



# OUR ENGINEERING PRODUCTS



# **ABOUT US**

Dolphin Engineers was established in 1st June 2008. Now Dolphin Engineers is an EN ISO 9001:2015 certified, IBR Approved Company located at MIDC Ahmednagar. Dolphin Engineers is a leading company in IBR & rendering services to sugar, chemical, distillery, Dairy and co-gen industry as well as Boiler manufacturer and become one of the most trusted names in this field.

In Year 2008 we start only erection and commission of IBR and Non IBR pressure parts. From a small manufacturing set up Dolphin Engineers developed into Boiler manufacturing unit equipped with all manufacturing facility. Today Dolphin Engineers with our design, Engineering, excellent manufacturing unit and positive commitment developed into Excellent Boiler Manufacturing Company in very short time.





#### **OUR MISSION:**

Our people are passionate about developing innovative boiler technology and systems that continue to lead the market in safety, reliability, efficiency and sustainability.

We collaborate with our clients to provide the best products and services and are dedicated to delivering boiler solutions with the lowest total cost of ownership.

#### **OUR VISION**

Be the leading provider of boiler solutions and services, delivering actionable insights that improve customer outcomes.

#### **OUR VALUES**

Stand behind our products and services. Treat our clients, Suppliers, employees with respects.

Provide our people with safe work environment where they feel valued and can effectively grow and innovate.

Encourage open and honest communications at every level, in all directions. Seek genuine feedback to continue to make our products, services and processes better.

Positive commitments to customers and each other. Collaborate with clients to offer the best solution. Utilize data and analysis for continued boiler optimization.





# **MANUFACTURING FACILITIES**

Dolphin Engineers has two units. One unit of 25000 Sq. feet and another unit of 10000 Sq. feet. Work shop well equipped with Automatic Four Torch Membrane Panel Welding machine, Automatic Membrane Panel Bending machine, Fins calibration machine, 3 Nos CNC boosters Bending Machine, CNC Pipe Bending machine, Radial Drilled Machine, Plate Bending machine and Hydraulics press.

#### **MEMBRANE PANEL WELDING MACHINE:**

The membrane welding machine is designed to increase production speed and quality in the Boiler membrane walls. It is a welding automation system designed for welding assembly operations of different diameter Tubes and different thicknesses according to customer demand. The tubes and fins placed on the fixture are compressed into the fixture with the pressed wheels, allowing fast welding to be done by keeping the welding heads constant by linear motion. Welding is minimized because both sides of the profiles are welded at the same time. The system is automatically positioned according to tubes and profiles measurements by entering from the operator panel. We have Hydro motion make machine equipped with 4 no's welding torch and suitable of size 76.2 OD, 63.5 OD and 50.8 OD.





#### **MEMBRANE PANEL BENDING MACHINE:**

This machine will have two support rolls and one forming beam. It will be mounted in a rigid Box like frame such that the support rollers can be moved towards each other or away from each other depending on the radius of the bending required. The movement of the support rollers will be through electromechanical drive.

We have Wise Welding Technology & Equipment Co. Ltd make machine suitable for Tube diameter 50.8 to 76.20D, Panel Width up to 2500mm, Panel Length up to 22000mm and bending angle up to 130

#### FINS BAR STRAIGHTNING AND CALIBRATION **MACHINE:**

The fin-bar calibrating machine straightens, calibrates width and cuts fin-bar to pre-set length.

We have Wise Welding Technology & Equipment Co. Ltd make machine suitable for fins width up to 10-114mm, fin thickness 4 to 10mm and calibrating range up to 1mm.





#### **CNC BOOSTER TUBE BENDING MACHINE:**

We have 3 no's hydrodynamic controls make machine suitable for bending radius from 1d to 500mm Radius of tube size 38.10D to 76.20D and thickness 3.66thk to 5mm Thk.





#### **RADIAL DRILL MACHINE:**

We have HMT make RM 65 radial drilled machine used for various drilling purpose like headers drilling, APH tube plate drilling etc. Having drilling capacity up to Diameter 125mm at 60rpm with 0.62mm/rev and drilling depth up to 325mm.



#### **HYDROULIC PRESS MACHINE:**

We have 50Ton capacity Hydraulic press used for straightening purpose.







# OUR PRODUCTS BOILER MANUFACTURING



### **OUR PRODUCT RANGE:**

Capacity: 1 tph to 40 tph

Working Pressure: 10.5kg/cm² to 125kg/cm²

Steam Temperature: upto 530°c.

Type: Package Boiler, Combo Pack Boiler, HP Boiler.

# **SUITABLE FUELS**



Coal



Rice Husk



**Biomass Briquette** 



Bagasse



Wood Chips



Pet Coke



Solid Waste Briquette









#### **BOILER PRESSURE PARTS:**



#### **ECONOMIZER:**

- We have fabricated no. of Economizers
- Dolphin Engineers is IBR approved class-I Economizer manufacturer.
- We design and manufacture Economizer according to customer's requirements suitable for their boilers.
- To improve efficiency of boilers.

#### **WATER WALL PANEL:**

We have fabricate Water Wall Panels using automatic Fin to tubes welding machines and large Tube Panel Benders to achieve desired shape of panels which can have Swaged Ends, Stub Welded to Headers. Evaporator Coils etc.





#### **SUPER HEATERS:**

We have fabricated numbers of Superheaters - Radiant, Pendant, Final, Fluidized Bed types, Reheaters for all kinds of Boilers having Complicated very close and Compact Shapes with tube sizes ranging from 32 mm OD to 76.2 mm OD and thickness from 3mm of 12mm in all types of Boiler Quality Steel Grades ranging from Carbon to Alloys for metal temperature ranging up 650 C and for Boilers of 10 to 500 MW Capacity.







#### **PRESSURE VESSELS:**

We provide a range of pressure vessels adhering to stringent safety standards for a diverse selection of clients in the sugar, oil, gas and petrochemical industry. We have been certified by IBR as Class-I Pressure vessel manufacturer.

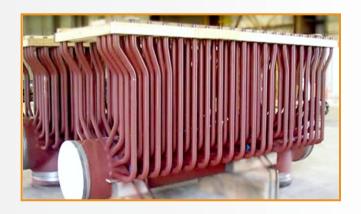


#### **HP & LP PIPING WORK (C.S, S.S, A.S)**

We are specialized in piping and mechanical works: engineering, prefab and on-site construction. Our offering includes maintenance of piping and a variety of installations, with CS, GRE, monel and other materials.

#### STEAM DISTRIBUTION HEADER

Dolphin Engineers fabricates all types of Steam Distribution Header. Headers form an important part of all types of boilers. Steam from the generating tubes is collected in headers which are therefore always under pressure. This pressure may vary from 300 psi to 2000 psi. Since headers are always under pressure, the utmost care is taken by us while fabricating them.

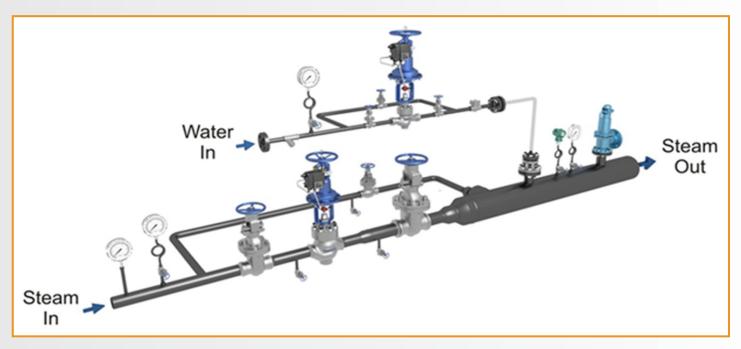








#### PRESSURE REDUCING AND DE-SUPERHEATING STATION (PRDS)



The superheated steam is generated at the Boiler and is distributed to various locations in the plant through a steam piping network. In the process industry, there are several auxiliaries at different locations that require different steam parameters (Steam pressure & temperature). According to their application in the Process Industry requirement, the Superheated Steam Temperature and Pressure are reduced in PRDS.



#### **LIGHT & HEAVY STRUCTURES:**

Dolphin Engineers is a custom manufacturer of not only tension structures, but also commercial shade structures, architectural designed structures, industrial sewn canvas products and framed protective covers. We specialize in complex and difficult commercial, government one roof. Dolphin Engineers is a custom manufacturer of not only tension structures, but also commercial shade structures, architectural designed structures, industrial sewn canvas products and framed protective covers. We specialize in complex and difficult commercial, government one roof.





#### **CHIMNEYS:**

We are one of the leading manufacturers and suppliers of Chimneys available in various sizes and designs to suit our clients' specifications. And our efforts have constantly been focused on creating an eco friendly environment. There are manufactured by the use of high grade raw qualitative standards. These are designed as per IS 6533. As our chimneys provide various salient features such as durability, availability at most competitive prices, low maintenance, efficiency etc., these are highly sought after by our clients.



#### **WET SCRUBBER:**



Fly ash collection system.

Suitable for (fuel firing):- Baggase, Coal, Pet Coke, Wood, Biomass Briquette.

Dolphin Engineers is one of the most trusted name in the field of industrial boiler and pollution control equipment.

Our engineering technology that ensure 100% of effecient work product and quality control and quality is imperative with efficient in-house work facilities.

We are well equipped with all latest machinery to cater to all sorts of industrial and commercial requirements.

Our team comprises of dedicated engineers & experts. A separate team of workers, who undertake the site work and comminssioning of the equipment. Apart from that we have a dedicated team of designers, draughtsman, technicals, erectors - fabricators, etc,...

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#### PRINCIPLE OF OUR WET SCRUBBER:

- >> Wet scrubbers are used for removal of particles which have a diameter of the order of 10 microns above.
- >>> Wet scrubbers works by spraying a stream of fine liquid droplets on the incoming stream. The droplets capture the particles. The liquid is subsequently removed for treatment.
- >> Our design of wet scrubber depends on the industrial process condition and the nature of the air pollutants involved in system.
- >> We design scrubbers to collect particular matter and gaseous pollutants.
- The resistance offer by our system not exceeding 20 mm WC.
- We used special device for internal water spraying hence the spraying chamber is completely covered by water film.
- Our system create suitable pressure drop for efficient working.
- More fuel flexibility.

#### **ADVANTAGES OF OUR WET SCRUBBERS:**

- >> Wet Scrubbers can handle incoming streams at high temperature, thus removing the need for temperature control equipment.
- >> Wet scrubbers can handle high particle loading.
- >> Loading fluctuations do not affect the removal efficiency.
- >> They can handle explosive gases with little risk.
- >> Gas adsorption and dust collection are handled in one unit.
- >> Corrosive gases and dusts are neutralized.







# **BOILER MANUFACTURING WORK**

- 1) PIYUSH SUGAR AND POWER IND PVT LTD 20TPH, 45KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH DUMPING GRATE
- 2) M/S YASHWANT AGRO PRODUCT AND ALLIED INDUSTRIES LTD 25TPH, 45KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH DUMPING GRATE
- 3) DDN SFA PVT LTD 30TPH, 45KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH DUMPING GRATE
- 4) SHIVAJIRAO AGRO PVT LTD 30TPH, 45KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH WATER COOLED PIN HOLE GRATE
- 5) SAIPRASAD NATURAL SUGAR PVT LTD 25TPH, 32KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH DUMPING GRATE
- 6) RUPAMATA AGROTECH PVT LTD 32TPH, 45KG/CM<sup>2</sup> BAGASSE FIRED BOILER WITH DUMPING GRATE
- 7) M/S KHANDOBA BIO-REFINERIES LTD 15TPH, 45KG/CM<sup>2</sup> BAGASSE & COAL FIRED BOILER WITH TRAVLLING GRATE
- 8) M/S MAA NARMADA KHANDSARI. GADARWADA, DIST-NARSINGHPUR. 06 TPH, 21 KGF/CM<sup>2</sup>
- 9) M/S SHREE RAMJI GUDH UDYOG. GADARWADA, DIST NARSINGHPUR. 07 TPH, 21 KGF/CM<sup>2</sup>
- 10) M/S GAUTAMJI KHANDSARI. GADARWADA, DIST NARSINGHPUR. 07 TPH, 10.58 KGF/CM<sup>2</sup>
- 11) M/S SAMARTHA SOLVENT EXTRACTION PVT LTD 10TPH, 17.5KG/CM<sup>2</sup>, MULTI FUEL WITH BUBLING BED









# **BOILER MODIFICATION WORK**

- 1) M/S TERNA SHETKARI SSK LTD (UPGRADE FROM 90TPH TO 110TPH WITH W.P. 45 KG/CM<sup>2</sup> & TEMP 440°C IN YEAR 2023)
- M/S DALMIA SUGAR & INDUSTRIES LTD 2) (UPGRADE FROM 25TPH TO 40TPH WITH W.P.22 KG/CM<sup>2</sup> & TEMP 340°C IN YEAR 2022)
- M/S YOGESHWARI SUGAR & INDUSTRIES LTD 3) (UPGRADE FROM 40TPH TO 55TPH WITH W.P. 45KG/CM<sup>2</sup> & TEMP 440°C IN YEAR 2022)
- M/S JAI BHAVANI SAHAKARI SAKHAR KARKHANA LTD 4) (UPGRADE FROM 20TPH TO 25TPH WITH W.P.21 KG/CM<sup>2</sup> & TEMP 380°C IN YEAR 2022)
- M/S DDN SFA UNIT II 5) (SPACE TUBE TO MEMBRANE PANEL TYPE)
- M/S SAHAKAR MAHARSHI SHANKARRAO KOLHE SAHAKARI SAKHAR KARKHANA LTD 6) (UPGRADE FROM 40TPH TO 50TPH WITH W.P.45 KG/CM<sup>2</sup> & TEMP 480°C IN YEAR 2020)
- M/S MUKTESHWAR SUGAR AND MILL LTD, AURANGABAD. 7) (UPGRADE FROM 40TPH TO 48TPH WITH W.P. 40 KG/CM<sup>2</sup> & TEMP 380°C IN YEAR 2019)
- M/S GANGAMAI INDUSTRIES & CONSTRUCTION LTD. SHEVGOAN, DIST AHMEDNAGAR. 8) (UPGRADE FROM 30TPH TO 40TPH WITH W.P. 67KG/CM<sup>2</sup> & TEMP 510°C IN YEAR 2018)
- M/S BALIRAJA S. K. LTD. PURNA, DIST PARBHANI. 9) (UPGRADE FROM 08TPH TO 14TPH WITH W.P. 36 KG/CM<sup>2</sup> & TEMP 380°C IN YEAR 2017)
- 10) M/S SHAYDRI STARCH LTD. SANGLI, DIST SANGLI. (UPGRADE FROM 32TPH TO 35TPH WITH W.P. 55 KG/CM<sup>2</sup> & TEMP 425°C IN YEAR 2017)
- 11) M/S SANT MUKTAI SUGAR & ENERGY LTD. DIST JALGAON. (UPGRADE FROM 32TPH TO 38TPH WITH W.P. 38KG/CM<sup>2</sup> & TEMP 380°C TO 500 C IN YEAR 2016)
- 12) M/S OM SUGARS LTD. CHIKKODI, DIST BELAGAVI. (UPGRADE FROM 32TPH TO38TPH WITH W.P. 32KG/CM<sup>2</sup> & TEMP 380°C IN YEAR 2015)
- 13) M/S MAA BAGESHWARI SUGARS LTD. PARTUR, DIST JALNA (UPGRADE FROM 32TPH TO 38TPH WITH W.P. 38KG/CM<sup>2</sup> & TEMP 380°C TO 510°C IN YEAR 2015)
- M/S LAILA SUGAR PVT LTD. KHANAPUR, KARNATKA. 14) (UPGRADE FROM 32TPH TO 40TPH WITH W.P. 32 KG/CM<sup>2</sup> & TEMP 430°C IN YEAR 2015)







# **PROJECT**



SHIVAJIRAO AGRO PVT LTD 30TPH, 45KG/CM2 BAGASSE FIRED BOILER WITH WATER COOLED PIN HOLE GRATE



SAIPRASAD NATURAL SUGAR PVT LTD 25TPH, 32KG/CM2 BAGASSE FIRED BOILER WITH DUMPING GRATE



YASHWWANT AGRO ALLIED PRODUCTS PVT LTD

25TPH, 45KG/CM2 BAGASSE FIRED BOILER WITH DUMPING GRATE



PIYUSH SUGAR AND POWER IND PVT LTD

20TPH, 45KG/CM2 BAGASSE FIRED BOILER WITH DUMPING GRATE





# **QUALITY ASSURANCE**

Dolphin Engineers has developed in-built quality assurance setup with necessary skilled manpower & instruments to control and monitor quality at each stage of manufacturing.

Project management team takes care of other activities like procurement, erection and commissioning activities.

We are having qualified & experience staff, engineers and skilled & unskilled workers to execute order with top class workmanship, quality and timely completion of project.

#### **IBR CERTIFICATIONS:**











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# **OUR ESTEEMED CUSTOMERS**



































































































































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# **GET US TOUCH:**







