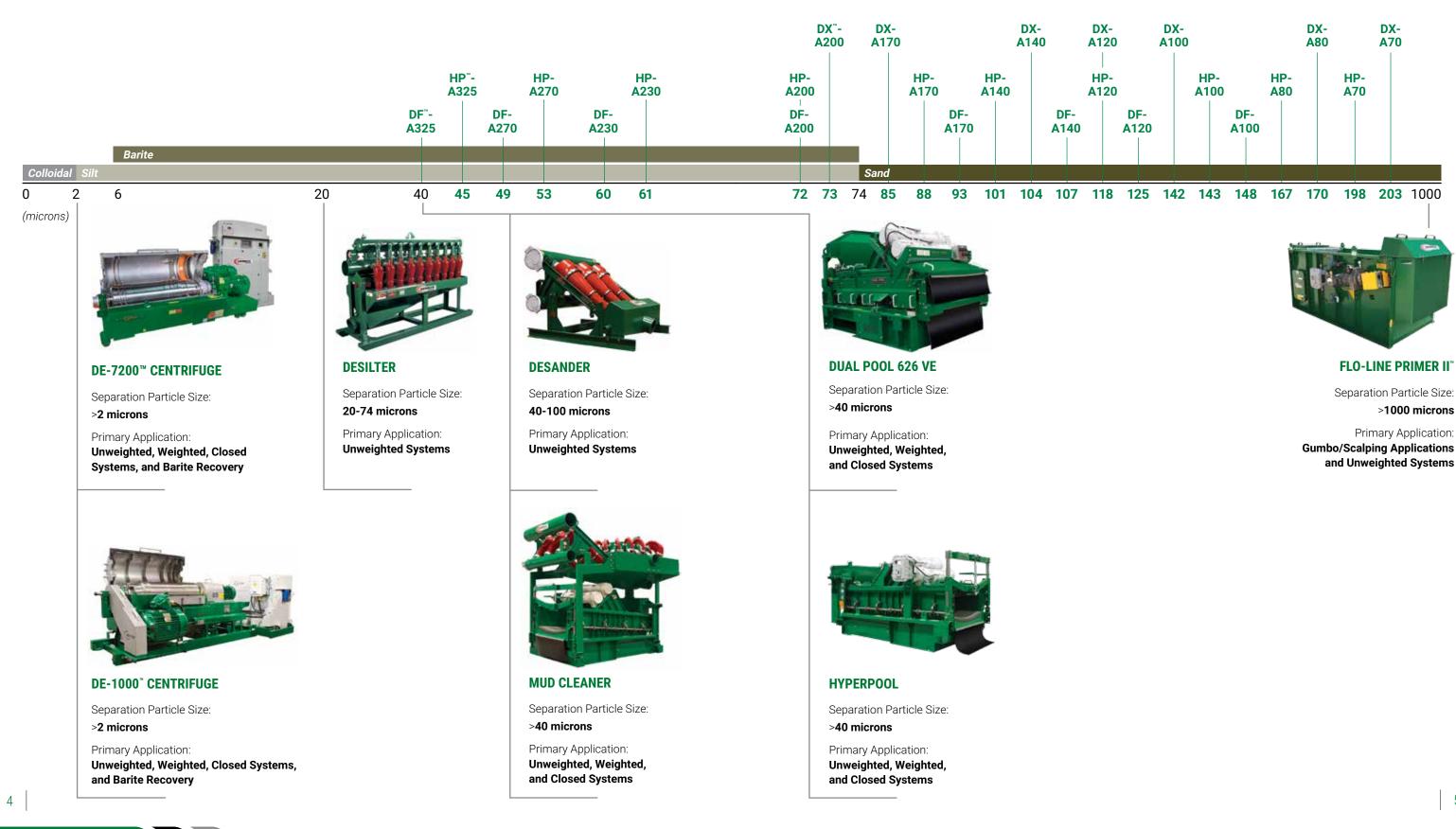
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### **SUMMARY** OF SOLIDS CONTROL EQUIPMENT



>1000 microns

and Unweighted Systems

### **GUMBO REMOVAL**

### Flo-Line Primer 258

The Flo-Line Primer 258™ utilizes a screen belt conveyor system to separate hydrated clays and large drilled cuttings from drilling fluid. This allows finer screens to be installed on the primary shakers, leading to lower dilution and operating costs. The Flo-Line Primer 258 is used in place of scalping shakers. The synthetic screen belt is available in 5, 10, and 20 square mesh weave.

With a 1.5 HP electric motor driving a variable speed gearbox, the Primer allows ample adjustment for changes to solids loading. Rotating nylon brushes located at the discard end cleans the screen belt to eliminate blinding issues associated with sticky clays. The feed box comes with a built-in non-pressurized bypass. Access doors allow for easy clean out of the hopper, which simplifies screen belt replacement and allows inspection of the feed end roller. Optional features include custom hoods and custom hopper for oversize outlet.



Flo-Line Primer 258

### **FLOW DISTRIBUTION**

### Flo-Divider<sup>™</sup>

Trouble free handling capacities are increased by the Flo-Divider", which distributes fluids/solids equally to multiple downstream shale shakers. The unit's weir gates can be used to shut down flow to one or more of the outlets for servicing a downstream unit, adding or removing a shaker, or bypassing all shakers. The Flo-Divider eliminates the need for back tanks and shaker bypasses and minimizes the effect of pitch and heave on offshore installations. The unit is available in five sizes: 3-, 4-, 5-, 6-, and 8-way.

Mud from the flow line enters the rear of the Flo-Divider (1) where it contacts a baffle (2) allowing the flow to pass under and sometimes over before it flows over the weirs (3), and divides the liquid and solids equally between the desired number of shaker feed ports (4). Positive-sealing weir gates shutoff the flow to the downstream shakers (5).



Flo-Line Primer II

### Flo-Line Primer II

The Flo-Line Primer II utilizes a removal cartridge screen belt conveyor system to separate hydrated clays and large drilled cuttings from drilling fluid. This allows finer screens to be installed on the primary shakers, leading to lower dilution and operating costs. The Primer II is used in place of scalping shakers. Two types of screen belts can be used on the Primer II, a stainless steel chain or a synthetic mesh screen belt. The opening sizes available for the chain are  $1/2" \times 1"$  and  $1" \times 1"$ . The synthetic screen belt is available in 5, 10, and 20 square mesh weave.

With a 1.5 HP electric motor driving a variable speed gearbox, the Primer II allows ample adjustment for changes to solids loading. When the chain belt cartridge is utilized, the sprocket roller on the discard end cleans the openings in the chain to eliminate blinding issues associated with sticky clays. When the synthetic belt cartridge is utilized, rotating nylon brushes located at the discard end cleans the screen belt. The feed box has a built-in non-pressurized bypass. Access doors allow for easy clean out of the hopper, replacing the synthetic belt and the inspection of the feed end roller or sprockets. Optional features include vapor extraction hoods, custom hoods, and custom hopper for oversize outlet.



Integrated Flo-Divider





Flo-Divider



### Integrated Flo-Divider

The Integrated Flo-Divider<sup>™</sup> functions similarly to the Flo-Divider. The Integrated Flo-Divider distributes the drilling fluid evenly across the screen frames of dual or triple Hyperpool shakers. The unit combines a box feeder with a Flo-Divider to receive and divide flow from a central feed connection between two or three shakers. Pipes connect the box feeder/Flo-Divider to the box feeder on the additional shaker(s).

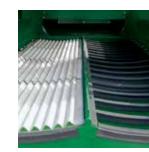
Positive-sealing weir gates are provided to permit interruption of flow to one or more shakers, as needed to facilitate screen panel changes or other maintenance. Storage receptacles are provided on the front of the Flo-Divider to retain the weir gate when not in use. A bypass pipe for dispensing fluid/cement is installed at the base of the Flo-Divider. A butterfly valve is included in the bypass line to permit the feed to be diverted from all shakers when required for equipment maintenance or to accommodate drilling conditions, such as cementing.

### **DUAL POOL®**

Derrick's knowledgeable workforce incorporates the importance of rig personnel safety and drilling optimization into every aspect of the design, manufacturing, and support of the high G Dual Pool 600 Series shaker. As a result, rigs have longer uptime and employees are safe in their working environment.

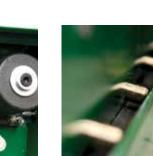
With a history of innovation and setting new standards, Derrick and its patented DP 600 Series shaker reassures its commitment to the drilling industry by providing long-life equipment with low maintenance requirements. This premium product includes an innovative dual concave screen frame, actuated screen compression system, optional vapor extraction covers and hood, and an optional scalping deck. The combination of these features ensure increased fluid handling capacity and provide a new standard in screening equipment.







Dual Concave Screen Bed



Screen Air Actuation Lever

Screen Compression Pins



Dual Pool 626 VE™



Dual Pool 626 VE Mud Cleaner

### **FEATURES & BENEFITS**

### Health, Safety, & Environment (HSE)

- · Easy screen inspection, removal, and installation
- Low sound production (74 +/- 4 dBA)
- Optional vapor extraction covers and hood protect operating personnel and surrounding equipment from vapors emitted during the screening process (dependent on customer provided HVAC exhaust system)
- Self-locking splash covers provide clean operating environment
- · Light-weight screen panels make for easy installation

### **Dual Concave Screen Bed**

- Fluid centering technology increases capacity
- Increased efficiency in a smaller footprint
- Compression fit bed material requires no hardware

#### **Actuated Screen Compression System**

- Eliminates bypass of solids under screen panels
- Air actuation offers quick, easy screen changes
- Fail-safe spring system securely retains panels upon loss of air pressure
- All stainless steel pneumatic fittings
- Snap-on protective covers

### **Pyramid® Screen Technology**

- Pyramid<sup>®</sup> and Pyramid Plus<sup>™</sup> screens offer up to 206% more API RP 13C non-blanked screen area over conventional shakers delivering increased efficiency
- Compliant with industry-standard API RP 13C (ISO 13501)



### Super G3<sup>™</sup> Integrated Vibratory Motors

- Zero maintenance
- Industry leading high G performance
- · Patented continuous internal oil recirculating lubrication system
- Superior conveyance
- Three-year warranty

### **Optional Scalping Deck**

- Effective removal of coarse material
- Optional Loss Circulation Material (LCM) reclamation
- Full view exposure of lower deck while operating
- · Lower deck screen changes without removing scalping panels
- Abrasion-resistant ultra-long-life urethane panels
- Integral bypass diverts flow directly to primary deck if desired

### Hydraulic Screen Angle Adjustment

- Fast, push button adjustment from +1° to +7°
- Permits optimal shaker performance by maintaining consistent fluid pool

### **Mud Cleaner**

- Up to twenty 4" hydrocyclones
- Up to three 10" hydrocyclones
- Individual shutoff valve for each 4" hydrocyclone

### **HYPERPOOL**<sup>®</sup>

Backed by over 60 years of cost-effective solutions plus award-winning service, the Derrick Hyperpool shaker is the latest in a long line of products designed expressly to exceed the demanding needs of today's oilfield drilling operations.

With its compact footprint, industry-leading processing capacity, solids bypass prevention, and low maintenance cost, the Hyperpool is well suited for all drilling applications where drilling performance and rig modularity are required. The Hyperpool is designed to bring maximum value to the customer.

By combining multiple shakers on a single modular design, the Hyperpool dual and triple units offer increased capacity in a compact footprint. Optimum flexibility is provided by the box feeder/Flo-Divider, which permits distribution of feed slurry equally to each shaker screen frame. A bypass pipe with integrated butterfly valves connects all hopper discharge outlets.















Triple Hyperpool Unit with Integrated Flo-Divider

### **FEATURES & BENEFITS**

### Health, Safety, & Environment (HSE)

- Easy screen inspection, removal, and installation
- Low sound production (74 +/- 4 dBA)
- Optional vapor extraction covers protect operating personnel and surrounding equipment from vapors emitted during the screening process (dependent on customer provided HVAC exhaust system)
- Optional self-locking splash covers provide clean operating environment
- Light-weight screen panels make for easy installation

#### **Concave Screen Bed**

- Eliminates bypass of solids under screen panels
- Fluid centering technology increases capacity up to 35% over competitive equipment
- Increased efficiency in a smaller footprint
- Compression fit bed material requires no hardware

### **Screen Compression System**

- Less than 45-seconds per screen panel change
- Fast, secure panel retention
- Single-side operation, available in either left or right side

### Pyramid Screen Technology

- Pyramid and Pyramid Plus screens offer up to 45% more API RP 13C non-blanked screen area over conventional shakers delivering greater efficiency
- Compliant with industry-standard API RP 13C (ISO 13501)

### Super G<sup>®</sup> Integrated Vibratory Motors

- Zero maintenance
- Powerful, quiet, dual vibratory motors apply high G performance
- Two options Super G<sup>®</sup> or Super G2<sup>®</sup>
- Standard Super G has greased-for-life bearings (Two-year warranty)
- Optional Super G2 has continuous recirculating internal oil lubrication system (Three-year warranty)

### Single Point Screen Angle Adjustment

- Adjustable screen angle while drilling from  $+2^{\circ}$  to  $+8^{\circ}$ for optimum capacity, screen life, and efficiency
- · Manual single point system allows one man operation and optimization while drilling

### **Mud Cleaner**

- Up to twenty 4" hydrocyclones
- Up to three 10" hydrocyclones
- Optional individual shutoff valve for each 4" hydrocyclone



Hyperpool Mud Cleaner

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## **FLO-LINE CLEANER<sup>™</sup>**

With over 15 years of offshore and onshore rig installations, Derrick's Flo-Line Cleaner 500 Series shakers embody an industry-proven balance of product dependability and enhanced performance. Designed with the customer in mind, the Flo-Line Cleaner offers user-friendly technology such as light-weight screens, adjustable screen angle while drilling, and single-side screen tensioning.

The Flo-Line Cleaner's modular design allows for versatile configuration as a durable flow line shaker, high performance mud cleaner, single skid dual unit, or even as a drying shaker.



FLC 504 Mud Cleaner





Quick-Lok Tension System











FLC 514 VE

### **FEATURES & BENEFITS**

### Health, Safety, & Environment (HSE)

- · Easy screen inspection, removal, and installation
- Low sound production (74 +/- 4 dBA)
- Optional vapor extraction covers protect operating personnel and surrounding equipment from vapors emitted during the screening process (dependent on customer provided HVAC exhaust system)
- Light-weight screen panels make for easy installation

### **Convex Screen Bed & Quick-Lok Tension System**

- Rugged stainless steel construction screen bed materials for long life
- Convex screen bed for increased efficiency in a smaller footprint
- Less than one minute per screen panel change
- Fast, secure panel retention
- Single-side operation, available in either left or right side

### Pyramid Screen Technology

- Pyramid and Pyramid Plus screens offer up to 39% more API RP 13C non-blanked screen area over conventional shakers with a FLC 503/513 and up to 85% with a FLC 504/514, delivering greater efficiency
- Compliant with industry-standard API RP 13C (ISO 13501)

### Super G2<sup>®</sup> & Super G Integrated Vibratory Motors

- Zero maintenance
- Powerful, quiet, dual vibratory motors apply high G performance
- Super G vibratory motors are standard for FLC 503 and 504
- Super G2 vibratory motors are standard for FLC 513 and 514
- Super G has greased-for-life bearings (Two-year warranty)
- Super G2 has continuous recirculating internal oil lubrication system (Three-year warranty)

### Single Point Screen Angle Adjustment

- Adjustable screen angle while drilling from -1° to +5° (FLC 513 and 503) and -1° to +7° (FLC 514 and 504) for optimum capacity, screen life, and efficiency
- Single point system allows one man operation and optimization while drilling
- Hydraulic push-button system on FLC 513/514
- Manual ratchet system on FLC 503/504

### **Mud Cleaner**

- Up to twenty 4" hydrocyclones
- Up to three 10" hydrocyclones
- Optional individual shutoff valve for each 4" hydrocyclone

### THE GLOBAL LEADER **IN SCREENING TECHNOLOGY**

In 1977, Derrick Corporation expanded into the oilfield, establishing Derrick Equipment Company to serve this market. Derrick has been fully committed to furthering solids control technology through extensive research and development (R&D). Satisfying the ever-changing needs of the oil and gas industry for nearly forty years, Derrick combines several time proven products with new innovations to offer the most comprehensive and cost effective solids control systems in the industry.

Continuing to set the standard in solids control, Derrick Equipment Company is leading the way to API's new API RP 13C (ISO 13501), the new industry-standard for physical testing and labeling of shaker screens. Until API RP 13C. no common standard existed for testing and labeling of screens. All Derrick screens offer cut point integrity and are API RP 13C (ISO 13501) compliant. Utilizing the most advanced and innovative R&D program, Derrick maintains its lead as a provider of fine screening technology.

### **Increased Solids Removal Results in Lower Drilling Costs**

Derrick screens are designed to maximize solids removal capabilities while significantly reducing costs associated with drilling fluid and disposal. The utilization of Derrick screens lowers the percentage of drilled solids in the mud system. Less dilution is required, decreasing total drilling fluid requirements and disposal costs. Cleaner drilling fluid will decrease down hole problems which can adversely affect drilling time. All the benefits of clean drilling fluid lead to one end result: Lower Drilling Costs.

### High Solids Removal Efficiency Minimize/Eliminate Well Minimize Dilution Bore Problems



### **Derrick Innovations**

1974 DX Extra Fine Screen Cloth

#### 1977 Sandwich (SWG) Screen® Panel

### 1984

Perforated Wear Plate (PWP™) Screen Panel

#### 1986 HP High Performance Screen Cloth

1989 Polyurethane Screen Panel

### 1995

Pyramid (PMD®) Screen Panel

1997 Pyramid Plus (PMD+") Screen Panel

#### 1998 Floating Backing Wire Screen Panel

2006 API RP 13C Compliant Screens

### 2006

High Temperature Screen Panel

2007 Compression Screen Panel

### 2007

Urethane Scalping Screen Panel

## **API RP 13C (ISO 13501) COMPLIANT SCREEN PANELS**

### What is API RP 13C (ISO 13501)?

A physical testing and labeling procedure for shaker screens. To be API RP 13C compliant, a screen must be tested and labeled in accordance with this recommended practice. Internationally, API RP 13C is known as ISO 13501.

### API RP 13C (ISO 13501) Compliance Tests

To meet API RP 13C compliance two tests are required: cut point and conductance. API RP 13C allows the end user to compare by cut point, conductance (fluid flow), and non-blanked open area. The cut point test is based on a time-proven testing method used by ASTM to classify particles by size. The shaker screen designation is identified by matching the screen's cut point to the closest ASTM sieve cut point. The D100 separation is used for assigning screen designations (Fig. 1). D100 means that 100 percent of the particles larger than the test screen will be retained, and all finer particles will pass through. The conductance test measures the ability of a fluid to pass through the screen. The non-blanked open area of a screen describes the net unblocked area (in square meters or square feet) available to permit the passage of fluid.

After identifying the cut point and conductance, API RP 13C requires application of a permanent tag or label to the screen that is visible and legible (Fig. 2). Both cut point, expressed as an API number, and conductance shown in kD/mm are required on the screen label.

The new procedure is a revision of the previous API RP 13E, which was based on optical measurements of the screen opening using a microscope and computer analysis. Under API RP 13E, screen designations were based on individual manufacturer test methods which produced inconsistent labeling.

#### Fig. 2 Required Screen Tag Information



#### Fig. 1 D100 Separation & API Screen Number

### API RP 13C (ISO 13501) **CUT POINT NUMBERS**

D100 Separation (Microns)	API Screen Number
>780,0 to 925,0	API 20
>655,0 to 780,0	API 25
>550,0 to 655,0	API 30
>462,5 to 550,0	API 35
>390,0 to 462,5	API 40
>327,5 to 390,0	API 45
>275,0 to 327,5	API 50
>231,0 to 275,0	API 60
>196,0 to 231,0	API 70
>165,0 to 196,0	API 80
>137,5 to 165,0	API 100
>116,5 to 137,5	API 120
>98,0 to 116,5	API 140
>82,5 to 98,0	API 170
>69,0 to 82,5	API 200
>58,0 to 69,0	API 230
>49,0 to 58,0	API 270
>41,5 to 49,0	API 325
>35,0 to 41,5	API 400
>28,5 to 35,0	API 450
>22,5 to 28,5	API 500
>18,5 to 22,5	API 635

Table 5 (found on page 40 and 41 of API RP 13C)



Non-Blanked Area: 7.09 ft<sup>2</sup> (0.66 m<sup>2</sup>) ctance: 0.95 (kD/mm) ms of API RP 13C (ISO 1350

Derrick Corporation

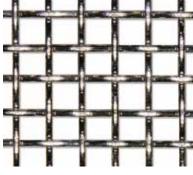
PMD500 DX-A20

Made in USA

### **SCREEN CLOTH**







### Extra Fine (DX<sup>™</sup>) Cloth

The Derrick Extra Fine (DX) cloth series is used on the first multiple layer (Sandwich) screens. The DX cloth is designed to maximize capacity, maintain cut point integrity, and minimize nearsize particle blinding.



The Derrick Fine (DF) cloth series has a slightly larger wire diameter than the DX cloth, but is thinner than market grade and tensile bolting cloth. The DF cloth is designed to maximize screen life, maintain cut point integrity, and minimize nearsize particle blinding.



### High Performance (HP<sup>™</sup>) Cloth

The Derrick High Performance (HP) cloth series was developed to increase fluid capacity by utilizing slotted openings. Its slotted openings allow for higher flow rates to be processed without sacrificing cut point integrity.

# **SCREEN PANEL CONSTRUCTION**

### Perforated Wear Plate Screen Panel (PWP<sup>™</sup>)

The Derrick PWP screens are constructed of multiple screen layers bonded to a perforated metal plate for added support and facilitation of repair. Bonding squares help maintain cut point integrity by stabilizing the Sandwich Screen, increasing durability by reducing screen flutter, and isolating any screen failures. Screens for particular shakers may be repaired using the stainless steel plugs supplied with the panel.

### Pyramid and Pyramid Plus<sup>™</sup> Screens (PMD<sup>®</sup> and PMD+<sup>™</sup>)

Derrick has revolutionized screening technology with the patented Pyramid (PMD) and Pyramid Plus (PMD+) screens. These revolutionary three-dimensional screens offer the benefits of traditional flat multi-layered screens while adding a significant increase in usable screen area. The result is a screen that increases fluid handling capacity. Pyramid and Pyramid Plus screens provide an easy, cost effective increase in shaker performance. Designed with the latest technology, Pyramid screens allow rigs to screen finer earlier in the drilling process, thus significantly reducing mud and disposal costs. All Derrick screens are API RP 13C compliant.

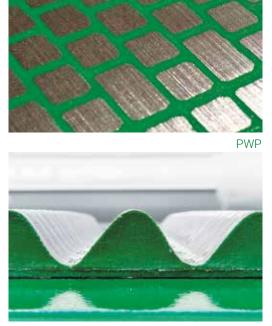
#### **Exclusive Benefits**

- Increased shaker capacity
- Enhanced permeability
- Makes fine separations
- Screen finer faster Drier cuttings

### **Screen Shape and Conductance**

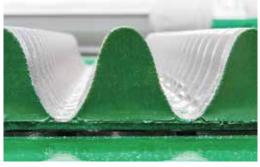


Corrugated Pyramid Screen Enhanced Permeability



PMD

• Fit existing shakers



PMD+

Gravity and vibration force the solids into the corrugated screen's troughs, thus allowing more fluid to pass through the top of the screen.



Conventional Flat Screen Solids Impede Fluid Flow

### **REPLACEMENT SCREEN PANELS**

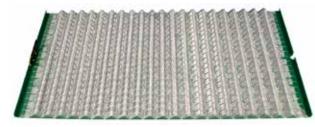
FOR DERRICK SHAKERS



Dilution and disposal costs are minimized with Derrick state-of-the-art screen surface technology. Combining high G shakers with Derrick's exclusive Pyramid Screen technology significantly improves solids separation. Integrating the industry's latest advancements in screen surface design - higher capacity, longer screen life, and optimal solids removal efficiency – Derrick screens can dramatically reduce operating costs.

### Hyperpool Series for Derrick Hyperpool Shakers

Derrick's Hyperpool performance is optimized through the installation of Pyramid screens, permitting the use of finer mesh sizes at higher capacities. The Hyperpool's innovative screen compression system drives the center of the screen panel downward, firmly sealing the screen panel to the screen frame. Compression benefits include extended screen life, improved conveyance, elimination of ultra fine solids bypassing under screen panels, and faster and more user-friendly screen changes than any other shaker in the Derrick product line.



Hyperpool Series Screen

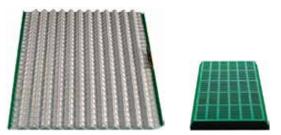
### API RP 13C (ISO 13501) Non-Blanked Open Screen Area

	PMD	PMD+
Hyperpool	22.64 sq. ft.	30.76 sq. ft.

### **COMPRESSION SYSTEM**

### 600 Series for Derrick Dual Pool 600 Shakers

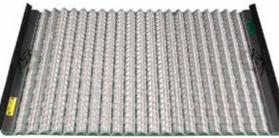
Derrick's 600 Series screens, available in Pyramid and Pyramid Plus panels, are used on all Dual Pool 600 series shakers. The DP 600's innovative actuated screen compression system drives the center of the screen panel downward, firmly sealing the screen panel to the screen frame. Compression benefits include extended screen life, improved conveyance, elimination of ultra fine solids bypassing under screen panels, and fast, user-friendly screen changes. Derrick's long-life urethane panels are used on models equipped with the scalping deck option.



Pyramid (PMD) 600 Series Screen & Scalping Deck 600 Series Urethane Screen

### 500 Series for Derrick Flo-Line Cleaner 500 Shakers

Derrick's 500 Series screens, available in Pyramid, Pyramid Plus, and PWP panels are used on all FLC 500 series shale shakers. The FLC 500's innovative single-side tensioning system reduces screen panel replacement time to less than one minute per panel on average. This faster, easier, and more reliable screen panel tensioning is provided by tensioning fingers and two Quick-Lok 1/2-turn tensioning bolts on each screen panel.



Pyramid (PMD) 500 Series Screen

#### API RP 13C (ISO 13501) Non-Blanked Open Screen Area

	PMD	PMD+	Urethane
DP 616	24.60 sq. ft.	32.64 sq. ft.	-
DP 626	24.60 sq. ft.	32.64 sq. ft.	12.00 sq. ft.
DP 618	32.80 sq. ft.	43.52 sq. ft.	-
DP 628	32.80 sq. ft.	43.52 sq. ft.	16.00 sq. ft.

### **COMPRESSION SYSTEM**



#### API RP 13C (ISO 13501) Non-Blanked Open Screen Area

PWP		PMD	PMD+		
FLC 513	12.15 sq. ft.	21.27 sq. ft.	29.40 sq. ft.		
FLC 514	16.20 sq. ft.	28.36 sq. ft.	39.20 sq. ft.		

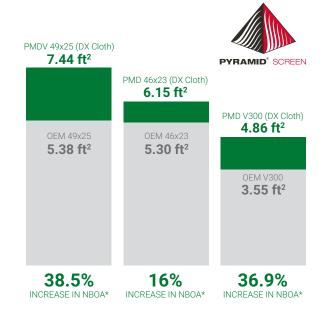
### **TENSIONING SCREEN SYSTEM**

### **REPLACEMENT SCREEN PANELS**

FOR NON-DERRICK SHAKERS

### More Screen Area with Pyramid Screens

Derrick makes replacement screens to fit non-Derrick shale shakers. Continuing with its commitment to remain the leading technology provider of fine screens, Derrick's Research and Development department has developed a pretensioned screen for the BRANDT® COBRA<sup>™</sup> Series, LCM-3D, and VSM 300<sup>™</sup> shakers, as well as M-I SWACO® MONGOOSE® & MEERKAT® Series shakers. Utilizing Derrick's PMD and PWP technology, the 49x25, 46x23, and V300 replacement screens are API RP 13C (ISO 13501) compliant to ensure accurate cut point designation.



\*NBOA = Non-Blanked Open Area

#### 49x25 for BRANDT<sup>®</sup> COBRA<sup>™</sup> Series and LCM-3D Shakers

The PMDV 49x25 is a superior pre-tensioned (VENOM™ style) replacement screen for the COBRA series and LCM-3D shale shakers. The exclusive Derrick Pyramid technology offers up to 38.5% greater non-blanked open area, increasing capacity of the existing shaker package. The PTCV 49x25 (PWP) flat screen is also available and comes with a stainless steel screen repair plug.



PMDV 49x25 Screen

### 46x23 for M-I SWACO® MONGOOSE® & MEERKAT® Series Shakers

The PMD 46x23 is a superior pre-tensioned replacement screen for MONGOOSE & MEERKAT series shale shakers. The exclusive Derrick Pyramid technology offers up to 16% greater non-blanked open area, increasing capacity of the existing shaker package. The PTM 46x23 (PWP) flat screen is also available.



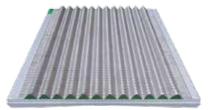
PMD 46x23 Screen

API RP 13C (ISO 13501)
Non-Blanked Open Screen Area
Using DX Series Cloth

	PWP	PMD
MONGOOSE	17.60 sq. ft.	24.60 sq. ft.
MEERKAT	13.20 sq. ft.	18.45 sq. ft.

### V300 for BRANDT VSM 300" Shakers

A pre-tensioned Pyramid screen is available for the VSM 300 shale shakers. The V300 screens ensure longer screen life and accurate cut point designation in compliance with API RP 13C. The exclusive Derrick Pyramid technology offers up to 36.9% greater non-blanked open area, increasing capacity of the existing shaker package. The V300 (PWP) flat screen is also available.





#### API RP 13C (ISO 13501) Non-Blanked Open Screen Area Using DX Series Cloth

	PWP	PMD
COBRA	15.00 sq. ft.	22.32 sq. ft.
KING COBRA™	20.00 sq. ft.	29.76 sq. ft.
LCM-3D	20.00 sq. ft.	29.76 sq. ft.

### API RP 13C (ISO 13501) Non-Blanked Open Screen Area **Using DX Series Cloth**

	PWP	PMD
VSM 300	13.16 sq. ft.	19.44 sq. ft.

### **SCREEN PANEL CHART** FOR DERRICK SHAKERS

							API RP 13C	NON-BLAN	IKED OPEN AR	EA (SQ. FT.)			
							48x30	36x30	60x30	500 Series	600 Series	Hyperpool	
							5.30	4.26	7.27	4.05	-	-	
					-		6.85	5.76	10.03	7.09	4.10	5.66	
= PWI	P 🔺 =	PMD	<b>A</b> =	PMD+		= HT	9.47	7.78	-	9.80	5.44	7.69	
API RP	13C DESIGNAT	ΙΟΝ	c	ONDUCTANC	E NUMBE	R		A	AILABLE (	CONSTRUCTIO	л		
Screen Designation	API RP 13C Designation	API D100 Cut Point	PWP 500	PWP 48x30, 36x30, 60x30	PMD	PMD+	48x30 <sup>1,5</sup>	36x30 <sup>6</sup>	60x30 <sup>7</sup>	500 Series <sup>2,5</sup>	600 Series <sup>3</sup>	Hyperpool	
DX-A200	API 200	73.30	0.94	0.73	0.95	1.46							
DX-A170	API 170	85.40	1.20	0.85	1.36	1.61							
DX-A140	API 140	104.00	1.61	1.43	1.92	2.42							
DX-A120	API 120	117.80	1.64	1.46	1.92	2.46							
DX-A100	API 100	142.00	2.18	1.80	2.33	3.20							
DX-A80	API 80	170.40	2.50	2.48	3.09	4.14							
DX-A70	API 70	202.70	2.55	2.67	3.80	5.00							
DX-A60	API 60	243.70	3.85	3.56	4.68	5.66							
DX-A50	API 50	288.50	4.59	4.19	5.50	6.21							
DX-A45	API 45	341.10	7.30	6.05	5.84	7.06							
DX-A40	API 40	411.70	8.16	6.77	6.59	7.39							
DX-A35	API 35	477.50	11.80	7.24	7.06	11.59							
HP-A325	API 325	44.50	0.43	0.48	0.65	0.95							
HP-A270	API 270	52.50	0.50	0.47	0.55	0.96							
HP-A230	API 230	61.00	0.56	0.48	0.60	0.99							
HP-A200	API 200	71.70	0.86	0.70	1.10	1.51							
HP-A170	API 170	88.40	1.04	0.81	1.35	2.16							
HP-A140	API 140	100.60	1.59	1.56	2.08	2.99							
HP-A120	API 120	117.80	2.01	1.88	2.50	4.13					Not	Not	
HP-A100	API 100	142.70	2.42	2.43	3.17	4.83					Available	Available	
HP-A80	API 80	166.60	2.85	2.80	3.71	5.10							
HP-A70	API 70	197.70	4.00	3.98	4.64	5.86							
HP-A60	API 60	238.40	4.90	4.98	5.31	6.59							
HP-A50	API 50	276.00	5.57	5.74	5.52	7.40							
HP-A45	API 45	331.40	6.00	6.94	6.14	7.80							
HP-A40	API 40	445.10	7.20	7.80	7.42	11.75							
DF-A325	API 325	40.30	0.35	0.29	0.38	0.61							
DF-A270	API 270	49.20	0.39	0.31	0.44	0.65							
DF-A230	API 230	59.80	0.52	0.59	0.71	1.00							
DF-A200	API 200	72.20	0.86	0.80	0.93	1.37			Not Availabl	e			
DF-A20	API 20	783.80	15.96	14.35	10.57	13.69					<b>A </b>		



							API RP 13C NON	-BLANKED OPE	N AREA (SQ.
							49x25	46x23	V300
							5.00	4.40	3.29
🔲 = PWP		= PMD					7.44	6.15	4.86
API RP	13C DESIGNAT	ION	со	NDUCTAN	ICE NUME	BER	AVAIL	ABLE CONSTRU	CTION
Screen Designation	API RP 13C Designation	API D100 Cut Point	PWP 49x25	PWP 46x23	PWP V300	PMD	49x25 <sup>8</sup>	46x23°	V300 <sup>10</sup>
DX-A200	API 200	73.30	0.81	0.88	0.90	0.95			
DX-A170	API 170	85.40	1.14	0.96	1.02	1.36			
DX-A140	API 140	104.00	1.28	1.19	1.20	1.92			
DX-A120	API 120	117.80	1.40	1.36	1.16	1.92			
DX-A100	API 100	142.00	1.99	1.75	1.75	2.33			
DX-A80	API 80	170.40	2.15	2.45	2.17	3.09			
DX-A70	API 70	202.70	2.96	2.72	2.68	3.80			
DX-A60	API 60	243.70	3.65	3.52	3.16	4.68			
DX-A50	API 50	288.50	4.72	4.77	4.13	5.50			
DX-A45	API 45	341.10	7.63	7.96	6.74	5.84			
DX-A40	API 40	411.70	9.11	9.87	8.19	6.59			
DX-A35	API 35	477.50	11.13	10.84	8.70	7.06			
DF-A325	API 325	40.30	0.26	0.27	0.24	0.38			
DF-A270	API 270	49.20	0.37	0.35	0.36	0.44			
DF-A230	API 230	59.80	0.53	0.56	0.48	0.71			
DF-A20	API 20	783.80	12.43	14.43	13.30	10.57			

 $^1\mbox{Fits}$  Derrick FLC 2000" 3 and 4-Panel, FLC with AWD, FLC Plus", HI-G® Dryer, Cascade 2000  $^2\mbox{Fits}$  Derrick FLC 500 Series

<sup>3</sup>Fits Derrick DP 600 Series <sup>4</sup>Fits Derrick Hyperpool <sup>5</sup>HT option is available for PMD screens only. PWP screens are inherently HT

<sup>6</sup>Fits Derrick FC313 <sup>7</sup>Fits Derrick FLC 58

<sup>®</sup>Fits BRANDT COBRA Series and LCM-3D Shakers <sup>®</sup>Fits M-I SWACO MONGOOSE & MEERKAT Series Shakers <sup>10</sup>Fits BRANDT VSM 300 Shakers

### **MUD AGITATORS**

### **DE-AG<sup>®</sup> Mud Agitator**

Derrick mud agitators include an explosion-proof, "C" faced motor, reduction gearbox (helical-bevel gears for horizontal agitators or all helical gears for vertical units), impeller, and shaft with assembly bushings. Motors range from 5 to 30 HP and may be supplied in several power configurations.

Attaching the motor directly to the gearbox protects correct alignment that can increase bearing life and provides 95 percent efficiency in power transfer to the impeller. Using this superior design surpasses standard worm drive gear assemblies by 30 percent, allowing Derrick agitators to do the same work at far less horsepower. By unitizing the motor and gearbox, weight and space requirements are reduced. Horsepower, mechanical configuration, impeller diameter, and shaft length are customized to tank dimensions and maximum mud weights. Available horsepower ratings\* are: 5, 7.5, 10, 15, 20, 25, and 30.

\*Horsepower is de-rated for 50Hz power configuration.

# Horizontal Mud Agitator

Vertical Mud Agitator

### DEGASSERS

### Vacu-Flo<sup>™</sup> 1200 Degasser

Derrick Vacu-Flo<sup>™</sup> degassers have a more efficient vertical tank design than traditional horizontal degassers, offering over 217% more surface area than alternative designs. This additional capacity results in no increase in vessel size, tank space requirements, unit weight, or reconfiguration of pit arrangements. A 5 HP vacuum pump, capable of pulling 29" Hg, draws mud into the degassing chamber where decreased pressure causes gas bubbles to surface from the fluid more rapidly. A stacked, corrugated fiberglass leaf arrangement and multiple feed ports provide higher fluid impact, thinner layers of mud dispersion, and greater turbulence for more efficient gas removal. Derrick's Vacu-Flo degassers offer convenient access to the leaf assembly and float mechanisms (without having to remove the vessel lid) through an oversized access door. This feature significantly reduces downtime and maintenance costs compared to other units. The Vacu-Flo 1200 has a leaf area of 16,755 in<sup>2</sup> (10.8 m<sup>2</sup>).

### **CENTRIFUGAL PUMPS**



Overhead Belt Drive Package

### Centrifugal Pumps

Derrick offers a complete line of centrifugal pumps to accommodate a full variety of drilling applications. Sizes range from 3 x 2 to 8 x 6. Bare pumps, horizontal packages, and overhead belt drive configurations are available. Explosion proof electric motors are available up to 200 HP in 1200, 1800, or 3600 RPM.

Horizontal packages are skidded, as shown, and include the Derrick Premium 250 pump, explosion proof electric motor, and coupling with OSHA type guard. Starters are optional.

Overhead belt drive packages are skidded, as shown, and include the Derrick Premium 250 pump, an explosion proof electric motor, belts and sheaves, and OSHA type belt guard. Starters are optional.



ACD-1500 Degasser Dual Voltage



#### Vacu-Flo 1200 Degasser

### ACD-1500 Atmospheric Degasser Dual Voltage

The Derrick ACD-1500 Atmospheric/Centrifugal degasser is a unique in-tank alternative to the standard Derrick vacuum style Vacu-Flo 1200 degasser.

The Derrick ACD-1500 degasser agitates mud through a submerged 12" pump impeller relying on impact and turbulence to enable the separation of gas from the fluid. Strike plate adjustment of 0.25" to 1.25" allows variable flow capacity. The ACD-1500 degasser satisfies the NEC Class I, Division 1, Group C and D explosion proof electrical requirements for the equipment voltages 460V/3phase at 60Hz or 380V/3phase at 50Hz.

### **VIBRATORY MOTORS**

Proven to dramatically increase liquid/solids separation, the Super G series vibratory motors produce superior conveyance due to their high G characteristics. Increased fluid-handling capacities using fewer shakers is only part of the reason for their success on drilling rigs. Screening finer, earlier in the drilling process, significantly reduces mud and disposal costs. The Super G series vibratory motors are built with Derrick's superior electrical components, which are renowned in the industry for durability. High performance and exceptional durability make the Super G series vibratory motors an asset to any drilling program.



### **HYDROCYCLONES**



Inline Vertical Desander

### Super G3 and Super G2 Integrated Vibratory Motors

Both the Super G3<sup>™</sup> and Super G2 vibratory motors feature a patented continuous, internal recirculation lubrication system that provides long life, reduced repair costs, and robust maintenance free operation. In addition to greatly extending the life of the vibratory motor, the hydrodynamic cushioning effect on bearing surfaces created by this unique lubrication system reduces friction, wear, heat, and sound (measured at 74 +/- 4 dBA). Sealed, continuous recirculation of lubricating oil maintains a fresh film of oil on all bearing surfaces at all times and prevents entry of contaminants. Both the Super G3 and Super G2 vibratory motors carry a three-year warranty.



Super G2 Vibratory Motor



Inline Incline Desander

#### Super G Integrated Vibratory Motors

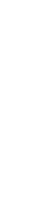
Featuring permanently lubricated bearings that eliminate the need for a remote lubrication system, Derrick Super G vibratory motors reduce both repair costs and maintenance requirements. These grease-filled bearings also result in significantly lower sound output with a measured level of 74 +/- 4 dBA. Super G vibratory motors carry a two-year warranty.



Super G Vibratory Motor



Inline Vertical Desilte



### **10 Inch Inline Desanders**

Derrick desanders make separations between 40 and 100 microns and offer the flexibility of mounting either one, two, or three 10" desander cones over a cone underflow pan. The underflow can be discarded or directed onto a vibrating screen for further processing. Derrick desanders are also available in vertical or inclined manifold stand-alone models, or for inclined mounting on Derrick shakers.

### 4 Inch Round or Inline Desilters

The Derrick round and inline desilters are designed to remove silt-sized (20 to 74 microns) solids from drilling fluids. Derrick's round desilters are simple to operate and easy to maintain. Optional shutoff valves on each round desilter cone inlet permit individual cone removal and inspection without interrupting operation of the desilter. The Derrick inline desilter is designed for use in areas that cannot accommodate the spatial requirements for the premium round desilter configuration. Both the round and inline desilters are available in a variety of sizes up to 20 cone models. Available cone quantity dependent on machine type.

Derrick's polyurethane hydrocyclone offers a high volume 4" cone, while providing contractors an economical replacement for less efficient older equipment. Derrick's unique uni-body construction eliminates excess parts and seams where excessive wear can occur. Derrick's 4" desilter cones are available with ceramic inserts for extreme service.



Round Desilter

### **CENTRIFUGES**

### DE-7200" VFD"

The DE-7200 VFD<sup>™</sup> (Variable Frequency Drive) centrifuge offers a robust mechanical design coupled with advanced control technology, enabling it to provide consistent and effective solids control in a wide range of drilling fluid types and drilling conditions. The stainless steel bowl and conveyor with hardened and replaceable wear parts reduce the total ownership cost and maintenance downtime. With a maximum of 2750 G's at 3000 RPM bowl speed the DE-7200 separates fine solids from drilling fluids, improving drilling fluid rheology and thus drilling performance. The DE-7200 features a 60 HP conveyor drive motor with 70,806 in-lbs gearbox torque, allowing it to maintain high feed rates while processing drilling fluids with high solids content and high mud weights. With a 21.4" x 72" bowl capable of processing high volumetric flow rates and removing large quantities of solids, the DE-7200 has the capacity needed for effective solids control on deep wells with high circulating rates and fast rates of penetration. Automatic load sensing and feed pump control dynamically adjusts the pump rate to maintain bowl or conveyor torque set point, enabling automated processing optimization and preventing rotating assembly overload. The DE-7200 is available with remote monitor and control capability, allowing the operator to be located outside of hazardous working environments and enabling offsite technicians to perform process optimization, quality control, and troubleshooting.

### DE-1000" LP VFD Dual Voltage

Combining the field-proven durability of the DE-1000 series rotating assembly with the same state-of-the-art control system as on the DE-7200, the DE-1000 LP (Low Profile) VFD is Derrick's premium small bowl centrifuge offering. With PLC-controlled variable frequency drives controlling bowl and conveyor speed as well as feed rate, the DE-1000 LP VFD can be rapidly optimized for most efficient solids control in a wide range of drilling applications. The automated control system adjusts feed rate based on centrifuge loading, ensuring the maximum solids removal without operator intervention. The DE-1000 VFD may also be controlled and monitored from a safe location offsite, protecting personnel from hazardous conditions onsite and allowing remotely located experts to assist in operation and maintenance. The unit features 24,782 in-lbs maximum conveyor torque with a 52:1 gearbox and a 20 HP motor driving the conveyor, enabling it to remove a large volume of solids (same as during barite recovery on a high mud weight system). Reaching a maximum of 2575 G's at 3600 RPM bowl speed, the DE-1000 VFD removes fine solids and improves drilling fluid quality. The Low Profile (LP) is a modular design, allowing the control cabinet to be positioned separately from the centrifuge for the safety of equipment operators and increased flexibility for job site installations. The dual voltage electrical configuration (460V/3phase and 480V/3phase at 60Hz or 380V/3phase and 400V/3phase at 50Hz) allows the unit to operate around the world without changing electrical components or motors.

### **DE-1000 FHD<sup>™</sup> Dual Voltage**

The DE-1000 FHD<sup>™</sup> (Full Hydraulic Drive) is engineered The DE-1000 LP (Low Profile) GBD (Gearbox Drive) and manufactured for performance, flexibility, reliability, offers consistent performance, high reliability, and and minimal maintenance. The full hydraulic drive control minimal maintenance at low cost. The gearbox drive enables independent adjustment of the bowl speed and system with onboard operator controls ensures conveyor differential speed during processing, allowing ease of use and is best suited for applications with the operator to adjust the centrifuge parameters for consistent feed properties. Several drive motor sheaves efficient solids removal as feed properties change are available to permit bowl speed adjustment up throughout the drilling process. With maximum to 4000 RPM at 60Hz or up to 3250 RPM at 50Hz, enabling effective solids control for various drilling centrifugal acceleration of 2300 G's at 3400 RPM bowl fluid properties and drilling conditions. This version of speed and conveyor differential speed adjustment from 3-90 RPM, the DE-1000 FHD is effective in a wide range centrifuge can attain up to 3180 G's. With two available of applications from barite recovery on 20 PPG drilling gearbox ratios of 52:1 and 125:1, the gearbox may be fluid to separation of flocculated ultrafine solids during changed to provide the best conveyor differential speed dewatering. The DE-1000 FHD has two unique features for the application. An overload clutch protects the that protect the rotating assembly from overload: feed gearbox, preventing costly damage to mechanical parts pump cycling and conveyor boost system. During in event of rotating assembly overload. During startup, feed pump cycling, the centrifuge electrical system the 50 HP bowl motor is protected from damage automatically shuts down the feed pump if the conveyor by a soft start fluid coupling. To prevent equipment becomes overburdened. Should feed pump shut down damage and protect personnel, the DE-1000 LP GBD fail to reduce load on the conveyor, the conveyor boost has automatic safety shutdown for high vibration, centrifuge motor overload, or feed pump motor system automatically increases the conveyor differential speed to clear solids from the bowl. The stainless steel overload. Like the other DE-1000 series centrifuges, rotating assembly with hardened, replaceable wear the DE-1000 LP GBD has excellent durability and low repair costs with a stainless steel rotating assembly parts extends the operating life of the DE-1000 FHD, minimizing repair cost and maintenance downtime. The and hardened, replaceable wear parts. The low profile design is compact and lightweight, reducing dual voltage electrical configuration (440V/3phase and 460V/3phase at 60Hz or 380V/3phase and 415V/3phase transportation and shipping costs, and facilitating at 50Hz) allows the unit to operate around the world installation on smaller rigs and drilling pads. without changing electrical components or motors.

DE-1000 FHD

Dual Voltage







### DE-1000 LP GBD



### **WEIGHTS & DIMENSIONS**

EQUIPMENT			DIMENSIONS					
Model	Opt	ions	Width in (mm)	Length in (mm)	Height in (mm)	Weir Height in (mm)	Weight Ibs (kg)	
Fla Line Drimer 250	Standard			159 (4039)	51 (1295)	26 (660)	3100 (1406)	
Flo-Line Primer 258	VE (Vapor Extraction)		53-3/4 (1365)	159-1/8 (4042)	58-5/16 (1480) 46-1/4 (1175)		3300 (1497)	
Flo-Line Primer II	Standard			110 (2794)			2700 (1225)	
	VE (Vapor Extraction)			110-1/4 (2800)	54 (1372)		2800 (1270)	
Dual Pool 616	Box Feeder			108 (2743)	73-9/16 (1868)	45-1/2 (1156)	5200 (2359)	
Dual Pool 626			74-5/8 (1896)	108 (2743)			5500 (2495)	
Dual Pool 616	Weir Feeder			126-1/4 (3207)		34 (864)	5400 (2450)	
Dual Pool 626							5700 (2585	
Dual Pool 618	Box Feeder Weir Feeder		74-5/8 (1896)	136-3/16 (3460)		45-1/2 (1156) 75-1/4 (1911) 34 (864)	6000 (2722	
Dual Pool 628				130-3/10 (3400)	75-1/4 (1011)		6400 (2903	
Dual Pool 618				154-3/8 (3922)	73 1/4 (1911)		6200 (2812)	
Dual Pool 628							6600 (2994	
	Box (TE)*	None	74-5/8 (1896)	109-1/2 (2781)	72 0/16 (1969)	45-1/2 (1156)	5700 (0E05	
Dual Pool 616	Box (RE)**	None	14-210 (1820)	119-5/16 (3031)	73-9/16 (1868)		5700 (2585	
VE (Vapor Extraction)	Box (RE)	3/20 Cones	80-1/2 (2045)	125 (3175)	114-7/8 (2918)		9700 (4400	
	Weir Feeder	None	74-5/8 (1896)	127-5/8 (3241)	73-9/16 (1868)	34 (864)	5600 (2540	
	Weir Feeder	3/20 Cones	80-1/2 (2045)	132-1/4 (3359)	114-7/8 (2918)		9500 (4309	
	Box (TE) Box (RE)	N	74 5 (0 (1000)	109-1/2 (2781)	70.0/16 (10.0)	45-1/2 (1156)	6000 (2722)	
Dual Pool 626		None	74-5/8 (1896)	119-5/16 (3031)	73-9/16 (1868)			
VE (Vapor Extraction)	Box (RE)	3/20 Cones	80-1/2 (2045)	125 (3175)	114-7/8 (2918)		10000 (4536	
	Weir Feeder	None	74-5/8 (1896)	127-5/8 (3241)	73-9/16 (1868)	34 (864)	5900 (2676)	
	Weir Feeder	3/20 Cones	80-1/2 (2045)	132-1/4 (3359)	114-7/8 (2918)		9900 (4491)	
	Box (TE)	Nana	74-5/8 (1896)	141-15/16 (3605)	75-1/4 (1911)	45-1/2 (1156)	6500 (2948)	
Dual Pool 618	Box (RE)	None		151-13/16 (3856)	75-174 (1911)			
VE (Vapor Extraction)	Box (RE)	3/20 Cones	80-1/2 (2045)	152-7/8 (3883)	114-7/8 (2918)		10400 (4717	
	Weir Feeder	None	74-5/8 (1896)	154-11/16 (3929)	75-1/4 (1911)	34 (864)	6500 (2948	
	Weir Feeder	3/20 Cones	80-1/2 (2045)	154-3/8 (3922)	114-7/8 (2918)		10400 (4717	
	Box (TE)	None	74-5/8 (1896)	141-15/16 (3605)	75-1/4 (1911)	45-1/2 (1156)	6900 (3130)	
Dual Pool 628	Box (RE)			151-13/16 (3856)	75-174 (1911)			
VE (Vapor Extraction)	Box (RE)	3/20 Cones	80-1/2 (2045)	152-7/8 (3883)	114-7/8 (2918)		10800 (4899	
	Weir Feeder	None	74-5/8 (1896)	154-11/16 (3929)	75-1/4 (1911)	34 (864)	6900 (3130)	
	Weir Feeder	3/20 Cones	80-1/2 (2045)	154-3/8 (3922)	114-7/8 (2918)		10800 (4899	
	Box Feeder	None	71-1/2 (1817)	101-3/4 (2585)	63-13/16 (1620)	37-5/8 (956)	3600 (1633)	
	DUX FEEUEI	3/20 Cones	80 (2032)	123-13/16 (3145)	109 (2769)		7300 (3311)	
Hyperpool	Weir Feeder	None	71-1/2 (1817)	118-3/16 (3002)	63-13/16 (1620)	36-3/4 (933)	3700 (1678)	
	Well I eedel	3/20 Cones	80 (2032)	123-13/16 (3145)	109 (2769)		7400 (3357)	
	Low Weir Feeder			118-1/8 (3000)	63-13/16 (1620)	19-3/4 (502)	3700 (1678)	
yperpool Drying Shaker	None		71-1/2 (1817)	105 (2667)	59-1/6 (1500)	30-1/16 (764)	2800 (1270)	
Hyperpool VE (Vapor Extraction)	Weir Feeder			126-1/2 (3212)		36-3/4 (933)	1000 (101 4)	
	Box F	eeder		107-1/2 (2731)	63-13/16 (1620)	37-5/8 (956)	4000 (1814)	
Dual Hyperpool	Integrated	None	161-1/8 (4092)	118-7/16 (3008)			9300 (4218)	
	Flow Divider	3/20 Cones	161-15/16 (4113)	124-3/16 (3154)	109 (2769)		13000 (5897	
Triple Hyperpool	Integrated	None	239-3/4 (6090)	118-7/16 (3008)	63-13/16 (1620)	44-5/8 (1133)	13300 (6033	
	Flow Divider	3/20 Cones	242-7/16 (6158)	124-3/16 (3154)	109 (2769)	17200 (7802		

# **WEIGHTS & DIMENSIONS**

EQUIPMENT			DIMENSIONS					
Model	Options		Width in (mm)	Length in (mm)	Height in (mm)	Weir Height in (mm)	Weight Ibs (kg)	
Flo-Line Cleaner 503	Box Feeder	None	68-3/4 (1746)	102 (2591)	73-3/8 (1864)	41-7/16 (1052)	3400 (1542)	
		3/20 Cones	80 (2032)	125 (3175)	109 (2769)		7300 (3311)	
	Weir Feeder	None	64-3/4 (1645)	118 (2997)	73-3/8 (1864) 109 (2769)	39-11/16 (1008)	3600 (1633)	
		3/20 Cones	80 (2032)	126-5/16 (3208)			7500 (3402)	
	Low Weir Feeder		64-3/4 (1645)	121-3/16 (3078)	73-3/8 (1864)	25-3/8 (645)	3600 (1633)	
	Box Feeder	None	68-7/8 (1749)	129-7/16 (3288)	82-1/2 (2096) 109 (2769) 41-7/16	41-7/16 (1052)	3800 (1724)	
		3/20 Cones	80 (2032)	144-7/16 (3669)		41-7/10 (1052)	7800 (3538)	
Flo-Line Cleaner 504	Weir Feeder	None	64-3/4 (1645)	145-7/16 (3694)	82-1/2 (2096)	39-11/16 (1008)	4000 (1814)	
	weir Feeder	3/20 Cones	80 (2032)		109 (2769)		8000 (3629)	
	Low Weir Feeder		64-3/4 (1645)		77-5/16 (1964)	25-3/8 (645)	4100 (1860)	
	No	ine	69 (1753)	66-1/2		Upon Request	3100 (1406)	
	With 6" Hopper		70-7/8 (1800)	101-3/4 (2584)	72-1/2 (1841)	Upon Request	Upon Request	
Flo-Line Cleaner 503	Box Feeder		69 (1753)		66-1/2 (1689)	33-15/16 (862)	3300 (1497)	
Drying Shaker	Box Feeder – With 6" Hopper		70-7/8 (1800)		72-1/2 (1841)	39-15/16 (1014)	Upon Request	
	Weir Feeder		64-3/4 (1645)	118-3/8 (3007)	66-1/2 (1689)	32-3/16 (818)	3500 (1588)	
	Weir Feeder – With 6" Hopper		69 (1753)	118-3/8 (3007)	72-1/2 (1841)	38-3/16 (973)	Upon Request	
	None		69 (1753)	129-1/4 (3283)	75 (1905)	Upon Request.	3400 (1542)	
	With 6" Hopper		70-7/8 (1800)		81 (2057)	Upon Request	Upon Request	
Flo-Line Cleaner 504	Box Feeder		69 (1753)		75 (1905)	33-15/16 (862)	3600 (1633)	
Drying Shaker	Box Feeder – With 6" Hopper		70-7/8 (1800)		81 (2057)	39-15/16 (1014)	Upon Request	
	Weir Feeder		64-3/4 (1645)	145-7/8 (3705)	75 (1905)	32-3/16 (818)	3800 (1724)	
	Weir Feeder – With 6" Hopper		69 (1753)		81 (2057)	38-3/16 (973)	Upon Request	
	Box Feeder	None	72-1/4 (1835)	103 (2616)	67-13/16 (1722)	41-7/16 (1053)	4000 (1860)	
Flo-Line Cleaner 513		3/20 Cones	80 (2032)	125 (3175)	109 (2769)		7900 (3583)	
FIO-LINE Cleaner 513	Weir Feeder	None	72-1/4 (1835)	119 (3023)	67-13/16 (1722)	39-11/16 (1008)	4300 (1950)	
		3/20 Cones	80 (2032)	126 (3200)	109 (2769)		8100 (3674)	
	Box Feeder	None	72-1/4 (1835)	129-1/4 (3283)	73-3/16 (1859)	42-3/4 (1086)	4600 (2087)	
Flo-Line Cleaner 514		3/20 Cones	80 (2032)	144-1/4 (3664)	110-3/8 (2804)		8700 (3946)	
Flo-Line Cleaner 514	Weir Feeder	None	72-1/4 (1835)	145 1/4 (0(00)	73-3/16 (1859)	41 (1041)	4800 (2177)	
		3/20 Cones	80 (2032)	145-1/4 (3689)	110-3/8 (2804)		8900 (4037)	
Flo-Line Cleaner 513 VE (Vapor Extraction)	Box Feeder	None	72-1/4 (1835)	103 (2616)	67-13/16 (1722)	41-7/16 (1053)	4300 (1950)	
	DOV I GEOGI	3/20 Cones	80-1/2 (2045)	125 (3175)	109 (2769)		8200 (3720)	
	Weir Feeder	None	72-1/4 (1835)	122 (3099)	67-13/16 (1722)	39-11/16 (1008)	4600 (2087)	
		3/20 Cones	80-1/2 (2045)	129 (3277)	109 (2769)		8400 (3810)	
	Box Feeder	None	72-1/4 (1835)	129-1/4 (3283) 73-3/1	73-3/16 (1859)	42-3/4 (1086)	4800 (2177)	
Flo-Line Cleaner 514		3/20 Cones	80-1/2 (2045)	144-1/4 (3664)	110-3/8 (2804)		9100 (4128)	
VE (Vapor Extraction)	Weir Feeder	None	72-1/4 (1835)	145-1/4 (3689)	73-3/16 (1859)	41 (1041)	5000 (2268)	
		3/20 Cones	80-1/2 (2045)	148-1/4 (3766)	110-3/8 (2804)		9300 (4218)	

\*TE = Top Exhaust Connection \*\*RE = Rear Exhaust Connection

# **WEIGHTS & DIMENSIONS**

EQUIPMENT			DIMENSIONS					
Model	Options		Width in (mm)	Length in (mm)	Height in (mm)	GPM (LPM) at 75 ft. head	Weight Ibs (kg)	
Vacu-Flo 1200 Degasser	Standard		63 (1600)	87-3/4 (2229)	73-5/8 (1870)	_	2700 (1226)	
ACD-1500 Atmospheric Degasser	Standard		48-3/4 (1238)	58 (1473)	143 (3632)	_	3000 (1361)	
Desilters	Round	10 Cones	65 (1651)	69 (1753)	63-1/8 (1603)	700 (2650)	2300 (1043)	
		12 Cones				840 (3180)	2400 (1089)	
		16 Cones	78-9/16 (1995)	80 (2032)	67-1/2 (1715)	1120 (4240)	2500 (1134)	
		20 Cones				1400 (5300)	2700 (1225)	
	Inline/Vertical	10 Cones	32 (813)	70 (1778)	55-5/16 (1405)	700 (2650)	1000 (454)	
		12 Cones				840 (3180)	1100 (499)	
		16 Cones		86 (2184)	59-7/16 (1510)	1120 (4240)	1200 (544)	
		20 Cones		102 (2591)	63-3/8 (1610)	1400 (5300)	1600 (726)	
Desanders	Inline/Vertical	2 Cones	74-1/4 (1886)	39 (991)	89-7/8 (2283)	1000 (3785)	1400 (635)	
		3 Cones				1500 (5678)	1500 (680)	
	Incline	2 Cones / 25°	62 (1575)	71-3/4 (1822)	39-7/8 (1013)	1000 (3785)	2000 (907)	
		2 Cones / 30°		68-5/16 (1735)	47-1/2 (1207)			
		2 Cones / 35°			51-1/16 (1297)			
		3 Cones / 25°		71-3/4 (1822)	39-7/8 (1013)	1500 (5678)	2100 (953)	
		3 Cones / 30°		68-5/16 (1735)	47-1/2 (1207)			
		3 Cones / 35°			51-1/16 (1297)			
DE-7200 VFD (Variable Frequency Drive)	Centrifuge		81-5/16 (2065)	155-13/16 (3958)	64-5/8 (1641) <sup>+</sup>	_	14000 (6351)	
	Electrical Control Cabinet		31-9/16 (802)	69-7/16 (1763)	79-5/16 (2015)	_	2010 (912)	
DE-1000 LP VFD (Variable Frequency Drive)	Low Profile Centrifuge/Cabinet		66 (1676) <sup>+</sup>	159-13/16 (4059)	67 (1702) <sup>+</sup>	_	7300 (3311)	
	Electrical Control Cabinet		55-3/8 (1407)	41 (1041)	50-15/16 (1294)	_	1500 (680)	
DE-1000 FHD (Full Hydraulic Drive)	Dual Voltage Centrifuge		83-1/2 (2121)†	115 (2921)	70-9/16 (1792)*	_	9000 (4082)	
DE-1000 LP GBD (Gearbox Drive)	Low Profile Centrifuge		69-15/16 (1776) <sup>+</sup>	110 (2794)	66-1/8 (1679) <sup>+</sup>	_	5200 (2359)	

† Centrifuge Bowl Cover Open

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