

TF/2023/06/14/R0

June 14, 2023

To,
SP-2/333, RIICO Industrial Area,
Bhiwadi - 301019, (Rajasthan), India.

Email: - rajgopal@jindalaluminium.com, purchase@jindalaluminium.com

Kind Attn:- Mr. Rajgopal. C. Sarda(Mo: - +91 9611195368) & Mohan N (Mo: - 8023-715-555 / 61)

Sub. : - Discounted Final Techno- commercial offer for Single Log Heating Tunnel Furnace For 5 inch Diameter Aluminium Log Heating Without Hot Log Shear for Bhiwadi plant

Dear Sir,

This has reference to your requirement of Single Log Heating Tunnel Furnace for 5 inch Diameter Aluminium Log Heating Without Hot Log Shear. Please find herewith the offer as per the discussion.

Thanking you and assuring you of our best attention and prompt services at all times.

Regards

N.P.Sompura M:-09426215943
Hardik Sompura M :- 09601551009



Thermochem Furnaces Pvt Ltd,



Plot No. 1604 , G.I.D.C, Phase IV , Wadhwan City-363035 Dist. Surendranagar (Gujarat)
Ph. No. (02752)243811, Fax : (02752)241813 E-mail : thermochemfurnace@hotmail.com

Aluminium Log Heating Furnace without Hot Log Shear

A. Technical Specification.

Sr. No.	Description	
1	Furnace Capacity	1200 Kg/hr
	Furnace Dimension (Approx)	
2	Furnace Dimension	Length 9200 mm Width 380 mm Height 480 mm
3	Over all Dimension of furnace including charge loading table	Length 20200 mm Width 3750 mm Height 3500 mm
4	Charge Material Details	Aluminum rod diameter 5 inch, Length 6.5 meter
5	Electrical Supply Requirements	415V,3-Phase,50 Hz,4 Wire A.C 5 KW Combustion blower 3.7 KW ID Fan 1.5 KW Electrical control system 22 KW Hot shearing Total 32.2 KW Apprx
6	Natural Gas requirement	1 Bar Inlet Pressure, Flow :- 100 Nm ³ /Hr (LNG)
7	Water Requirement	6 m ³ /hr
8	Compress Air Requirement	0.5 to 0.8 M Pascal
9	Max. Furnace Temp	530 C
10	Furnace Normal Operating Temp	450 C – 530 C
11	Metal Temperature Uniformity	+/-3 C at the end of Soaking
12	Skin temperature	25 °C above the ambient temperature
13	Maximum Pusher speed	18 m/min

14	Furnace Atmosphere	Air
15	Fuel Consumption- Maximum	0.9 MMBtu/ ton gas consumption
16	Oven Zone	Oven have a 4 Nos. control zone
17	Heating System	Multi - number premix small size burner fire to direct aluminium log with one small burner with auto ignition & flame failure burner in each zone
18	Gas Fired Pre-mix Burner	Furnace have the provision of 96 Nos. of pre-mix Gas Burner with 04 Nos. of Pilot burner with Auto ignition , flame Failure system Zone-1 No of Premix Burner :- 10 Nos (Each Zone :- 77,580 Kcal) Zone-2 No of Premix Burner :- 22 Nos (Each Zone :- 1,70,600 Kcal) Zone-3 No of Premix Burner :- 32 Nos (Each Zone :- 2,48,000 Kcal) Zone-4 No of Premix Burner :- 32 Nos (Each Zone :- 2.48,000 Kcal) Total No of Burners :- 96 Nos (750000 approx Kcal Each Burner) Air / Gas Mixer :- Qty :- 04 Nos (As per Above Zone Wise Capacity Each) Pilot Burner with UV Sensor (Small capacity burner will also acceptable) Qty :- 04 Nos
19	Gas Train Specification	Ball valve: - 01 No. High pressure gauge: - 01 No. Gas filter: - 01 No. Pressure regulating valve: - 01 No. Low pressure Switch: - 01 No. High pressure Switch:-01 No. Safety relief valve: - 01 No. Safety shut off valve:-01 No.
20	Temperature Control	Through ON/OFF Temperature Controller fitted in the Control panel & Burner Regulator
21	Zone Thermocouple	Each zone has an independent needle-type 4 point thermocouple that directly reads the real-time temperature of the aluminum rod and can be independently adjusted to achieve temperature control accuracy Total thermocouple: - 04 Nos.
22	Combustion Air Fan	Furnace have the provision of 01 Nos. combustion air fan and 1 Nos. recirculation Blower. Oven have Reversible horizontal Air Flow through change over valve via charge material length wise as per below flow direction From Right to Left and

		Left to right direction Each rated at 5 HP VFD operated Drive Impeller & Shaft Material :- MS Speed :- VFD Control Dynamic Balancing as per ISO G6.3 Grade
23	Furnace Casing	Furnace outer body fabrication from 5mm Thick M.S Plate with suitable section.
24	Furnace Insulation	Furnace All side walls and Roof will be lined with Ceramic Fiber rigid board lining backup with insulation bricks and castable refractory lining. Total Thickness of insulation :- 250 mm
25	No. of Door	02 No's
26	Door Structure	Fabricated from 5 mm Plate with Suitable Sections
27	Type of door operation	Pneumatically operated Top opening type
28	Door Speed	5 Mtr/Min
29	Door Insulation	Door Will be lined with 150 mm Ceramic Fiber Blanket Lining with MS 2mm cladding
30	Pusher mechanism	Furnace have the provision of chain type pusher mechanism with limit switch and storage table with storing capacity of 06 Nos. of aluminum billet. Storage bar table width :- 1000 mm Storage bar table length :- 6500 mm Total Pusher Length :- 11000 mm
31	Hot Shear (Purchaser Scope)	Maximum working pressure of hydraulic system is 16000 KPA Normal working pressure 12000 KPA Billet diameter: - 125 mm Main scissors oil cylinder:- 300 mm diameter Sheared length :- 300- 800 mm Maximum shear force:- 100 Ton Shear billet length accuracy: - +/- 2mm Shear angle:- < 1
32	Door control limit switch	2 Nos. of Limit Switch will be provided for door up/down Position
33	Electric Power Control Panel	01 No. Panel is fabricated from M.S. Sheet Power Control Panel and powder coated of Siemens Grey in housing with following electrical accessories & equipment Make:-Rittal /Eldon/Pyrotek/Pragati

		Each Furnace will have the provision of Power & Temperature Control Panel. →PLC will be Siemens-1200 Make →SCADA - Simantic Win CC will be Siemens Make →TIA Portal :- 15.1 version →VFD Drive for Recirculation Blower Motor → MCC with short circuit and over current trip →HRC Fuse Base with links will be provided → Control Switches → Safety Fuses → Indicating Lamp Sets → Auxiallary Contactors →Amp. & Volt Meters All electrical goods are Siemens/ schinder make.
--	--	---



Plot No. 1604 , G.I.D.C, Phase IV , Wadhwan City-363035 Dist. Surendranagar (Gujarat)
Ph. No.(02752)243811,Fax :(02752)241813 E-mail :thermochemfurnace@hotmail.com

COMMERCIAL OFFER:-

Description	At Our Works Unit Price(Rs.)	Qty	Total Price (Rs.)
Single Log Heating Tunnel Furnace For 5 inch Diameter Aluminium Log Heating Without Hot Log Shear	96,00,000/-	01	96,00,000/-
Erection Commissioning Charge To & Fro Tickets , lodging & boarding in customer scope	3,50,000/-	01	3,50,000/-

THERMOCHEM FURNACES PVT.LTD.

**THERMOCHEM**

Plot No. 1604 , G.I.D.C, Phase IV , Wadhwan City-363035 Dist. Surendranagar (Gujarat)
Ph. No.(02752)243811,Fax :(02752)241813 E-mail :thermochemfurnace@hotmail.com

Terms & Conditions:-

PRICE BASIS	At your Works Bhiwadi
FREIGHT	Included
PACKING & FORWARDING	Nil
GST	18% Extra
TRANSIT INSURANCE	Has to be arranged by Purchaser. However we will immediately dispatch the particulars
DELIVERY TIME	Within 3 Months The above time schedules are from the date of receipt of your order technically and commercially clear in all respects & timely approval of GA and Layout drawings. The delivery has been offered with good faith subject to force measure conditions.
PAYMENT TERMS	40% as advance along with the order. 50% of Ex-works value+100% taxes & duties after pre dispatch inspection and prior to dispatch. 10% after commissioning
ERECTION & COMMISSIONING PAYMENT	30% as advance at time of deputation of man power. 30% after 50 % work Completion 30 % after 75% work completion 10% after 100 % work completion
WARE HOUSE CHARGES	If Furnaces delivery has not been taken within 30 days after readiness of furnace Ware house charges @ 1.5% interest on balance amount will be charges per month
INSPECTION	If you require physical/visual inspection of the equipment in knocked down condition, can be had at our works before dispatch by your authorized representatives. The final inspection and test can be carried out at consignee's Site after erection and commissioning.
LATE DELIVERY	No Late Delivery clause is applicable, unless agreed upon in written.
UNLOADING OF THE EQUIPMENT	Our offer does not include unloading of the dispatched consignment at Consignee's site/stores. The consignee has to

	arrange for unloading the incoming consignment, bringing the materials to proper erection site when erection starts. The materials received by the consignee should be properly stored under covered area to prevent from rain.
SUB-CONTRACTING	We reserve the right to buy parts, semi-finished parts from sub-contractors and also to sub-contract any portion of the work as may be found necessary for betterment of the equipment. However, we will be responsible for the complete supply of the equipment.
WARRANTY	We stand WARRANTY for the equipment against defective design/faulty workmanship for a period of 18 months from the date of dispatch of equipment or 12 months from the date of commissioning whichever is earlier. However this Warranty does not apply of parts which are subject to normal wear and tear and require periodical replacement such as rubber parts, refractory items electrical/electronic items and other perishable items and if the components are found damaged during transit to bad storage, misuse or mishandling of the equipment by you.
VALIDITY	30 Days
JURISDICTION	All dispute are subject to Surendranagar jurisdiction
CANCELLATIONS	In case of cancellation of LOI / Purchase order, following cancellation charges will apply. Within 1 month of LOI / Order: 20% Within 2 month of order: 50% After 2 months of order: 100%