



NEC FLO-LINE CLEANER 503

TECHNICAL SPECIFICATION SHEET



MODEL:	DERRICK FLO-LINE CLEANER 503
MACHINE TYPE:	SHAKER HIGH G, LINEAR MOTION
MANUFACTURER:	DERRICK CORPORATION
ACCELERATION:	HIGH G
COUNTRY OF ORIGIN:	USA
SOUND:	74 ±4 DBA, ISO 3744
GA:	15640-00 SERIES
WS:	13320-00 SERIES

SCREEN FRAME	
Screen Deck Type	Single Deck - Single Crown Design 8 Float Mount Isolators
Screen Panels	3
Deck Angle Adjustment	-1° to +5°
Adjustable While Drilling	AWD Hand-operated ratchet jacking system
Tensioning System (Left or Right handed)	Single-sided Integral tension fingers 2 quick release ramp-loks per panel
Screen Support per Panel	9 Elastomeric screen cushions 2 Stainless cross supports 2 Stainless side supports
Screen Change Time	Approximately 60-90 seconds per screen

AVAILABLE SCREENS	
Flat (PWP)	with Metal backing plate
Pyramid (PMD)	with 0.8" High Pyramid Screen
Pyramid Plus (PMD+)	with 1.5" High Pyramid Screen

TOTAL API NON-BLANKED SCREEN AREA	
Refer to DOC#PE-S-076 for Screen Panel Information	

AVAILABLE FEEDER TYPES	
Weir Feeder	P/N 14630-02-005
Weir Feeder with bypass	P/N 14630-01-005
Box Feeder	P/N 13289-01-009
Low Weir Feeder	P/N 16589-02-001
Low Weir Feeder with bypass	P/N 16589-01-001
No Feeder (503 DRY)	G.A. 15640-00-017

DESILTER/DESANDER (OPTIONAL) DOC #PE-S-060		
Desilter *No cone package provided with Low Weir or DRY machines	20 Way Cyclone with 4" Cones	P/N 13245-01-002
	16 Way Cyclone with 4" Cones	P/N 13245-02-002
	14 Way Cyclone with 4" Cones	P/N 13245-03-002
	20 Way Cyclone with 4" Cones and Ball Valves	P/N 13245-01
	16 Way Cyclone with 4" Cones and Ball Valves	P/N 13245-02
	14 Way Cyclone with 4" Cones and Ball Valves	P/N 13245-03
Desander	2 - 10" Cones	P/N 12945-01-007
	3 - 10" Cones	P/N 12945-02-007



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AVAILABLE ELECTRICS ORIENTATION

<i>Right Hand Electrics</i>	<i>P/N 15652-01</i>
<i>Left Hand Electrics</i>	<i>P/N 15652-02</i>

WEIGHTS AND DIMENSIONS - EQUIPMENT (APPROXIMATE, REFERENCE GA 15640-00-004)

DIMENSIONS (IN/MM)					
OPTIONS	WIDTH	LENGTH	HEIGHT	WEIR HEIGHT	LBS/KG
<i>Box Feeder</i>	<i>68 3/4" (1746 mm)</i>	<i>102" (2591 mm)</i>	<i>74" (1880 mm)</i>	<i>41 7/16" (1052 mm)</i>	<i>3400/1542</i>
<i>Weir Feeder</i>	<i>64 3/4" (1645 mm)</i>	<i>118 5/16" (3005 mm)</i>	<i>74" (1880 mm)</i>	<i>39 11/16" (1008 mm)</i>	<i>3600/1633</i>
<i>Low Weir Feeder</i>	<i>64 3/4" (1645 mm)</i>	<i>121 3/16" (3078 mm)</i>	<i>74" (1880 mm)</i>	<i>25 3/8" (645 mm)</i>	<i>3600/1633</i>
<i>Weir Feeder with Hydrocyclones</i>	<i>80" (2032 mm)</i>	<i>126 5/16" (3208 mm)</i>	<i>109" (2769 mm)</i>	<i>39 11/16" (1008 mm)</i>	<i>7500/3402</i>
<i>Box Feeder with Hydrocyclones</i>	<i>80" (2032 mm)</i>	<i>125" (3175 mm)</i>	<i>109" (2769 mm)</i>	<i>41 7/16" (1052 mm)</i>	<i>7300/3311</i>

SAFETY FEATURES

<i>Overall Equipment</i>	<i>Warning Labels advise personnel of potential hazards of moving equipment, high temperatures, and High Voltage Guards protect operator from moving parts.</i>
<i>Electrical Circuit</i>	<i>Automatic motor shutdown if motor current overload occurs.</i>

PRODUCT FEATURES

<i>Overall Equipment</i>	<i>Processing rates in excess of 1000 GPM, depending on mud density and screen panel type. Infinitely adjustable manual AWD varies from -1° to +5°. Mounting provisions for optional desander/desilter packages having up to twenty 4" hydrocyclones - accepts up to three optional 10" desander cones. Dual and triple single skidded configurations available.</i>
<i>Feeder</i>	<i>Box, weir, and weir bypass feeders</i>
<i>Electrical</i>	<i>Available in left or right-hand configuration to match site requirements</i>
<i>Screen Frame</i>	<i>Accepts PWP, Pyramid, and Pyramid Plus screens for increased capacity Ramp-Lox 1/2 turn, single-side tensioning reduces screen panel changing time to less than one minute</i>

STANDARDS FOR CONSTRUCTION

Refer to DOC#PE-S-011

WARRANTY

Refer to DOC#FI-C-003

Form 1: Standard NEC Configuration

Section 1: Rated Electrical Power

Table 1.1: Standard Electrical Power Requirements		
Supply Voltage	Frequency / Phase	Power Requirement
<input checked="" type="checkbox"/> 460/480 V	60 Hz / 3 ϕ	7.5 kVA
<input type="checkbox"/> 575/600 V		
<input type="checkbox"/> 380/400 V	50 Hz / 3 ϕ	

Section 2: Motor and Controls Package

Table 1.2: Motor and Control Systems List		
Type	SGX Motor	Local/Onboard Control
Quantity	2x	1x
Power	2.5 HP (1.8 kW) each	N/A
Notes	<ul style="list-style-type: none"> -Power is approximate as several variables affect the actual power -Greased Bearing 	<ul style="list-style-type: none"> -Manual Starters in an enclosure with push buttons to energize the unit (ON/OFF) -Enclosure mounted on unit

Section 3: Machinery/Electrical Conformity

Table 1.3: Machinery Conformity
*Non-Rated

**Note: The inclusion of UL-listed, NEC, ATEX, IEC, or IECEx qualified electrics (components or parts) does not imply that the complete or partially completed equipment provided by Derrick complies with, is designed to, or is built to any international, European, ATEX, or IEC regulations, standards, requirements, or IECEx schemes. It is the equipment purchaser's responsibility to ensure that the quoted equipment satisfies the various local and national requirements in which that equipment will be operated*

Table 1.4- NEC (Division) Electrical Conformity			
Classification	Division	Groups	Temperature Class
CLASS I	DIV 1	C + D	T3 @ +40C

Note: Electrical components ONLY are suitable for use in specified environment

Table 1.5-NEC (Zone) Electrical Conformity, per NEC 505.20 (b)						
Classification	Area	American Standard	Protection Technique	Material Group	Group (Gas)	Temp Class
Class 1	Zone 1	AEx	Flameproof (d)	Group II	Group B	T3

Note: Electrical components ONLY are suitable for use in specified environment

Table 1.6: Electrical Component Environmental Protection			
Ambient Temperature Rating	NEMA Enclosure Rating	Ingress Protection	
		First #	Second #
-25°C to +40°C	4, 7, 9	Non-Rated	

NEC Division System Reference Legend	
Classification	I: Gases / vapors may be present
Division	1: Likely in normal operations
Group	C- ethers / D- hydrocarbons
Temp Class	T3: 200°C