

**IRANIAN PETROLEUM STANDARDS
A1-QUOTATION ANALYSIS REPORT TABLE
FOR CENTRIFUGAL PUMPS**

ISSUE DATE ----- PAGE ----- OF----- REV. -----
PREP'D. ----- CHE'D.- ----- APP'D. -----

OPERATING CONDITION	DATA	QUOTATION ANALYSIS REPORT FOR CENTRIFUGAL PUMP	SITE CONDITION	
PUMPING LIQUID:			PROJECT: ----- CLIENT: ----- LOCATION ----- UNIT No: ----- ITEM No: ----- SERVICE: -----	Range of Ambient Temps.:Max./Min.
PT (PUMPING TEMP.)	°C	Altitude		m
SPECIFIC GRAVITY AT PUMPING TEMP.		Relative Humidity: Max./Min.		/ (%)
VAPOUR PRESSURE AT PT	MPa(abs)	Unusual Condition		<input type="checkbox"/> Dust <input type="checkbox"/> Fumes
VISCOSITY AT PT	Pa.s, cp	Chloride Concentration		ppm
CORROSION/ EROSION CAUSED BY:		Elect. Area Classification		Cl GR DIV
CAPACITY:NORMAL	m ³ /h	<input type="checkbox"/> Winterization		<input type="checkbox"/> Req'd. <input type="checkbox"/> Not Req'd.
RATED	m ³ /h	<input type="checkbox"/> Tropicalization		<input type="checkbox"/> Req'd. <input type="checkbox"/> Not Req'd.
DIFFERENTIAL HEAD	m	Others		
DISCHARGE PRESS.	MPa(ga)			
SUCTION PRESS.	MPa(ga)			
DIFFERENTIAL PRESS.	MPa			
HYDRAULIC POWER	kW			
MAX.SUCTION PRESS.	MPa(ga)			
NPSH AVAILABLE	m			
OTHERS:		REMARKS:		

DESCRIPTION (Spec.)	DATA	VENDOR'S PROPOSAL								
		A			B			C		
MANUFACTURER										
TYPE:										
MODEL	<input type="checkbox"/> HORIZ. <input type="checkbox"/> VERT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
NO.OF STAGES										
ROTATION	<input type="checkbox"/> cw <input type="checkbox"/> ccw	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
PUMP SPEED	rpm									
1 ST , 2 ND & 3 RD CRITICAL SPEED										
CASE SPLIT	<input type="checkbox"/> RADIAL <input type="checkbox"/> AXIAL	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
VOLUTE TYPE	<input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
CASE SUPPORT	CENTERLINE	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
SHAFT SUPPORT	<input type="checkbox"/> OVERHUNG <input type="checkbox"/> BETWEEN BRG	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
NOZZLE: SUC. ; SIZE, RATING, FACE & LOC.										
NOZZLE: DIS. ; SIZE, RATING, FACE & LOC.										
EFF.AT RATED/ CAPACITY AT B.E.P.	% @ m ³ /h									
ESTIMATED POWER: RATED	kW									
MAX.	kW									
NPSH REQUIRED (IN WATER 3% H. DROP)	m									
SUCTION SPECIFIC SPEED	(WITH MAX IMPELLER)m ³ /min _m .rpm									
HEAD RISE TO SHUT-OFF/ HEAD @ RATED CAP.	%									
MIN.FLOW RATE :	m ³ /h									
MAX.ALLOW. WORK. PRESS.	MPa(ga)									
TEMP.	°C									
HYDRO. TEST PRESS.(at 15°C)	MPa(ga)									
OTHERS:										
IMPELLER:										
IMPELLER TYPE	<input type="checkbox"/> OPEN <input type="checkbox"/> CLOSE	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
	<input type="checkbox"/> S.SUCTION <input type="checkbox"/> D.SUCTION	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
IMPELLER DIA. : M1N. /MAX. RATED	mm mm									
MECHANICAL SEAL & AUX. CONNECTION:	<input type="checkbox"/> API CODE <input type="checkbox"/> MFR. Std.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
API AUX. PIPE PLAN: SEAL FLUSH / QUENCH										
CASING DRAIN CONN. PROVIDE WITH VALVE & FLANGE	<input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
CASING VENT CONN. PROVIDE WITH VALVE & FLANGE	<input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
OTHERS:										
BEARING & LUBRICATION										
BEARING TYPE :										
RADIAL:	<input type="checkbox"/> SLEEVE <input type="checkbox"/> BALL <input type="checkbox"/> TILT-PAD	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
THRUST:	<input type="checkbox"/> SLEEVE <input type="checkbox"/> BALL <input type="checkbox"/> TILT-PAD	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
LUBRICATION SYSTEM	<input type="checkbox"/> FLINGER <input type="checkbox"/> OIL RING	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
	<input type="checkbox"/> FORCED FEED <input type="checkbox"/> FLOOD									
OTHERS:										
COUPLING:										
COUPLING WITH GUARD	NON-LUBE FLEX. WITH NON-SPARK GUARD	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
MFR. / MODEL NO.										
OTHERS:										

**IRANIAN PETROLEUM STANDARDS
A1-QUOTATION ANALYSIS REPORT TABLE
FOR CENTRIFUGAL PUMPS
(CONTINUED)**

DESCRIPTION (Spec.)	DATA		VENDOR'S PROPOSAL								
			A			B			C		
DRIVER:											
TYPE:	ELECT. ENGINE	GAS TURBINE STEAM TURBINE									
MANUFACTURER:											
MODEL											
1 ST , 2 ND & 3 RD CRITICAL SPEED	rpm										
SPEED	rpm										
POWER	kW										
OTHERS:											
BASEPLATE:											
TYPE:	<input type="radio"/> COMMON <input type="radio"/> HEAVY- DUTY	<input type="radio"/> STEEL FABR.	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A
W/AIR VENT HOLES	<input type="radio"/> REQUIRED		<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A
DRAIN CONNECTION	<input type="radio"/> REQUIRED		<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO	<input type="radio"/> N/A
GEAR UNIT											
MAUFACTURER											
SPEED REDUCER OR INCREASER	TYPE/AGMA SF										
TYPE/ MODEL											
GEAR RATIO											
OTHERS:											
NOISE LEVEL	MAX.	db(abs.)									
MATERIALS: API SPECIFICATION											
CASING / IMPELLER	/		/			/			/		
IMPELLER WEARING/CASE WEARING	/		/			/			/		
SHAFT / SHAFT SLEEVE	/		/			/			/		
INNER PARTS / THROAT BUSH	/		/			/			/		
THROTTLE BUSH	/		/			/			/		
DEVIATIONS FROM IPS STD.											
TEST AND INSPECTION											
EVALUATION RANKING	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D							
TOTAL PRICE	IN USD \$										
DELIVERY (EX. FACTORY)											
REMARKS:											