

PROCESS ENGINEERING SERVICES

Process Engineering Services for the Bought Outs of TG boiler

Client: ISGEC Heavy Engineering Ltd, Noida

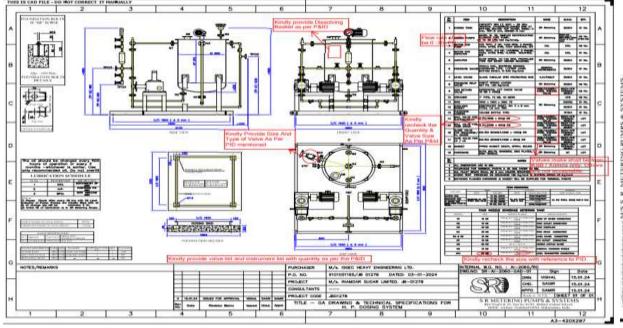
Project: M/s. Inamdar Sugars Ltd, Belagavi, Karnataka

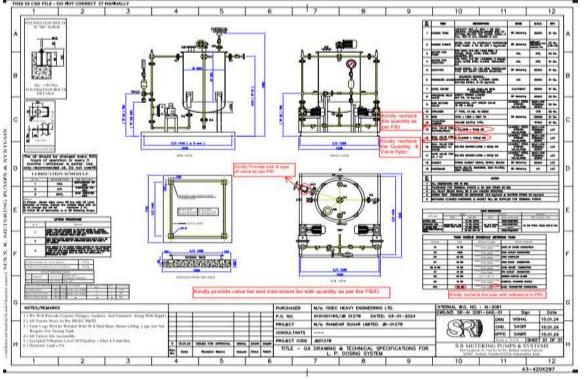
Scope Of Work: Process Engineering Services for 130 TPH Traveling Grate boiler

1) Preparation of technical specification for various bought out components

2) Vetting of technical offers

3) Vetting of Post order documents







PROCESS ENGINEERING SERVICES

Process Engineering Services for the Bought Outs of TG boiler

Client: ISGEC Heavy Engineering Ltd, Noida

Project: M/s. Inamdar Sugars Ltd, Belagavi, Karnataka

	Customer : ISGEC Heavy Engineering Limited
Po.No. PHILIPPENS - UTKAL ALUMINA JUICES	Spec Sheet : 381444/900010 Rev No.:
D1. + 29.03.2024 Qin Ref + 20479356 / 000010 S.O.No. + 381444	Consultant Valve spring Inspection DIGEC-NORD DIG
Assy.No (N31024-008-0C00	Spring No 1 X01869 A Post of the set
Cost Material No. 1	Range 1313 - 1416,99Paig pressure only
2. Tag No	Jarollor pressure only.
3. Size-Inlet Orifice Outlet	2.00 172 14.00
4.Styla	HCL36W-IBICSPL
5.Connection - Inlet Outlet	HCL SOW (BR. SPL BUTT WELD FLANGED
6.Rating/Type - Inlet Outlet 7.Flange Finish-Inlet Outlet	BUTT WELD 1150# BF
THE PROPERTY OF THE PROPERTY O	N/A 1 125-250 AARH
8.Type Nozzte	CONVENTIONAL LIEMI-NOZZLE
9.Disc Type	TWO-PRICE.
10.Orifice Area ActilEffiCalc	1.431 SQ. INCH 11.114 SQ. INCH
11.Honnet	OPENED
12.Cap. (Hydro Test Unit	SCHEWED LITERT CLAMP & GAG
16.Back Pressure 17.Spring Setting 18.C.D.S.PtCold Differencial Set pt.)	Atmosphere 1,372,230 Psig 96,500 Kg/om*G
19 Fluid Fluid State	SATURATED STEAM GAS/VAPOUR
20.8G MW CP/CV CXK	The section of the se
21.KB KV KSH Z	
22. Capacity Rated Regd Restricted Units	42374.00 33000.00 kg/h
22. Capacity Rated Read Restricted Units 23. Over Pr. Sizing/Design Code	5% LASME SEC 1/ HIR
22. Capacity Rated Readi Restricted Units 23. Over Pr. Sizing/Design Code 24. Design Pressure Design Temperature	5% LASMESECI/BB 97,500 kg/cm²a 310,000 °C
22 Canacity Rated Rendl Restricted Units 23 Over Pr. Sizing/Design Code 24 Design Pressure Design Temperature 25 Painting Spec.	5% LASMESECI/BB 97,500 kg/cm²a 310,000 °C
22. Carnacity. Rated J. Roudl. Restricted J. Units. 23. Over Pr. J. Sizing/Design. Code. 24. Design Pressure J. Design. Temperature. 25. Painting Spec. 26. Material Of Construction.	5% IASMESECT/IBE 97, 500 kg/cm² a 1 310,000 °C BET=003 SPING, ALOY/TUNGSTEN STEEL
22. Cunneity Rated Read Restricted Units 23. Over Pr. Sizting/Instanc Code 24. Design Pressure Design Temperature 25. Painting Siree. 26. Material Of Construction Hody/Cylinder 9.4216 GRWCC Cooling Spac N/A	5% LASMESECI/BB 97,500 kg/cm²a 310,000 °C
22. Canacity Rated I Regal Restricted I Units 23. Over Pr. 18 izina/Desian Code 24. Design Pressure Design Temperature 25. Painting Spec. 26. Material Of Construction Hady-Cylinds RAZ I GRWCC Cooling Space NAS	A30
22. Cunneity Rated Read Restricted Units 23. Over Pr. Sizing/Design Code 24. Design Pressure Design Temperature 25. Painting Sixes. 26. Material Of Construction Hody/Cylinder 8.4216 GRWCC Cooling Span N/A Norzfc/Dase 8.A351 GRCFRC Bestlett Rest N/A	A36
22.Camacity Rated Regal Restricted Units 23.Over Pt. Sizion/Design Code. 24.Design Pressure Design Temperature 25.Dunting Sirec. 26.Material Of Construction 16.Material Of Construction 17.Material Of Construction 17.Material Of Construction 17.Material Of Construction 18.Material O	A30
22. Cunnetty Rated Regal Restricted Units 23. Over Pr. Strum/Design. Cede 24. Design Pressure Design Temperature 25. Painting Stree. 26. Material Of Construction Body/Cylinder 8.4216 GRWCC Cooling Span N/A Norzfe/Base 8.4351 GRCPRC Bestlent Sea N/A Reflows N/A Norzfe Ning BA331 GRCPRM	A3h
22. Chancetty Rated Renall Restricted Units 22. Over Pr. Strum/Designs Code 24. Over Pr. Strum/Designs Code 24. Over Pr. Strum/Designs Code 24. Over Pr. Strum/Designs Code 25. Design Pressure Design Temperature 25. Equition Street 26. Material Of Construction Hosty/Cylinder 8.4216 GRWCC Cooling Span N/A Norsele Ring N/A Rellows N/A Norsele Ring BA351 GRCPRM 861 Servew A882 TP416 Adj Boll A882 TP416	A36
22. Canacity Rated Read Restricted Units 24. Over Pt. Sizing/Design Code. 24. Design Pressure Design Temperature 25. Painting Sirec. 26.	A30
2.2. Cuancity Rated Regal Restricted Units 2.3. Over Pr. String/Design Cedit 2.4. Design Pressure Design Temperature 2.5. Painting Stree. 2.5. Painting Stree. 2.6. Material Of Construction Indys/2/studes 8.2.16 GRWCC Conding Spain N/A Norsele Base 8.2.16 GRWCC Restlem Sea N/A Rethows N/A Rethows N/A Rethows N/A Rethows 18.2.3.1 GRCFRM 868 Servew 2.8.82 TP416 Adj Badi 2.8.82 TP416 Stude 8.4.93 GRB7 Adaptor In N/A	A36
22. Canacity Rated Result Restricted Units 23. Over Pt. Sizing/Design Code. 24. Design Pressure Design Temperature 25. Painting Sixe. 26. Initing Sixe. 16. Material Of Construction Indipersity 8x2 in GRWCC Coroling Spane N/A Norsele Base 5x,351 GRCPRC Resident Seal N/A Norsele Base 5x,351 GRCPRN Resident Seal 1,400 GRCPRC Resident Seal 1,	ASSE ASSESSED AS
22. Canacity Rated Read Restricted Units 23. Over Pr. Sizting/Design Code 24. Design Pressure Design Temperature 25. Equipment Stree. 26. Initiate Stree. 26. Initiate Stree. 27. Equipment Ra216 GRWCC Cooling Span N/A Norzfel Base Ra216 GRCPRC Resitent Seal N/A Rellows N/A Rellows N/A Rellows Ra231 GRCPRM Sea Server Ra217 T9416 Sea Server A882 T9416 Sea Server	A39. LANNERECTTHE 97.500 kg/cm²g 310.000 °C BPF-0D.3. SHED ALLOY TUNGSTER STEEL Homer SA21 GRWCC Homer SA21 GRWCC Disc Insert INCONEL 718 Disc Insert INCONEL 718 Disc Insert INCONEL 718 Disc Insert INCONEL 718 Clude N MONIL Clude N MONIL Clude SA21 GRCPSM Apinste SA21 GRCPSM Apinste SA21 GRCPSM Apinste SA21 GRCPSM Apinste N MONIL Clude SA21 GRCPSM Apinste SA21 GRCP

Po.No. 1910100304 1/TKAL ALUMINA JIBOLINE Di. 129.03.0324 Di. 129.03.0324 Di. 129.03.0324 Di. 129.03.0324 Di. 129.03.0324 Di. 129.03.0304 SO.No. 381444 Asay.No.		Customer : ISGEC Heavy Engineering Limited
Cust Assert Cust Cust	Dt. : 29.03.2024 Qto Ref : 20479386 / 000030	Spec Sheet (381444/000030 Rev No.: Consultant (Inspection Bullet-Notice
Property Property	Cust.Material No. 1	Range 1164 1277,99Pstg
1.59 192 1920 1	2 Tag No	[FF0001
S. Connection - Intel Outlet	3.Size-Inlet Orifice Outlet	1.50 [H2 [3.00]
6. Rating/Type - Infet Outlet HITT WELD 150 RF		HCL68W-IBR-SPL
7. Flange Finish-Inlet Outlet 8. Type Nozzie CONVENTIONAL 125-200 AARD 9. Disc Type TWO-PIECE 10. Orifice Area Actilifficale 0.993 80, INCH 10.793 80, INCH 11. Bennet 0.793 80, INCH 10.793 80, INCH 12. Cap Hydro Test Unit SCREWED TEST CLAMP & GAG 13. Lifting Lever P. N. N.		
S. Type	7. Flange Finish-Inlet Outlet	
9.Disc Typs 10.Onfice Area ActilEfficate 10.Onfice Area ActilEfficate 10.Onfice Area ActilEfficate 11.Bennist 12.Cap Hydro Test Unit 13.Ling Laver 14.Set Pressure 14.Set Pressure 15.Rellaving Temperature 16.Back Pressure 16.Back Pressure 16.Back Pressure 17.Spring Setting 11.20	NAME OF TAXABLE PARTY O	
19.0 frifice Area ActillETRCale		
11. Bonnet		
1.5.1.5 1.5		
14. Set Prossure	12.Cap Hydro Test Unit	SCREWED TEST CLAMP & GAG
20.8G MW CPCV CXK	17.Spring Setting 18.C.D.S.P(Cold Differencial Set pt.)	1,187.370 Paig #3.500 Eg/om*G
22. Canacity Rated I Rectal Restricted Units 20693.00 16500.00 kg/h	10 Eduid LEinid State	SUPERHEATED STEAM GAS/VAPOUR
22.Capacity Rated Rend Restricted Units 20.693.00 16.900.00 16.901.		A CONTRACTOR OF THE PROPERTY O
23. Over Pr. Sizing/Design Code 3% ARMERIC L'IBR	20.8G MW CP/CV CXK	
24. Design Pressure Design Temperature 97,500 kg/cm² g 1 495,000 °C 25. Painting Spec	20.SG MW CP/CV CXK 21.KB KV KSH Z	20503.00. 15500.00. 1 550
25.Painting Spec. Street 0.01	20.8G MW CP/CV CXK 21.KB KV KSH Z 22.Capacity Rated Readl Restricted Units	
Rody(Cytimier SA217 GRWC6 Rooset SA217 GRWC6 Coding Sport Coding S	20.8G MW CP/CV CXK 21.KB KV KSH Z 22 Capacity Rated Read Restricted Units 23.Over Pr. Sizing/Design Code	5% JASSIENIC L/ IBB
Cooling Sport	20.SG MW CP/CV CXK	5% IASME NICT/IBB 97,500 kg/cm*g 495,000 °C EPF-001
POS DATA:- All safety valves shall be supplied with Lifting laver, Tost gag, Cap,	20.8G MW CP/CV CKK 21.KH KV KSH Z 22.Canacity Rated Readl Restricted Units 23.Over Pr. Sizing/Design Code 24.Design Pressure Design Temperature 25.Painting Spec.	### ASMI NICI/IBB 97,500 kg/cm*g 495,000 °C #PP-001 Bprog Hebi TEMP ALLOY
with Lifting lever, Test gag, Cap,	20.8G MW CP/CV CKK 2.1 kH KV KSH Z 22. Canacity Rated Recall Restricted Units 23. Over Pt. Sizing/Design Code 24. Design Pressure Design Design Code 25. Painting Spec. 25. Painting Spec. 25. Painting Spec. 26. Material Of Construction Rody/Cylinder SA317 GRWC6 Cooling Spoid N/A Nizzle/Base NA31 GRCFRC Reculent/Suol N/A Nizzle/Base NA31 GRCFRC Nizzle/Base NA31 GRCFRC Nizzle/Base Niz	ASME NICL/IBB
	20.5G MW CP/CV CKK 21.6B KV KSH Z 22.Capacity Rated Regal Restricted Units 23.Cyce Pr. Sizing/Design Code 24.Design Pressure Design Temperature 25.Painting Sisse. 25.Material Of Construction Rodyt Sylinder SA217 GRWC6 Cooling Spool N/A Noradofflow NA311 GRCF8IC Resilient Steal N/A Noradofflow SA315 GRCF8IC Resilient Steal N/A Noradofflow SA315 GRCF8IC Resilient Steal N/A Sa32 TP416 Adj Bolt AS92 TP416 Adj Bolt AS92 TP416 Adj Bolt AS92 TP416 Adj Bolt N/A Adj Bolt N/A Resilient N/A Res	3% JASME NECL/IBB 97, 500 kg/cm*g 495,000 °C BPP=001 Spring High YEMPALLOY Bronet SA217 GRWCh Cap CARRION STEEL Disc Holder NCONRL 78 Disc Holder NCONRL 78 Disc Holder NCONRL 78 Disc Holder NAONRL Clude Ring SA51 GRCTBM Spirnde SA51 GRCTBM Spirnde SA51 GRCTBM Name SA51