



BGR TECH

ENERGY OF FUTURE...



INTRODUCTION



- ✓ BGR Tech Ltd, a **BGR Group Company**, is a Limited company, based in Chennai, India.
- ✓ BGR Tech Ltd offers Capital Equipment & Services catering to **Power, Oil & Gas, Water** and **other Process Industries**.
- ✓ BGR Tech Ltd, also will be foraying into additional new products and services catering to new emerging segments of **Green Hydrogen & Blue Hydrogen** to support world climate with nil carbon emissions.

OUR GROUP COMPANIES

- ✓ BGR Tech Ltd
- ✓ GEA BGR Energy System India Limited,
India
 - Online Condensor Cleaning Systems, Debris Filters etc
- ✓ Enexio Power Cooling Solutions India
Private Limited, India
 - Wet Cooling & Dry Cooling ACCs
- ✓ BGR NEO Limited, India
 - Robotics, Industrial Automation
- ✓ BGR Enertech, Malaysia
 - Local office in Malaysia
- ✓ Schmitz, India
 - Cleaning Balls for Condensor Cleaning Systems



BGR TECH FOCUS

- OIL AND GAS PROCESSING EQUIPMENTS
- HEAT EXCHANGERS
- GREEN HYDROGEN
- BLUE HYDROGEN
- CARBON CAPTURE IN HYDROCARBON/
POWER/STEEL/OTHER INDUSTRIES
- HYDROGEN DERIVATIVES



HEAT EXCHANGERS

- ✓ Air cooled heat exchangers
- ✓ Shell & tube heat exchangers
- ✓ Air preheater
- ✓ Double pipe heat exchanger
- ✓ Hair pin type heat exchanger



OIL AND GAS PROCESSING EQUIPMENTS

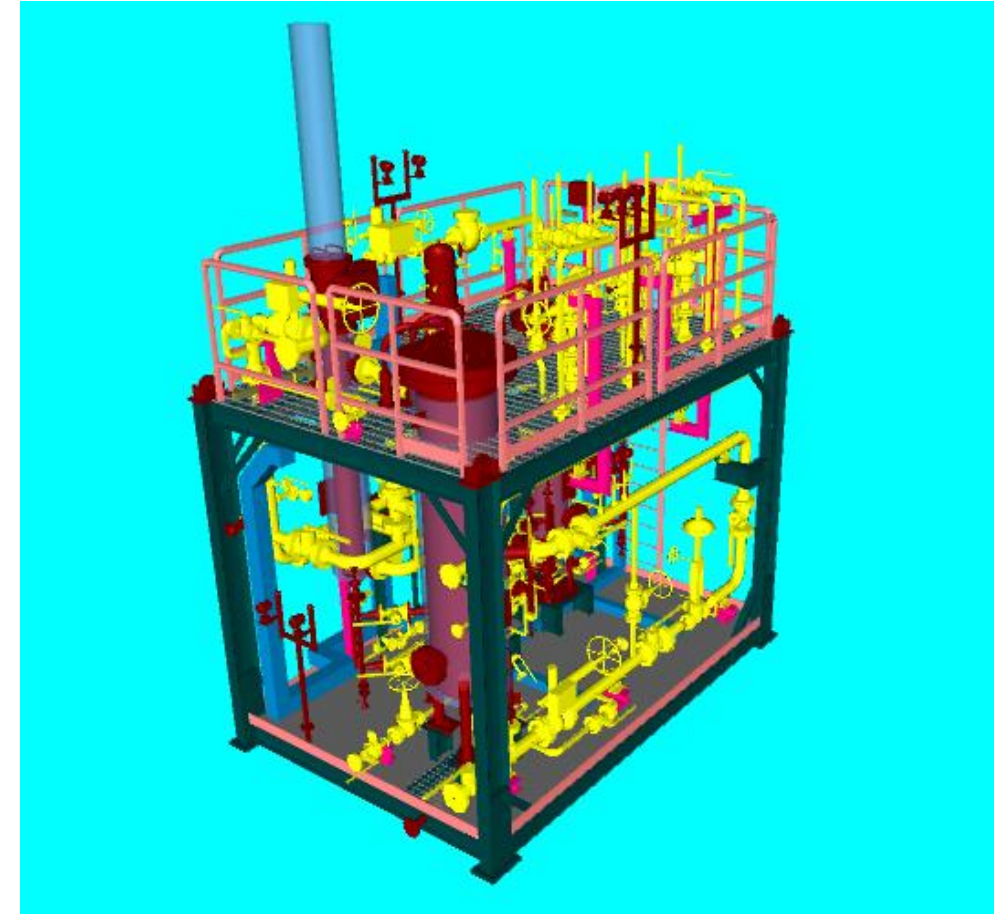


- ✓ GAS CONDITONING SYSTEM
- ✓ H₂S REMOVAL SKID/ DESULPHIRZATION SKID
- ✓ GAS DEHYDRATION SKIDS
- ✓ INDIRECT WATER BATH HEATER PACKAGE
- ✓ SEPARATORS / DRY GAS FILTERS / SCRUBBERS / KNOCK OUT DRUMS
- ✓ HEATER TREATER

OIL AND GAS PROCESSING EQUIPMENTS

1. GAS CONDITONING SYSTEM:

- ✓ Package design typically consists of
- Scrubber vessel or knockout drum,
 - Filter Coalescer units,
 - Heaters, Pressure reduction valves,
 - Emergency (ESD) and operational valves,
 - Flow - metering.

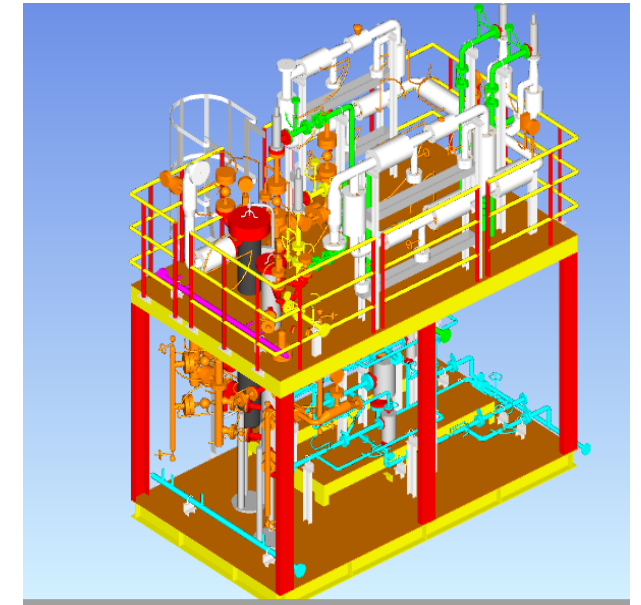


OIL AND GAS PROCESSING EQUIPMENTS

2. H₂S REMOVAL SKID/ DESULPHIRIZATION SKID

- ✓ Raw Gas produced commonly exists in mixtures of hydrocarbons principally in,
 - Methane ,
 - Ethane,
 - Propane ,
 - Butane & Pentane.

- ✓ Hydrogen sulfide is a highly flammable, acutely toxic, and extremely hazardous gas that must be captured and removed from gaseous and liquid streams .



OIL AND GAS PROCESSING EQUIPMENTS

3. GAS DEHYDRATION SKIDS

- ✓ Dehydration of natural gas is important for the following reasons,
 - Wet gas forms methane hydrate which can plug valves and gas pipelines
 - Condensed water in gas pipelines causes restricted flow and corrosion
 - Wet gas does not comply with regulatory specifications of 7 lb./MMscf (max)
- ✓ Natural gas dehydration methods
 - TEG dehydration
 - Dehydration using adsorbents (PSA Type)
 - Membrane dehydration



OIL AND GAS PROCESSING EQUIPMENTS

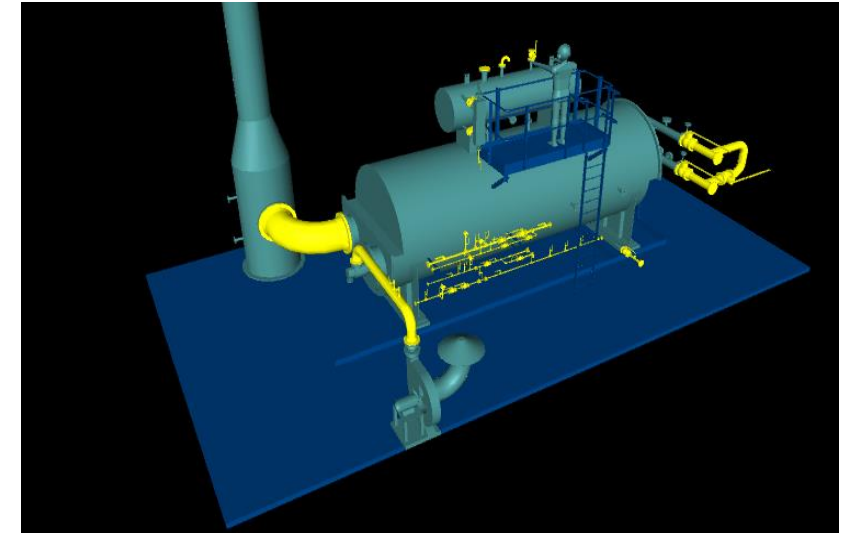
4. INDIRECT WATER BATH HEATER PACKAGE

✓ Indirect Water Bath Heaters designed as per API 12 K

- Natural /Forced Draft Burners, directly mounted on Fire Tube.
- Single or Multi Fire Tube design based on the capacity of the burner.
- Burner System complete with Pilot, Main Burner, Gas Train, Spark Igniter.

✓ Fuel Gas for burner

- Gas fired (Natural gas)
- Dual Fired (Diesel and natural gas)



OIL AND GAS PROCESSING EQUIPMENTS

5. SEPARATORS / DRY GAS FILTERS / SCRUBBERS/ KNOCK OUT DRUMS

- ✓ Separators can be either horizontal or vertical.
- ✓ Separators can be classified into,
 - 2- phase (Deals only with Oil & Gas)
 - 3-phase separators (Handles Oil, Water & Gas)
- ✓ Degree of separation between Gas and Liquid will depend on the operating pressure, the residence time of the fluid mixture and the type of flow of the fluid.



Other Products

- ✓ Deaerator
- ✓ Pressure Vessels
- ✓ Columns
- ✓ Pig Launchers / Receivers/
Slug Catcher
- ✓ Flow Tees



GREEN HYDROGEN



- ✓ Modularized Ultra Pure Water Treatment Unit
- ✓ Electrolyser (PEM and AEW)
- ✓ Separator
- ✓ De-oxygenator
- ✓ DRYER (TSA AND PSA)
- ✓ STORAGE TANK up-to 200 bar (In-house)

BLUE HYDROGEN



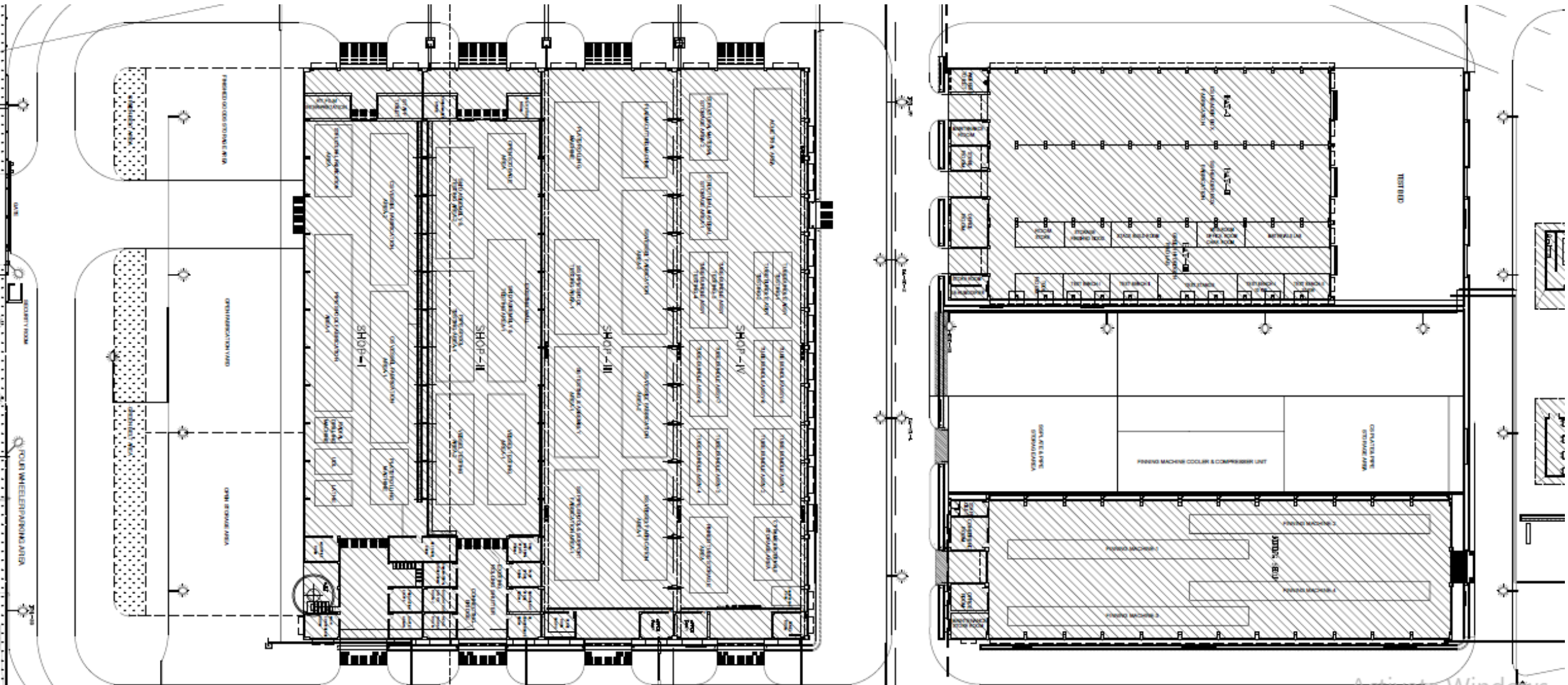
- ✓ SMR
- ✓ De- Sulfurization unit
- ✓ Hydrogen purification unit

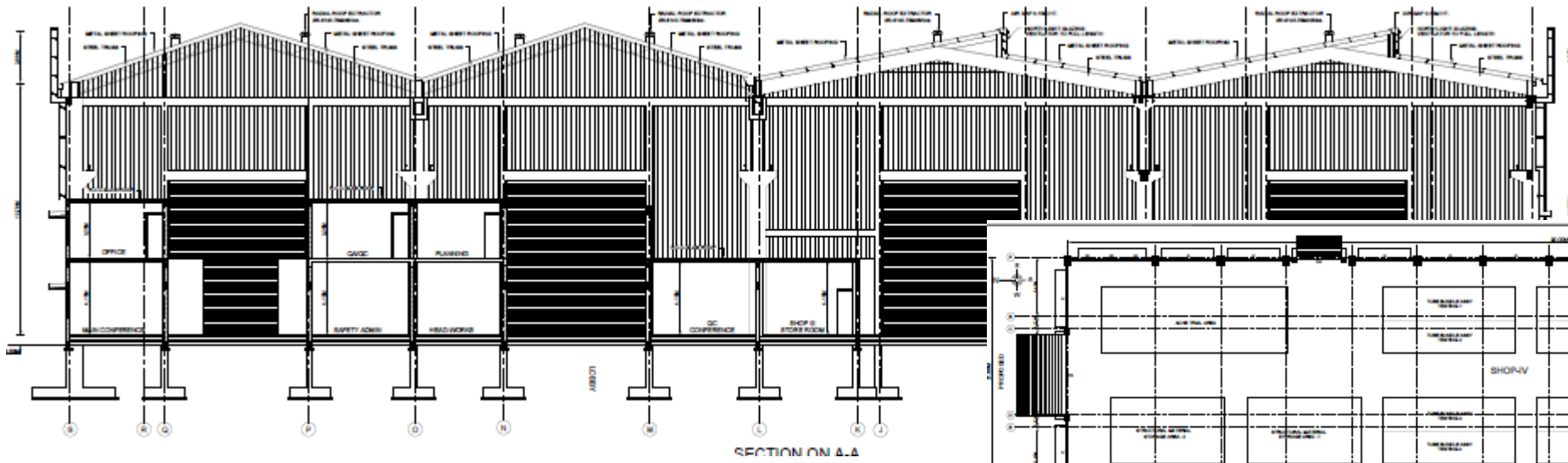
MANUFACTURING FACILITY – PANJETTY, CHENNAI



- ✓ Factory in main industrial hub along National High Way near Chennai
- ✓ Well accessible to Chennai Port & Krishnapattinam Port
- ✓ ISO 9001- 2015 certified.
- ✓ ASME U, U2, S AND R
- ✓ Total land area = 461,000 sq foot

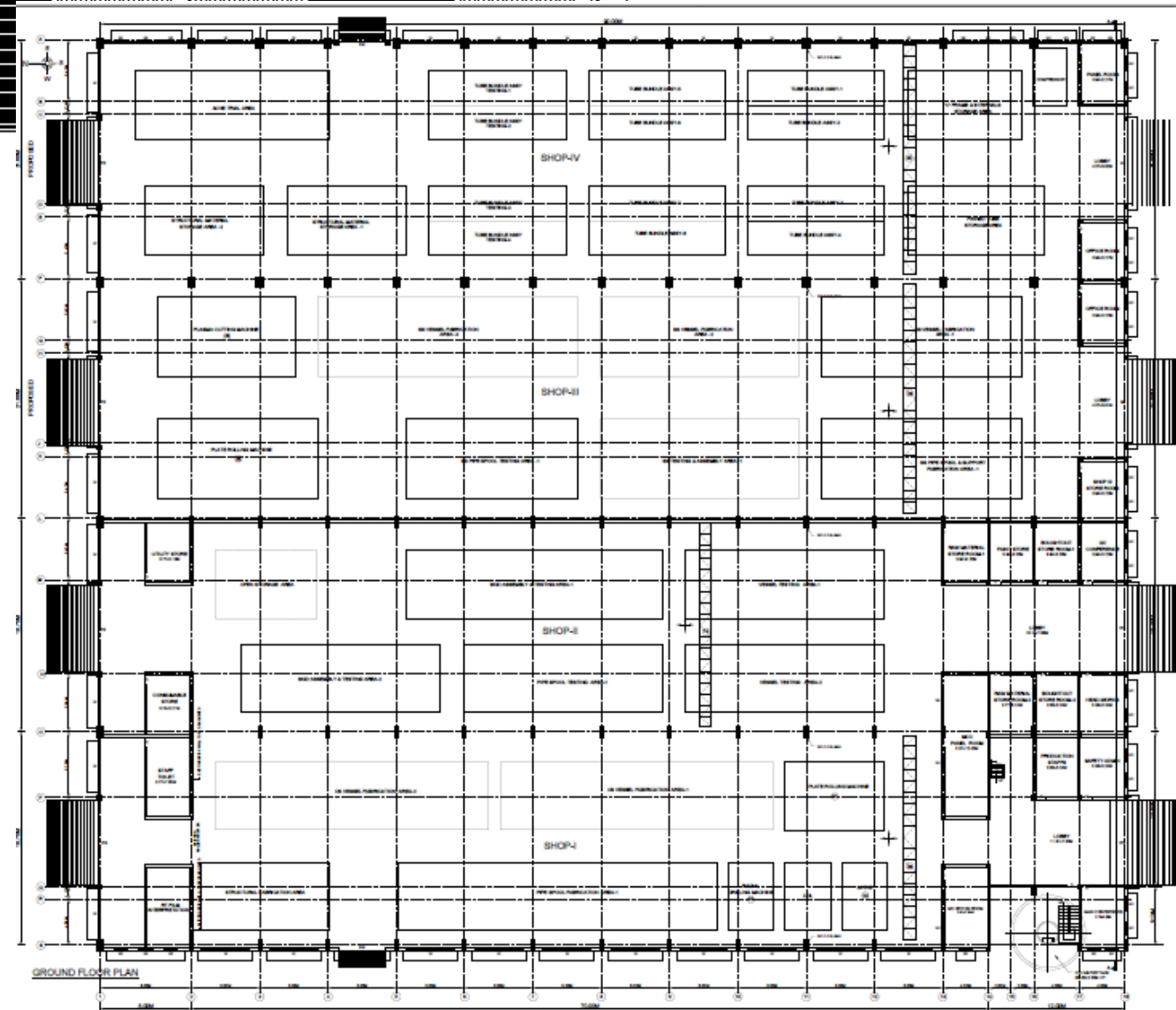
FACTORY OVERALL LAYOUT

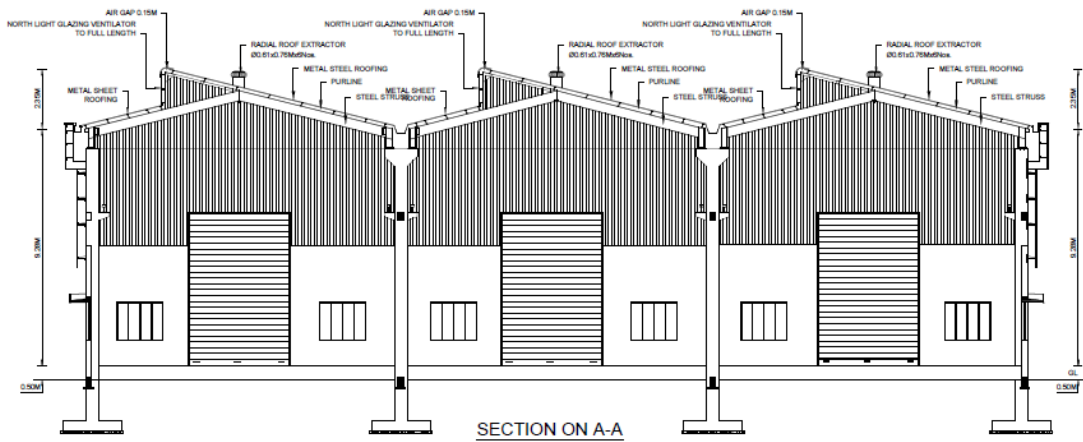




BAY 1,2,3 AND 4

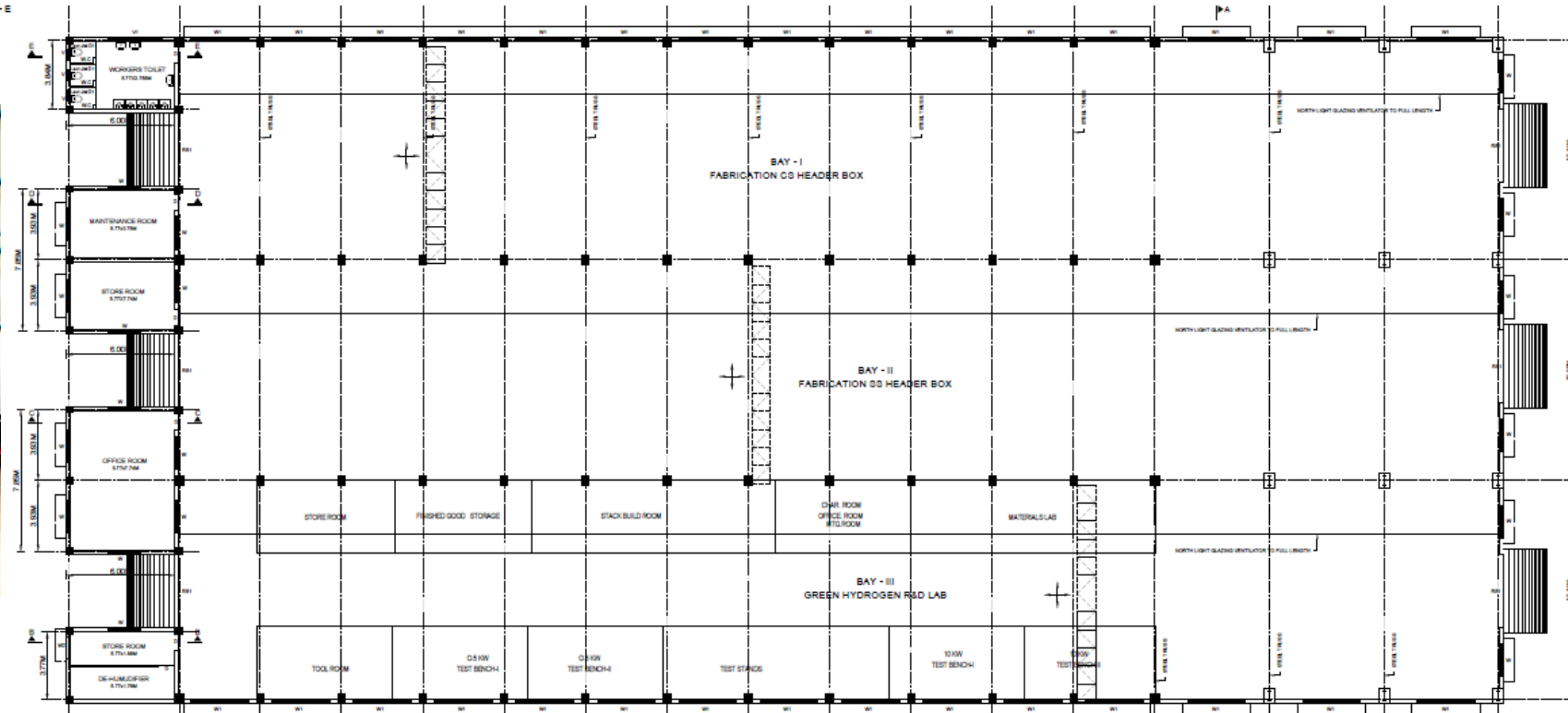
WIDTH: 20 M Each / LENGTH: 90M Each





BAY 5 & 6 -FABRICATION SHOP BAY 7 -LAB

WIDTH: 12 M Each
LENGTH: 73 M Each



WIDTH: 22 M
LENGTH: 73 M

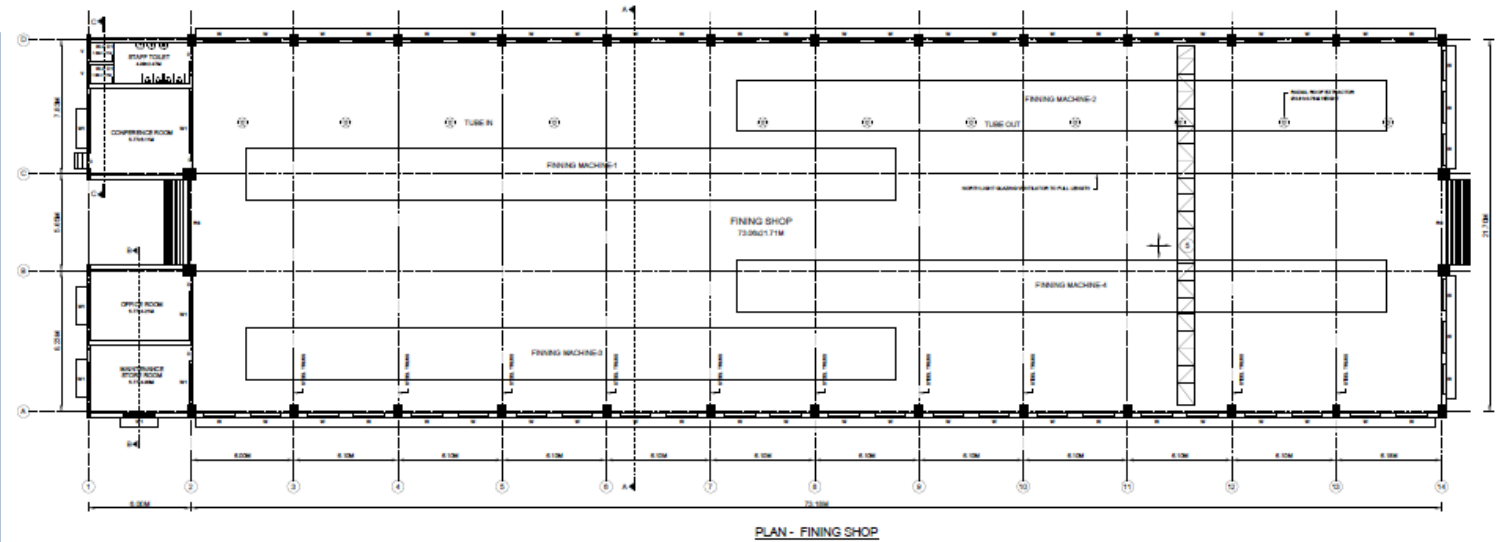
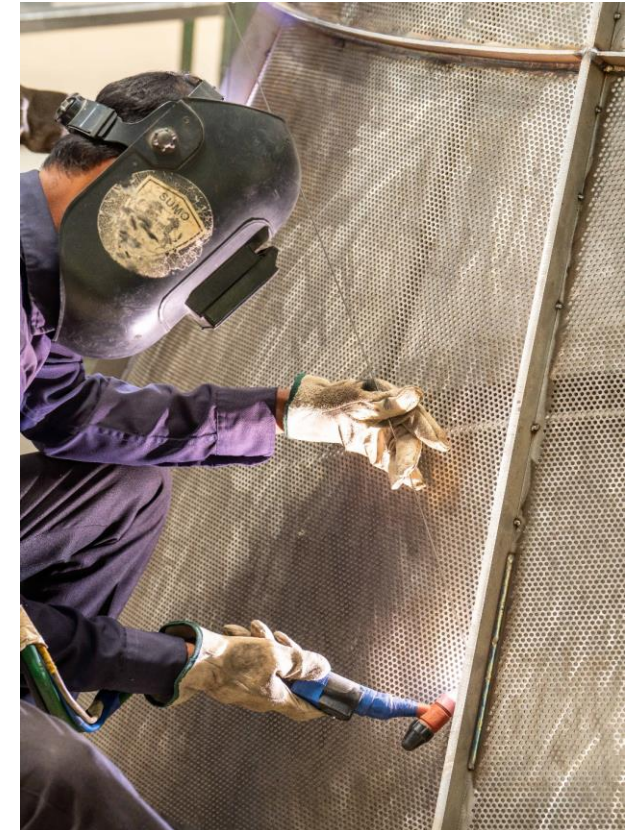
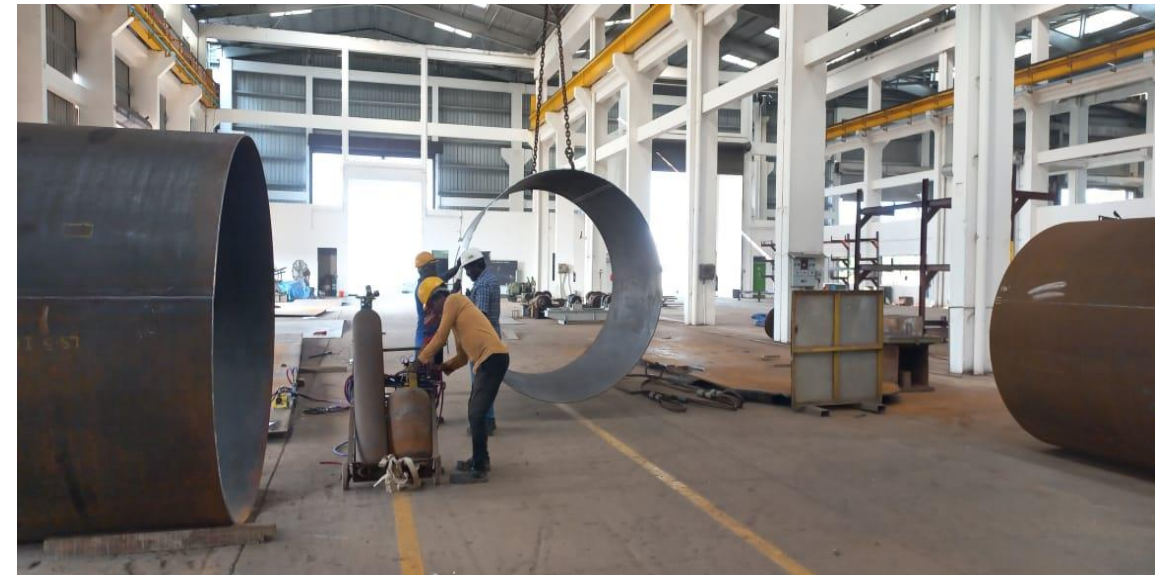


PHOTO GALLERY















OUR CORE TEAM



S.No	Name	Position	Educational Qualification	Overall Exp. (-Yrs)
1	Priyadershini Raghupathy	Managing Director	B.TECH	17
2	Pramod Achanath	Vice President - Marketing & Special Projects	B.TECH	32
3	Sundar N	Vice President – Business Development	B.E	30
4	S Parthiban	Deputy General Manager- Business Development	B.E	17
5	N Bakkiyaraj	Assistant Vice President - Engineering	B.TECH ,M.B.A	32
6	S Murugan	General Manager - Operations	M.B.A, B.E	25
7	N Murali	Deputy General Manager - Factory In-charge	B.TECH	30
8	K Mohan	Head- Purchase	PG DIPLOMA,M.B.A	33
9	P Padmanathan	Senior Manager - Design	B.E	20
10	S Ramshankar	Senior Manager - Process Design	M.B.A, B.E	22
11	R Palani	Deputy General Manager - QA&QC	B.E	28
12	A Kadhiresan	Deputy General Manager – R&D	B.TECH, MS	19

MACHINERIES



SR. NO	ITEM	SPEC / CAPACITY	SIZE / PROCESS	QTY	UNIT
A. WELDING MACHINES					
1	INVERTOR BASED DC TIG WELDING MACHINE	10 - 400 A	GTAW	10	NOS
2	INVERTOR BASED DC ARC WELDING MACHINE	10 - 400 A	SMAW	10	NOS
3	INVERTOR BASED DC TIG WELDING MACHINE	10 - 200 A	GTAW / SMAW	4	NOS
4	GMAW WELDING MACHINE	10 - 600 A	MIG	4	NOS
5	SAW WELDING MACHINE	10 - 1200 A	SAW	2	NOS
B. WELDING ELECTRODE DRYING OVEN					
1	BAKING OVEN	100 KG	50°C - 600°C	3	NOS
2	PORTABLE OVEN	5 KG	50°C -250°C	10	NOS

MACHINERIES



SR. NO	ITEM	SPEC / CAPACITY	SIZE / PROCESS	QTY	UNIT
C. UTILITY MACHINERIES / FACILITIES					
1	AIR COMPRESSOR WITH DRYER & RECEIVER	7 KG/CM ²	SCREW COMPRESSOR	1	NOS
2	HYDRO TEST PUMP	400 KG/CM ²		2	NOS
3	EOT CRANE - BAY I	30 MT / 10 MT		4	NOS
4	EOT CRANE - BAY II	20 MT / 5 MT		1	LOT
D. SPECIAL PROCESS MACHINERIES					
1	FINNING MACHINE	KL & G TYPE/WELDED FIN		4	NOS
2	PLATE ROLLING MACHINE	UPTO 34/60 MM		2	NOS
3	AIR PLASMA CUTTING MACHINE	UPTO 50 MM		1	NOS
4	PORTABLE GAS CUTTER - PUG	100 MM		3	NOS
5	RADIAL DRILLING MACHINE	UPTO 50MM		1	NOS
6	BEVELING MACHINE	UPTO 50 MM		1	NOS

SOFTWARE

✓ SAP

✓ HTRI

✓ PVELITE

✓ AUTOCAD

✓ STAAD PRO

CERTIFICATIONS



The American Society of Mechanical Engineers

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Single Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

BGR TECH LIMITED
New No. 11-199, GNT Road
Ponneri Taluk, Thiruvallur District
Panjeety Village,
Tamil Nadu 601204
India

SCOPE:

Manufacture and assembly of power boilers at the above location and field sites controlled by the above location

AUTHORIZED: March 22, 2024

EXPIRES: March 22, 2027

CERTIFICATE NUMBER: 61462



Board Chair,
Conformity Assessment



Senior Director,
Engineering Operations



The American Society of Mechanical Engineers

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Single Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

BGR TECH LIMITED
New No. 11-199, GNT Road
Ponneri Taluk, Thiruvallur District
Panjeety Village,
Tamil Nadu 601204
India

SCOPE:

Manufacture of pressure vessels at the above location and field sites controlled by the above location (This authorization does not cover impregnated graphite)

AUTHORIZED: March 22, 2024

EXPIRES: March 22, 2027

CERTIFICATE NUMBER: 61463



Board Chair,
Conformity Assessment



Senior Director,
Engineering Operations

CERTIFICATIONS



The American Society of Mechanical Engineers

CERTIFICATE OF AUTHORIZATION

The named company is authorized by The American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Single Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Single Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

BGR TECH LIMITED
New No. 11-199, GNT Road
Ponneri Taluk, Thiruvallur District
Panjetty Village,
Tamil Nadu 601204
India

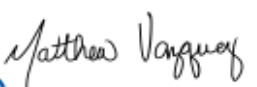
SCOPE:

Manufacture of Class 1 and Class 2 pressure vessels at the above location and field sites controlled by the above location

AUTHORIZED: March 22, 2024
EXPIRES: March 22, 2027
CERTIFICATE NUMBER: 61464



Board Chair,
Conformity Assessment



Senior Director,
Engineering Operations

THE NATIONAL BOARD
OF
BOILER & PRESSURE VESSEL INSPECTORS

Certificate of Authorization



This is to certify that
BGR TECH LIMITED
New No. 11-199, GNT Road,
Panjetty Village, Ponneri Taluk,
Thiruvallur District, Tamil Nadu 601204
India

is authorized to use the R Symbol in accordance with the provisions of the National Board Inspection Code and NB-415, Accreditation of "R" Repair Organizations.

All activities within the scope of this Authorization shall be controlled by the above location.
The scope of this Authorization is limited to:

Metallic
Repairs and Alterations
At
Shop and Field Locations



Certification Number: 12456
Issue Date: March 22, 2024
Expiration Date: March 21, 2027
Executive Director 

THANK YOU

