

Shell					
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Product Code No.	RP-62670				
Project Name	Shell Deer Park				
Supply Tag	RP-62670 and RP-62671				
Code	Design Code	Design Code	Design Code	Design Code	Design Code
100	100	100	100	100	100
Code	Accepted as Submitted - Final				
Code	Accepted with Comments. Incorporate comments (inserted only) by revision and Resubmit as final. Work Map Provided.				
Code	Review and Resubmit. Incorporate comments, (inserted only) and Resubmit. Work Map Provided.				
Code	Review as required - Do not resubmit.				
Code	Revised. Incorporate comments (inserted only) and Resubmit. Work Map NOT Provided.				
Code	Sign				

PROJECT: Shell DEER PARK REFINERY				DOCUMENT NO.: BIC7417_Shell Deer Park_ BOM_Equip	
1	ISSUED AS PURCHASED	CM	2019-06-04	MC	
0	ISSUED FOR PURCHASE	CM	2019-04-04	MC	
B	ISSUED FOR APPROVAL	CM	2019-02-22	MC	
A	ISSUED FOR APPROVAL	CM	2019-01-11	JT	
REV.	DESCRIPTION	BY	DATE	CHK.	
BILL OF MATERIAL - EQUIPMENT					
Multiphase Pump					
ITEM	QTY	CLIENT CODE	DESCRIPTION		MANUFACTURER
MECHANICAL					
1	2	RP-62670 RP-62671	Main Pumps Bornemann W9.5zk-89/1/N c/w double acting mechanical seals		BORNEMANN
2	2		Couplings Model # TLCS-1050-0078-2540 Coupling w/bore and keyed hubs w/interference fits and puller holes added 10.00" DBSE, Max Bore Standard Hub: 4.50 Inch, Max Bore for Large Hub: 5.88 Inch, 1.5 SF, Balancing to AGMA 9, 0.0005/inch of shaft interference fit, Coupling included puller holes		Metastream
3	2		Insulation Blanket (for Pump) Custom fit sewn blankets, 2" thickness, straps buckles & Velcro		ALPHA (SPI)
4	2		Structural skid Estimated dimensions: 12' x 40' (W x L) c/w 16" x 40# Main Structural Wide Beam c/w (4) Lifting Lugs c/w Checkered Deck-plate (1/4" Thick) c/w Non-Sparking Coupling Guard c/w 2" NPT Drain c/w 3 step industrial paint system (inorganic zinc/epoxy/polyurethane) All Carbon Steel Construction Assembly includes mounting pump and motor, laser alignment.		VGAS
5	2		Plan 54 Seal Flush System free issued by others		JOHN CRANE
6	2		Plan 32 Seal Flush System free issued by others		JOHN CRANE
7	2		Lube Oil System Type: modified API Plan - 54 11.6W-XK-0KW-SS/SS-T4X-Cl. 1, Zn. 2 Lube oil flow at supply header: 20.85 GPM @ 45 PSIG / ISO VG150 c/w (1) Reservoir, (2) pumps and motors, (1) Duplex Filter, (1) Backpressure Regulating Valve, various instrumentation, various CS valves Lube system pressure rating: 150# c/w shell and tube heat exchanger c/w reservoir immersion heater, 7 kW, 460/3/60, 3" 150# RF FLANGE CONNECTION, REMOVABLE 304 S.S. CARTRIDGES HOUSED IN 316L S.S. SHEATH, 45" IMMERSED LENGTH		LUBE POWER
ELECTRICAL					
8	2	RDP-62670 RDP-62671	Pump Motors 1140 HP, 2300 V, 1251 rpm, 41.9 Hz, 4 poles, S.F. 1.0, TEAO enclosure (IP55), 880S Frame, Temperature Rise class C, Sleeve Bearing, Oil Flooded Lubrication for Bearings required.		SIEMENS
Notes: 1. DELETED. 2. Tag Numbers: even numbers applicable to RP-62670, odd numbers applicable to RP-62671.					