

Customer	PETROLEUM & ENERGY INFRASTRUCTURE LTD.	Project No.	2351497-001,003
Project Name	Haifa & Hadera BB3 tender	Service	LIQUID FUELS
Item No.	'P-04 & P-07	Specification	Boosting pump
Order No.	PO23000964	Doc No.	2351497-PEI-HGS-DT-PDS-001

PUMP DATA SHEET

2	2024.02.15	For Approval	J.S.KIM	H.C.CHOI	J.G.BEAK
1	2024.01.09	For Approval	J.S.KIM	H.C.CHOI	J.G.BEAK
0	2023.06.30	For Approval	J.S.KIM	H.C.CHOI	J.G.BEAK
Rev.	Date	Revision Description	Prepared by	Reviewed by	Approved by

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DOC. NO.										2351497-PEI-HGS-DT-PDS-00																			
PUMP DATA SHEET															SPECIFICATION					☒ FOR MFG									
															OF PUMP					☐ ESTIMATED									
CUSTOMER					PETROLEUM & ENERGY INFRASTRUCTURE LTD.					LOCATION					HADERA, ISRAEL														
PROJECT NAME					Haifa & Hadera BB3 tender					SERVICE					Boosting pump														
ITEM NO.					P-04		NO. OF PUMPS		1 SETS		JOB NO.					-		ORDER NO.		-									
PUMP MODEL					SAVD200/5		NO. OF STAGE		5		INSTALLATION					☒ INDOOR		☐ OUTDOOR											
SUPPLIER					HYOSUNG GOODSPRINGS					DRIVER					☒ MOTOR		☐ ENGINE		☐ TURBINE										
MANUFACTURE					HYOSUNG GOODSPRINGS					NO. OF DRIVER					1 SETS		SETS		SETS										
OPERATING CONDITIONS										PERFORMANCE																			
LIQUID		Gasoline, diesel, kero													SPEED		2981		RPM		EFF.		75.3		%				
CAPACITY		NORMAL		363		m3/hr		RATED		400		m3/hr		NPSHre		6.2		m		RATED BHP		957.7		kW					
TOTAL HEAD		817		m		NPSHav				m		MIN. FLOW		122.90		m3/hr		MAX. BHP		1060.6		kW							
PRESS		SUCTION		5.00		barg		DIFF.		64.9		barg		MAX. HEAD AT RATED IMPELLER					960					m					
		DISCHARGE		69.85		barg		VAPOR		0.7		bara		NSS(SUCTION SPECIFIC SPEED)					10690.0					[m3/hr, rpm, m]					
PUMPING TEMP.		NORMAL		20.00		℃		MAX		30		℃		MATERIALS															
VISCOSITY						CP		S.GRAVITY		0.810		PART NAME				S-6													
SOLID		SIZE				mm		CORR/EROS				CASING				A216 Gr WCB or Eq													
		CONTENT				%		CAUSED BY				BARREL				N/A													
CONSTRUCTIONS										IMPELLER										A743 Gr CA6NM or Eq									
CASING		MOUNTING		Near Centerline								WEAR RING(CASING/IMP.)				A276 Tp 420 or Eq		A276 Tp 420 or Eq											
		SPLIT TYPE		AXIAL								SHAFT				A276 Tp 410 or Eq													
		VOLUTE TYPE		-								SHAFT SLEEVE				A276 Tp 420 or Eq													
		MAWP		108.9		barg		@		38		℃		COLUMN PIPE				N/A											
HYDRO.TEST		163.4		barg										BASE PLATE				SS275 or Eq.											
FLANGE		SIZE				RATING				FACING		POSITION		JOURNAL BEARING				-											
SUCTION		250		mm		ASME #900Lb				RF		SIDE		COOLING WATER					☒ YES		☐ NO								
DISCHARGE		200		mm		ASME #900Lb				RF		SIDE		INLET		SIZE		N/A		mm		RATING		150					
PUMP (BARREL) LENGTH (FOR VERTICAL TYPE)												m		OUTLET		SIZE		N/A		mm		RATING		150					
IMPELLER		MOUNTING		BETWEEN		TYPE		CLOSED		PRESS				Kg/cm ²		Q'ty		m3/hr											
		DIA. SIZE (mm)		RATED		1st : 350/368, Series : 380/408						ELECTRIC MOTOR																	
BEARING		RADIAL		SLEEVE		THRUST		BALL		MANUFACTURER				HHI		ENCLOSURE		TEAAC											
		LUBRICANT		OIL RING / FAN COOLING								R.OUTPUT				1200		kW		NO.OF POLE		2		POLE					
BASE PLATE		COMMON													SYN.SPEED				2981		rpm		CYCLES		50		Hz		
COUPLING		FLEXIBLE SPACER DISC													PHASE				3		Φ		INS.CLASS		F				
TRANSMISSION		DIRECT													VOLTAGE				6000		V		TEMP.RISE						
ROTATION VIEWD FROM DRIVER										C.W										ACCESSORIES									
CONNECTION		VENT		DRAIN		GAUGE CONNec.		COUPL. SET				☒ YES		☐ NO		BASE PLATE		☒ YES		☐ NO									
		3/4"		1"		N/A		COUNT. FLANGE				☐ YES		☒ NO		ANCH. BOLT		☒ YES		☐ NO									
SHAFT SEAL		☐ PACKING		☒ MECH. SEAL		FUNNEL				☐ YES		☒ NO		GAUGE COCK		☐ YES		☒ NO											
		SIZE				PLAN		#11/52/61		SUC.STRAINER				☐ YES		☒ NO		PRESS.GAUGE		☐ YES		☒ NO							
		TURN				API CODE		N/A		APPENDED DRAWINGS																			
						MFG.		KSM		PERFORMANCE				2351497-PEI-HGS-DT-PPC-001															
SHOP TEST										SECTIONAL DWG.										2351497-PEI-HGS-DD-PSD-001									
PERFORMANCE TEST		☒ WITNESS		☐ NON-WITNESS		PUMP				6,510		Kg		DRIVER		6,200		Kg											
HYDRO STATIC TEST		☐ WITNESS		☐ NON-WITNESS		BASE PLATE				8,130		Kg		TOTAL		20,040		Kg											
NPSHre TEST		☐ WITNESS		☐ NON-WITNESS		☒ N/A		Product Packing Type																					
SHOP INSPECTION		☐		Seaworthy Packing																									
NOTES																													
* Except details specified on this datasheet, all subjects including test shall be performed in accordance with HGS's standard.																													
										REV. DESCRIPTION DATE APPROVED CHECKED PREPARED																			
										0 FOR APPROVAL 2023.06.30 J.G.BAEK H.C.CHOI J.S.KIM																			
										1 FOR APPROVAL 2024.01.09 J.G.BAEK H.C.CHOI J.S.KIM																			
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PUMP DATA SHEET										SPECIFICATION					☒ FOR MFG									
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CUSTOMER					PETROLEUM & ENERGY INFRASTRUCTURE LTD.					LOCATION					HADERA, ISRAEL									
PROJECT NAME					Haifa & Hadera BB3 tender					SERVICE					Boosting pump									
ITEM NO.					P-07		NO. OF PUMPS		1 SETS		JOB NO.					-		ORDER NO.		-				
PUMP MODEL					SAVD200/5		NO. OF STAGE		5		INSTALLATION					☒ INDOOR		☐ OUTDOOR						
SUPPLIER					HYOSUNG GOODSPRINGS					DRIVER					☒ MOTOR		☐ ENGINE		☐ TURBINE					
MANUFACTURE					HYOSUNG GOODSPRINGS					NO. OF DRIVER					1 SETS		SETS		SETS					
OPERATING CONDITIONS										PERFORMANCE														
LIQUID					Gasoline, diesel, kero					SPEED					2980 RPM		EFF.		75.2 %					
CAPACITY					NORMAL		363 m3/hr		RATED		400 m3/hr		NPSHre					6.2 m		RATED BHP		933 kW		
TOTAL HEAD					795 m		NPSHav		m		MIN. FLOW					120.70 m3/hr		MAX. BHP		1023.5 kW				
PRESS					SUCTION		2.00 barg		DIFF.		63.1 barg		MAX. HEAD AT RATED IMPELLER					940 m						
					DISCHARGE		65.11 barg		VAPOR		0.7 bara		NSS(SUCTION SPECIFIC SPEED)					10690.0 [m3/hr, rpm, m]						
PUMPING TEMP.					NORMAL		20.00 °C		MAX		30 °C		MATERIALS											
VISCOSITY					CP		S.GRAVITY		0.810		PART NAME					S-6								
SOLID					SIZE		mm		CORR/EROS				CASING					A216 Gr WCB or Eq						
					CONTENT		%		CAUSED BY				BARREL					N/A						
CONSTRUCTIONS										IMPELLER										A743 Gr CA6NM or Eq				
CASING					MOUNTING		Near Centerline					WEAR RING(CASING/IMP.)					A276 Tp 420 or Eq		A276 Tp 420 or Eq					
					SPLIT TYPE		AXIAL					SHAFT					A276 Tp 410 or Eq							
					VOLUTE TYPE		-					SHAFT SLEEVE					A276 Tp 420 or Eq							
					MAWP		93.2 barg		@		38 °C		COLUMN PIPE					N/A						
HYDRO.TEST					139.8 barg							BASE PLATE					SS275 or Eq.							
FLANGE					SIZE		RATING		FACING		POSITION		JOURNAL BEARING					-						
SUCTION					250 mm		ASME #600Lb		RF		SIDE		COOLING WATER					☒ YES ☐ NO						
DISCHARGE					200 mm		ASME #600Lb		RF		SIDE		INLET		SIZE		N/A mm		RATING		150			
PUMP (BARREL) LENGTH (FOR VERTICAL TYPE)					m								OUTLET		SIZE		N/A mm		RATING		150			
IMPELLER					MOUNTING		BETWEEN		TYPE		CLOSED		PRESS		Kg/cm ²		Q'ty		m3/hr					
					DIA. SIZE (mm)		RATED		1st : 350/368, Series : 377/408		ELECTRIC MOTOR													
BEARING					MAX / MIN		408		327		MANUFACTURER					HHI		ENCLOSURE		TEAAC				
					RADIAL		SLEEVE		THRUST		BALL		R.OUTPUT					1100 kW		NO.OF POLE		2 POLE		
LUBRICANT					OIL RING / FAN COOLING					SYN.SPEED					2980 rpm		CYCLES		50 Hz					
BASE PLATE					COMMON					PHASE					3 Φ		INS.CLASS		F					
COUPLING					FLEXIBLE SPACER DISC					VOLTAGE					6000 V		TEMP.RISE							
TRANSMISSION					DIRECT					ACCESSORIES														
ROTATION VIEWD FROM DRIVER					C.W					COUPL. SET		☒ YES ☐ NO		BASE PLATE		☒ YES ☐ NO								
CONNECTION					VENT		DRAIN		GAUGE CONNec.		COUNT. FLANGE		☐ YES ☒ NO		ANCH. BOLT		☒ YES ☐ NO							
					3/4"		1"		N/A		FUNNEL		☐ YES ☒ NO		GAUGE COCK		☐ YES ☒ NO							
SHAFT SEAL					☐ PACKING		☒ MECH. SEAL		SUC.STRAINER		☐ YES ☒ NO		PRESS.GAUGE		☐ YES ☒ NO									
					SIZE		PLAN		#11/52/61		APPENDED DRAWINGS													
					TURN		API CODE		N/A		PERFORMANCE					2351497-PEI-HGS-DT-PPC-001								
					MFG.		KSM		OUTLINE DWG.					2351497-PEI-HGS-DD-GAD-001										
SHOP TEST										SECTIONAL DWG.					2351497-PEI-HGS-DD-PSD-001									
PERFORMANCE TEST					☒ WITNESS ☐ NON-WITNESS					WEIGHTS (APPROX)														
HYDRO STATIC TEST					☐ WITNESS ☒ NON-WITNESS					PUMP		6,510 Kg		DRIVER		6,200 Kg								
NPSHre TEST					☐ WITNESS ☐ NON-WITNESS ☒ N/A					BASE PLATE		8,130 Kg		TOTAL		20,040 Kg								
SHOP INSPECTION					☐					Product Packing Type														
NOTES										Seaworthy Packing														
* Except details specified on this datasheet, all subjects including test shall be performed in accordance with HGS's standard.																								
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