

REQ241-2015/E

Supply new complete heavy duty horizontal centrifugal pump , end suction, single stage, driven by electrical motor via flexible coupling mounting on common steel base plate, according technical specification as below.

Quantity	Two		
Serves	RO product water pumps		
Pump item	A / B		
Liquid handled	RO water		
Capacity	200 m ³ /hr.		
Head	70 m		
NPSH available	5 m		
Discharge pressure	7 bar		
Suction pressure(bar)	min 0.2	norm 0.5	max 0.7
Specific gravity	1.2		
General specification for pumps	Pumps choosing according to API 610 last edition standard ,OH2		
	Material	D-2 SuperDuplexstainlesssteel	
	Pumps type	overhung	
	Number of stage	single stage	
	Locution	outdoor	
	Pumps Lubrication	oil	
	Ambient temperature range	-2 °C to 55°C	
	The shaft for all pumps should be protected from the wear by installing the shaft sleeve at the shaft seal device		
	Pump should be furnished with cartridge mechanical seal ,single API 682, plan 11		
	Pumps should be furnished with flexible (non – sparking) coupling spacer type.		
The oil seal should be Labyrinth oil seals made from non sparking metal			
Driver specifications	3ph induction motor squirrel cage, TEFC (totally enclosed fan cooled)cast-iron frame and copper winding, weather proof		
	Drive standard	IEC	
	Mounting	horizontal /foot (B3)	
	Volt / Phases /HZ	380 / 3ph / 50	
	Enclosure	IP 55	
	Ambient temperature	55 °C	
	Duty service	S1	
	Insulation class	F	
	Lubrication	Grease	
	Temperature Rise	class B (80 K)	
Motor starting	Star / delta		

Spare parts	Spare parts for (pump and electrical motor) including the flowing items should supply with shipment			
	Item	Description	Unit	2
	1.	Impeller	NOS	2
	2.	Shaft with keys	NOS	3
	3.	Thrust Bearing	NOS	3
	4.	Radial Bearing	NOS	2
	5.	Set of wear ring (impeller wear ring & case wear ring)if used	SET	3
	6.	Bearing Locknut	NOS	10
	7.	Bearing Lock washer	NOS	10
	8.	Shaft Sleeve (Mechanical Seal)	NOS	4
	9.	Complete cartridge Mechanical Seal	NOS	4
	10.	Kit spare for Mechanical seal	Kit	2
	11.	Complete Coupling	NOS	2
	12.	Labyrinth for DE	NOS	6
	13.	Labyrinth for NDE	NOS	6
	14.	SET OF Gaskets & 'O' Rings if used	SET	2
15.	Set of Bearing for electrical motor	SET	2	

VENDER LISTS

no	Equipment's	Manufacturer	Origin
A	Centrifugal pumps		
1.		EBARA PUMPS matsui.kiyoshi@ebara.com	Japan
2.		CPC pumps sales@cpcpumps.com hfayed@cpcpumps.com	west Europe/ UK / U.S.A /Canada
3.		DMW CORPORATION Suzuki2500@dmw.co.jp mailto:thanks@dmw.co.jp q-info@dmw.co.jp	Japan
4.		SHIN NIPPON pump@snm.shi.co.jp	Japan
5.		Flowserve pumps esg@flowserve.com	west Europe/UK /U.S.A
B	Sub venders		
a	motors		
		Schorch	
1.		Baldor Electric	
2.		WEG	
3.		ABB	
4.		Helmke	
5.		toshiba	
6.		Brook	
7.		FUJI	
8.		Schorch	
b	mechanical seal		
1.		ASESEAL	
2.		john crane	

3.		Flowserve	
4.		EGAL – BURGMANN	
5.		TREM Engineering	
c	Coupling		
1.		john crane	
2.		FLENDER Standard Couplings	
3.		Rexnord (Thomas Flexible Disc Couplings)	
4.		KTR	
Notes The supplier should take the following points in consideration			
1.	All certificates , data sheet and manuals (installation -operation –maintenance) for pump ,motor and all accessories in English language in four copies and also tow copies of it in (compact disc) have to providing and spare parts list should be received with the equipment		
2.	Certificate of origin is certified by embassy of the Republic of IRAQ in country of origin should be provided with shipment.		
3.	The offer should be include the flowing parts		
a.	general outline dimensional drawing		
b.	Parts Listings and Cross-Sectional Drawings for (pump, mechanical seal & electrical motor)		
c.	technical specification for pump, electrical motor ,mechanical seal and coupling		
d.	data sheet ,construction& performance cure for pump and motor		
e.	inspection test schedule &quality control test		