

**IRANIAN PETROLEUM STANDARDS
A4-QUOTATION ANALYSIS REPORT TABLE FOR
GENERAL PURPOSE STEAM TURBINE**

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

| OPERATING CONDITION | DATA | QUOTATION ANALYSIS REPORT FOR GENERAL PURPOSE STEAM TURBINE PROJECT: ----- CLIENT: ----- LOCATION: ----- UNIT No: ----- ITEM No: ----- SERVICE: ----- | SITE CONDITION | | |
|---------------------------------------|---------------|--|--|---------------------------------|-------------------------------------|
| INLET TEMP. RATED | °C | | Range of ambient Temps.:Max./Min. | / | °C |
| MIN. / MAX. | / °C | | Altitude | | m |
| INLET PRESSURE : RATED | MPa(ga) | | Relative Humidity: Max./Min. | / | (%) |
| MIN. / MAX. | / MPa(ga) | | Unusual Condition | <input type="checkbox"/> Dust | <input type="checkbox"/> Fumes |
| EXHAUST PRESSURE | MPa(ga) | | Chloride Concentration | | ppm |
| EXHAUST TEMP. | °C | | Elect. Area Classification | Cl | GR DIV |
| CALCULATED OUT-PUT POWER: RATED @ rpm | kW @ rpm | | <input type="checkbox"/> Winterization | <input type="checkbox"/> Req'd. | <input type="checkbox"/> Not Req'd. |
| NORMAL @ rpm | kW @ rpm | | <input type="checkbox"/> Tropicalization | <input type="checkbox"/> Req'd. | <input type="checkbox"/> Not Req'd. |
| OTHERS: | MPa(ga) kW | | Others | | |
| REMARKS: | | 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 | | | | | | | | | | |
| STEAM RATE : NORMAL / RATE | kg/kW.h | | | | | | | | | |
| STEAM CONSUMPTION NORMAL / RATED | kg/h | | | | | | | | | |
| MAXIMUM ALLOWABLE PRESSURE | MPa(g) | | | | | | | | | |
| MAXIMUM ALLOWABLE TEMP.INLET / EXHAUST | °C | | | | | | | | | |
| POTENTIAL MAX. | kW | | | | | | | | | |
| 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 |
| SHAFT SPEED: RATED | rpm | | | | | | | | | |
| 1 ST , 2 ND , 3 RD , CRITICAL SPEED | rpm | | | | | | | | | |
| MAX. CONTINUOUS SPEED | rpm | | | | | | | | | |
| 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 |
| NOZZLE: INLET;SIZE, RATING, FACE & LOC. | | | | | | | | | | |
| NOZZLE: OUTLET.;SIZE, RATING, FACE & LOC. | | | | | | | | | | |
| ADIABATIC EFF. | % | | | | | | | | | |
| INLET FLOW | RATED MAX. MIN. kg/h | | | | | | | | | |
| OUTLET FLOW | RATED MAX. MIN. kg/h | | | | | | | | | |
| MAX.ALLOW. WORK. PRESS. TEMP. | Mpa(ga) °C | | | | | | | | | |
| HYDRO. TEST PRESS.(at 15°C) | Mpa(ga) | | | | | | | | | |
| MIN. SHAFT DIAMETER | | | | | | | | | | |
| 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 |
| NO. OF HAND VALVE / NO. OPEN FOR RATED: | | | | | | | | | | |
| OTHERS | | | | | | | | | | |
| GOVERNOR: | | | | | | | | | | |
| MANUFACTURER | | | | | | | | | | |
| MODEL | | | | | | | | | | |
| TYPE | <input type="checkbox"/> ELECT. <input type="checkbox"/> HYDRO. <input type="checkbox"/> OIL RELAY | | | | | | | | | |
| NEMA CLASS / SPEED MIN. MAX. | | | | | | | | | | |
| OTHER: | | | | | | | | | | |
| WHEEL: | | | | | | | | | | |
| TYPE | <input type="checkbox"/> <input type="checkbox"/> | <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 |
| WHEEL DIA: MAX. / RATED | mm mm | | | | | | | | | |
| MAX. WHEEL. TIP SPEED | m/s | | | | | | | | | |
| OTHERS: | | | | | | | | | | |
| BEARING & LUBRICATION SYSTEM | | | | | | | | | | |
| LUBRICATION SYSTEM'S STANDARD | <input type="checkbox"/> IPS <input type="checkbox"/> MAUFACTURER | <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 |
| BEARING TYPE: | <input type="checkbox"/> MAGNETIC | <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"/> HYD.DYNAMIC <input type="checkbox"/> SLEEVE <input type="checkbox"/> TILT-PAD | | | | | | | | | |
| AXIAL. THRUST LOAD | | | | | | | | | | |
| THRUST COLLAR | <input type="checkbox"/> INTEGRAL <input type="checkbox"/> REPLACEABLE | <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 |
| BEARING TEMP. DEVICES | <input type="checkbox"/> THERMOCOUPLE <input type="checkbox"/> RTD | <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.PER BRG (RADIAL/ THRUST) | | | | | | | | | | |
| OTHERS: | | | | | | | | | | |

