

# 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

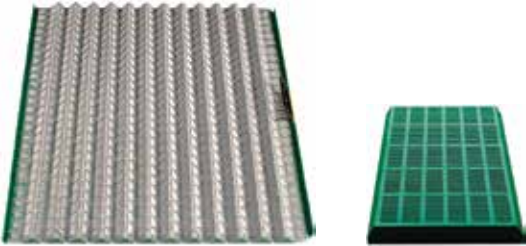
API RP 13C (ISO 13501)  
Non-Blanked Open Screen Area

	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

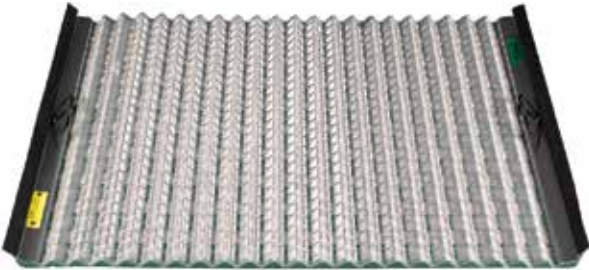
**API RP 13C (ISO 13501)  
Non-Blanked Open Screen Area**

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

**COMPRESSION SYSTEM**

**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**

	PWP	PMD	PMD+
<b>FLC 513</b>	12.15 sq. ft.	21.27 sq. ft.	29.40 sq. ft.
<b>FLC 514</b>	16.20 sq. ft.	28.36 sq. ft.	39.20 sq. ft.

**TENSIONING SCREEN SYSTEM**

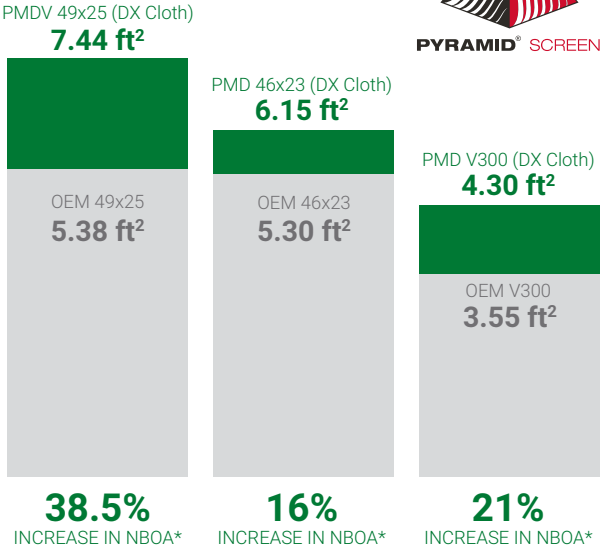
# REPLACEMENT SCREEN PANELS

## 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™ Series, LCM-3D, and VSM 300™ 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

### 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.

### 49x25 for BRANDT® COBRA™ Series and LCM-3D Shakers

The PMDVA 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.



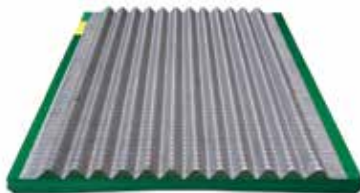
PMDVA 49x25 Screen

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

	PWP	PMD
<b>COBRA</b>	15.00 sq. ft.	22.32 sq. ft.
<b>KING COBRA™</b>	20.00 sq. ft.	29.76 sq. ft.
<b>LCM-3D</b>	20.00 sq. ft.	29.76 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 21% greater non-blanked open area, increasing capacity of the existing shaker package. The V300 (PWP) flat screen is also available.



V300 PMD Screen

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

	PWP	PMD
<b>VSM 300</b>	13.16 sq. ft.	17.20 sq. ft.

# SCREEN PANEL CHART

## FOR DERRICK SHAKERS

								API RP 13C NON-BLANKED OPEN AREA (SQ. FT.)						
								48x30	36x30	60x30	500 Series	600 Series	Hyperpool <sup>6</sup>	
								5.30	4.26	7.27	4.05	-	-	
								6.85	5.76	10.03	7.09	4.10	5.66	
								9.47	7.78	-	9.80	5.44	7.69	
		API RP 13C DESIGNATION		CONDUCTANCE NUMBER				AVAILABLE CONSTRUCTION						
		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 <sup>6,4</sup>
								□ ▲ ▲ ●	□ ▲ ▲	□	□ ▲ ▲ ●	▲ ▲	▲ ▲	
DX SERIES	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 SERIES	HP-A325	API 325	44.50	0.43	0.48	0.65	0.95	□ ▲ ▲ ●	□ ▲ ▲	□	□ ▲ ▲ ●	Not Available	Not Available	
	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	□ ▲ ▲ ●	□ ▲ ▲	□	□ ▲ ▲ ●			
	HP-A100	API 100	142.70	2.42	2.43	3.17	4.83	□ ▲ ▲ ●	□ ▲ ▲	□	□ ▲ ▲ ●			
	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 SERIES	DF-A325	API 325	41.5	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	n/a	n/a	0.93	1.37	Not Available					▲ ▲	▲ ▲
	DF-A20	API 20	783.80	15.96	14.35	10.57	13.69	□ ▲ ▲ ●	□ ▲ ▲	□	□ ▲ ▲ ●	▲ ▲	▲ ▲	

<sup>1</sup>Fits Derrick FLC 2000<sup>™</sup> 3 and 4-Panel, FLC with AWD, FLC Plus<sup>™</sup>, HI-G<sup>®</sup> Dryer, Cascade 2000  
<sup>2</sup>Fits Derrick FLC 500 Series

<sup>3</sup>Fits Derrick Dual Pool<sup>®</sup> 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 Fluid Cleaner 313  
<sup>7</sup>Fits Derrick FLC 58

# SCREEN PANEL CHART

## FOR NON-DERRICK SHAKERS

								API RP 13C NON-BLANKED OPEN AREA (SQ. FT.)		
								49x25	46x23	V300
								5.00	4.40	3.29
								7.44	6.15	4.30
API RP 13C DESIGNATION			CONDUCTANCE NUMBER				AVAILABLE CONSTRUCTION			
Screen Designation	API RP 13C Designation	API D100 Cut Point	PWP 49x25	PWP 46x23	PWP V300	PMD	49x25 <sup>8</sup>	46x23 <sup>9</sup>	V300 <sup>10</sup>	
DX SERIES	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 SERIES	DF-A325	API 325	41.50	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	□ ▲	□ ▲	□ ▲

□ = PWP™    ▲ = PMD®

<sup>8</sup>Fits BRANDT COBRA Series and LCM-3D Shakers  
<sup>9</sup>Fits M-I SWACO MONGOOSE & MEERKAT Series Shakers  
<sup>10</sup>Fits BRANDT VSM 300 Shakers

# WEIGHT COMPARISON CHART

## FOR NON-DERRICK SHAKERS

SHAKER TYPE	OEM	DESCRIPTION	WEIGHT (LBS)
BRANDT COBRA Series & LCM-3D	DECO	PMDVA49X25	29
	DECO	PTVA49X25	28
	BRANDT	VENOM™ PXL and RHD Series Screens	35
	M-I SWACO*	DURAFLO* Composite Screens (XR, XL, HC, and MG)	34
BRANDT VSM 300	DECO	PMDV300	24
	DECO	PWPV300	25
	BRANDT	VENOM PXL and RHD Series Screens	21
	BRANDT	300PLUS (Axiom)	14*
	M-I SWACO	DURAFLO Composite Screens (XR, XL, HC, and MG)	18
M-I SWACO MONGOOSE & MEERKAT Series Shakers	DECO	PMDA46X23	23
	DECO	PTMA46X23	20
	BRANDT	MONGOOSE* PT Shale Shaker	34
	M-I SWACO	DURAFLO Composite Screens (XR, XL, HC, and MG)	25

\*The 300PLUS (Axiom) utilizes six screens (three per side) to screen up a VSM 300, vice the usual four (two per side)

# 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. 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)

Fig. 2  
Required Screen Tag Information

