



**GLORIA GROUP ENTERPRISE** 











### PROFILE

GLORIA more than being a successful first generation business enterprise, is a throbbing and passionate story of its people, values and indomitable spirit of faith and innovation. It is the story of an ever-growing vibrant family that is founded on ethics, anchored on humanism, energized by passion, driven by the spirit of excellence and above all is in quest for immortality.

GLORIA is a fast growing global engineering organization with business interest ranging from design to manufacturing of aggregates and systems related to commercial vehicles, passenger cars, and farm equipments.

The brothers, Rajkumar Agarwal and Pawan Agarwal, from a humble beginning, scripted the story of the GLORIA in 1996 at Pune. Two decades later, headquartered at Pune, it has grown into a pulsating institution with manufacturing setups at ,Pune, Lucknow, Jamshedpur, Dharwad and Bhuj.

Inspired and motivated by the benevolent ideals of the legendry JRD and obsessed with an incorrigible and irrepressible passion to create a world class industrial edifice, Rajkumar Agarwal along with his brother Pawan Agarwal set about meticulously crafting the present-day GLORIA GROUP brick by brick.

Toughened by the early trials and tribulations and propelled by nothing-is-impossible spirit of the Agarwal brothers, GLORIA has now blossomed into a pulsating and throbbing global engineering institution in automotive components and systems and farm equipment aggregates.

GLORIA now boasts of manufacturing facilities in Five different locations in India with around 10 lac square feet of workspace. Latest technologies and human resources are working together around the world passionately to create an enduring institution.

Founder and Chairman Mr. Rajkumar Agarwal, Co-Founder and Managing Director Mr. Pawan Agarwal and Joint Managing Director Mr. Amrit Agarwal and Mr. Shishan Agarwal now spearhead GLORIA GROUP.

#### VISION

To be a leader in Aluminium products which involve quality process across industry by following quality operating system.new product development in best in cost effective and productive manner.

Also to meet customers expectations in terms of cost, delivery and safety with total employee involvement for continuous improvement in providing healthy and competitive returns to all the stake holders.

### MISSION

#### BEST IN CLASS IN

- PRESSINGHANDLING
- STRETCHING HARDING

#### TO ACHIEVE THE ABOVE INITIATIVES THROUGH

- Best in the class manufacturing
- process and safety.
- High morale & social values
- Team work
- Discipline
- Dedication
- Determination

Strive to produce quality products at a competitive price for customers.

Seek continuously to upgrade and implement the most advanced technologies & techniques in all areas of operations.

Embrace change and look upon it as an opportunity for improving ourselves.

Preserve the environment & seek to improve upon it in all processes.

Ensure best & safe work practices in all operations.

Conduct as model members in the communities where we work and live.

#### QUALITY POLICY

"GLORIA ALLUMINIUM INDIA PVT LTD" team to serve our customers with consistent quality of Aluminium Extruded profiles.

Gloria team firmly believes the above is continuously achieved by total employee involvement and continuous improvement in process and system in a healthy and safe work environment.



We are one of the largest MFG. of aluminum profiles in following category

### OUR PRODUCT RANGE



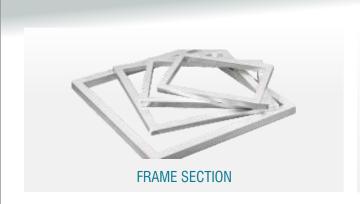
- Heat Sink Section : Used In Electrical Components
- Fencing Section : Used In Spm ( Special Purpose Machine )
- Ladder Section: Used In Ladder Making.
- Modular Furniture Section: Used In Furniture Application. (Residential, Commercial, industrial Etc)
- Scaffolding Section : Used In Making Scaffolding
- Solar Section: Used As A Frame For Solar Panels And Panel Mounting.
- Tube Section : ( Round, Square, Rectangular Etc )
- Special Window Section : (Residential, Commercial, Industrial)

We are pleased to introduce ourselves as a manufacturer and supplier of Aluminum Profiles in following category:

- Aluminum Extrusion Heat Sinks
- Air Ducting Profiles...
- Aluminum Drawn Tube & Rod.
- Modular Furniture / Tables Profiles.
- Conveyor Sections / Profile Tracker Sections.
- Green House Profiles.
- Solar Photo Voltaic Profiles / Solar Water Heaters Profiles.
- Aluminum Resistor Profiles.
- Modular Enclosure Systems (IT racks) Profiles.
- Pneumatics / Auto Ancillary Profiles.
- Building Projects Profiles / Architectural Sections.
- Air Filters Profiles.
- Auto Accessories Profiles.
- Modular Kitchen Profiles.
- Heat Exchanges / Oil Cooler Tubes.
- Transport Sections.
- Electrical Sections.
- Solar Frames.
- A.C. Grill Sections.
- Industrial Sections.
- Photo Frame Section
- Scafolding Section





















### OPERATION FLOW CHART



### **Raw Material**

( Primary Grade Aluminium Master Alloys for Alloying Elements )



MELTING FOR ALLOYING

**CHECK**: Chemical Analysis

Not Conforming to Quality Plan

> Conforms to Quality Plan

> > Rejected

4
STRETCHING, CUTTING
& FINAL INSPECTION

CHECK:

Dimensions, Flatness, Angularity, Surface etc.

Not Conforming to Quality Plan

Conforms to **Quality Plan** 

Rejected & Sent for Remelting

2

D.C. BILLET CASTING

**CHECK:** 

Bath Sample Chemical Analysis

Not Conforming to Quality Plan

> Conforms to Quality Plan

Molten Bath Correction

5

AGING FOR HARDENING

CHECK:

Dimensions, Flatness, Angularity, Surface

Not Conforming to Quality Plan

> Conforms to Quality Plan

Rejected & Sent for Remelting

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**EXTRUSION** 

**CHECK:** 

 Final Chemical Analysis
 Identification Bath marking for Traceability
 Ultrasonic Testing for non non-metallic inclusion / Voids

Not Conforming to Quality Plan

> Conforms to Quality Plan

Traceability Rearranging

6

PACKING & DESPATCH

CHECK:

U.T.S. Elongation, Conductivity Webster Test ( Both Ends ), Brinell Hardness etc.

Not Conforming to Quality Plan

> Conforms to Quality Plan

Rejected & Sent for Remelting

### **EXTRUSION CAPABILITIES**

2200MT Press





### 900MT Press

- Both these press are fully automated, the principal function of extrusions press is to make flow the aluminum through the die at a controlled speed and temperature.
- This is achieved by means of hydraulic cylinder & hydraulic circuits controlled by a PLC system.

Both these press are equipped with automatic puller.

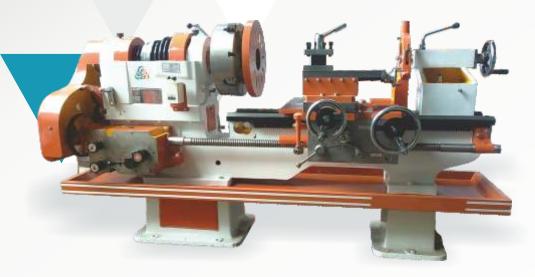
### **CONVERYOR HANDLING SYSTEM**

This handling system is fully automated which rolls the extruded profile without any scratches, hence maintains the quality of extruded aluminium profile.



# TOOL ROOM FACILITIES







LATHE MACHINE

**DRO MACHINE** 



**EDM WIRE CUTTING MACHINE** 



**SPECTROMETER MACHINE** 







FORK LIFT TOOL ROOM VMC MC HARDNESS TESTING MACHINE

# CASTHOUSE



**HOT TOP CASTING** 



 Foundry is equipped with imported HOT-TOP continuous log casting machine for producing the Billets of Dia - 5" and length up to 6 meter series.



**ALLUMINUM BILLETS (6 MTR)** 

# APPLICATIONS OF ALLUMINIUM





CONSTRUCTION



GREENHOUSE



AUTOMOTIVE



SPM (SPECIAL PURPOSE MACHINE)





**ELECTRICAL & ELECTRONICS** 



SOLAR



MODULAR FURNITURE



# Aluminium Alloy Composition Limits (% Weight)

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	V	Ti	Bi	Ga	Pb	Zr	Limi Each	ts <sup>++</sup> Total	Al
3003	0.6	0.7	0.05-0.20	1.0-1.5			0.1							0.05	0.15	remainder
6005	0.6-0.9	0.35	0.1	0.1	0.40-0.6	0.1	0.1		0.1					0.05	0.15	remainder
6005A <sup>+</sup>	0.5-0.9	0.35	0.3	0.5	0.40-0.7	0.3	0.2		0.1					0.05	0.15	remainder
6060	0.3-0.6	0.1-0.3	0.1	0.1	0.35-0.6	0.05	0.15		0.1					0.05	0.15	remainder
6061	0.4-0.8	0.7	0.15-0.40	0.15	0.8-1.2	0.04-0.35	0.25		0.15					0.05	0.15	remainder
6063	0.2-0.6	0.35	0.1	0.1	0.45-0.9	0.1	0.1		0.1					0.05	0.15	remainder
6066	0.9-1.8	0.5	0.7-1.2	0.6-1.1	0.8-1.4	0.4	0.25		0.2					0.05	0.15	remainder
6070	1.0-1.7	0.5	0.15-0.40	0.4-1.0	0.50-1.2	0.1	0.25		0.15					0.05	0.15	remainder
6082	0.7-1.3	0.5	0.1	0.4-1.0	0.60-1.2	0.25	0.2		0.1					0.05	0.15	remainder
6105	0.6-1.0	0.35	0.1	0.1	0.45-0.8	0.1	0.1		0.1					0.05	0.15	remainder
6162	0.4-0.8	0.5	0.2	0.1	0.7-1.1	0.1	0.25		0.1					0.05	0.15	remainder
6262	0.4-0.8	0.7	0.15-0.40	0.15	0.8-1.2	0.04-0.14	0.25		0.15	0.40-0.7		0.40-0.7		0.05	0.15	remainder
6351	0.7-1.3	0.5	0.1	0.40-0.8	0.40-0.8		0.2		0.2					0.05	0.15	remainder
6463	0.2-0.6	0.15	0.2	0.05	0.45-0.9		0.05							0.05	0.15	remainder

<sup>&</sup>lt;sup>+</sup> Manganese plus chromium must between 0.12-0.50%

### **Titanium - Boron Road Feeder Unit**

We have a unique technology to add Titanium - Boron elements while alloy making to make the above alloys complete in all elements and smooth finish on sections.



<sup>&</sup>lt;sup>++</sup>This column lists the limits that apply to all elements, whether a table column exists for them or not, which no other limits are specified.

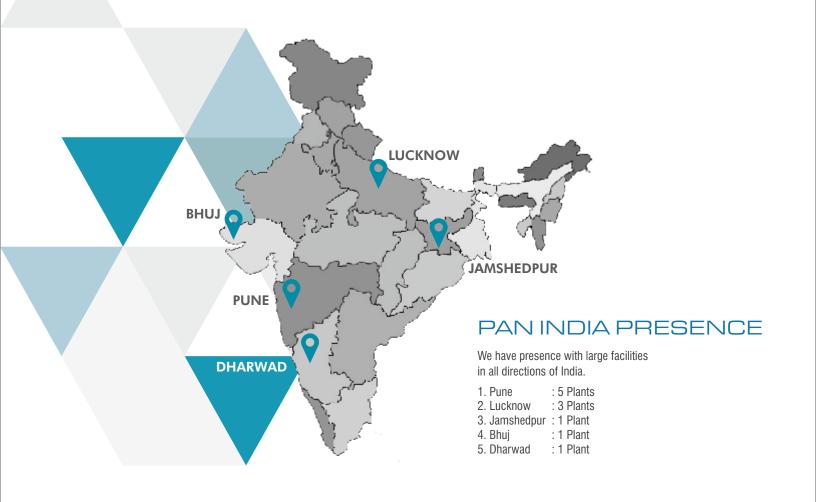


# LIST OF MACHINES

SR.	NAME OF MACHINE	CAPACITY	MAKE					
01	Melting Furnace	05 Mt	Thermsys India					
02	Hot top Casting Machine	Ø 127 X 6 Mtr.	Chaing Wen, Taiwan					
03	Log End Cutting Machine	Ø 127 X 6 Mtr.	Minghong Machinery, Taiwan					
04	Extrusion Press Machine	900MT	Hydromech India					
05	Extrusion Press Machine	2200MT	Yejing Machinery China					
06	Log Heather	Ø 127 X 8 Mtr.	Chaing Wen, Taiwan					
07	Die Pre-Heater	18 Kw (500 x 500 x 400 mm)	Thermsys India					
08	Ageing Oven	6 M. Ton Per Batch	Thermsys India					
09	Die Nitriding Furnace	18 Kw	Chaing Wen, Taiwan					
10	Automated Material Handling System							
	Cooling Water Table	7 Mtr. width X 42 Mtr. long						
	Puller	30 M. Ton	Minhong Machinery, Taiwan					
	Strecher	Ø 350 mm Circular Saw						
	Rough Cutting							
	Finish Cutting							
11	Pre-Treatment Set-up	09 Tank Plc Based	Aditya Mechatronix					
12	Hardness Tester	Rockwell	Fis					
13	Spectrometer	18 Element						
14	Overhead Cranes	5 Tons, 02 off	Pvss					
15	Cooling Tower	500 Tr	Aquarius					
16	Titanium - Boron Rod Feeder Unit	9.5 mm	Pyrotek					









www.gloriagroup.co.in

**Manufacturing Address**: Plot No.B/18, Chakan Industrial Area, Phase-II, MIDC Vasuli Khed, Opposite GE India, Pune - 410501

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