



DELUMA

FUNDIÇÃO ALUMÍNIO - ZAMAK



WWW.DELUMA.COM.BR

2023

OUR BUSINESS – WHAT WE DO?

DELUMA offers complete solutions for your needs.

From Product Development to Serial Production of Aluminum and Zamak Castings Parts.

- ★ We design and manufacture all Tool Engineering internally;
- ★ All Foundry Process: High and Low Pressure, Gravity and Green Sand process;
- ★ All parts can be deburred, machined and painted internally.

Our goal is to increase new partnerships, as well as consolidate existing ones.



HISTORY

37 ANOS

Since 15/03/1985

- ★ Located in Guarulhos-SP / Brazil;
- ★ Own Building – Built area 13.100m²;
- ★ The first foundry to be certified ISO 9001 : 2015;
- ★ The only foundry in Brazil that designs, manufactures the tools and produces the parts vertically;
- ★ For all segments. More than 800 different items produced.



Devanir Brichesi
Fundador



Laís Brichesi
Presidente



QUALITY POLICY

Deluma undertakes to sustain the relationship with the client and other interested parties, by meeting the requirements and improving quality, aiming at common achievements.

MISSION

Provide satisfactory services, being competitive, enabling sustained growth, focusing essentially on our reason for being:

Customer & employee.



PRINCIPLES

- ★ Freedom;
- ★ Equality;
- ★ Fraternity;
- ★ Authenticity;
- ★ Truth;
- ★ Transparency;

VISION

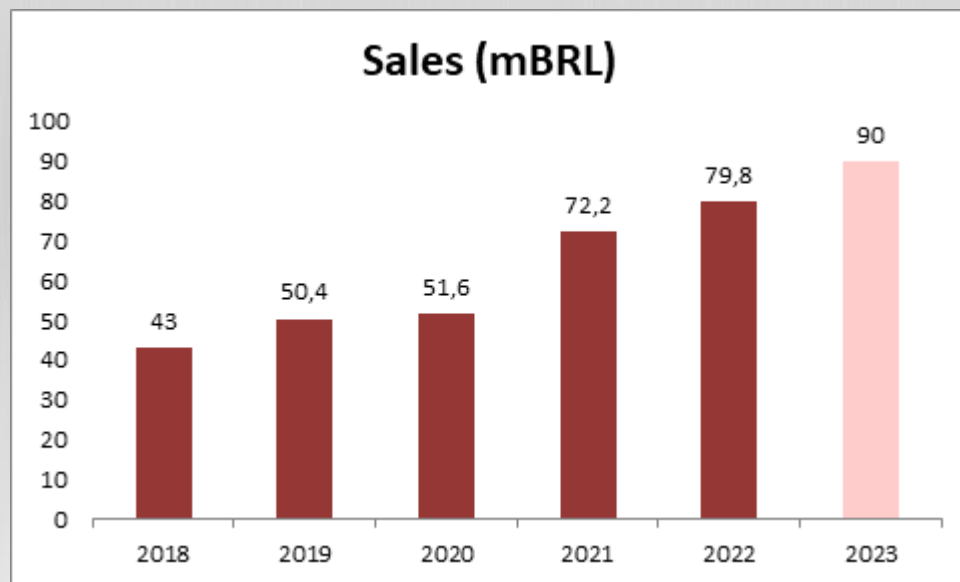
To be the best Foundry Under Pressure in the World, which seeks to achieve its goals through work with a focus on people, raising awareness and training them more and more to provide good service to the explicit and implicit needs of the client.

VALUES

- ★ Commitment;
- ★ Credibility;
- ★ Competitiveness;
- ★ Continuity;
- ★ Enthusiasm;



DELUMA OVERVIEW IN NUMBERS



279 Direct employees

5.8 years of average
time with the company



MAIN CUSTOMERS

AUTOMOTIVE

CESTARI
AISIN
MODINE
DELPHI DIESEL
MWM INTERNATIONAL
NIDEC-GPM
MAN LATIN
MERCEDES BENZ
YANMAR DO BRASIL
ZF – WABCO
VIBRACOUSTIC
AUTOMETAL
BASF – AUTOMOTIVE
MAGNETI MARELLI
DAYCO
AETHRA
DONALDSON
NAL

ELECTRONICS

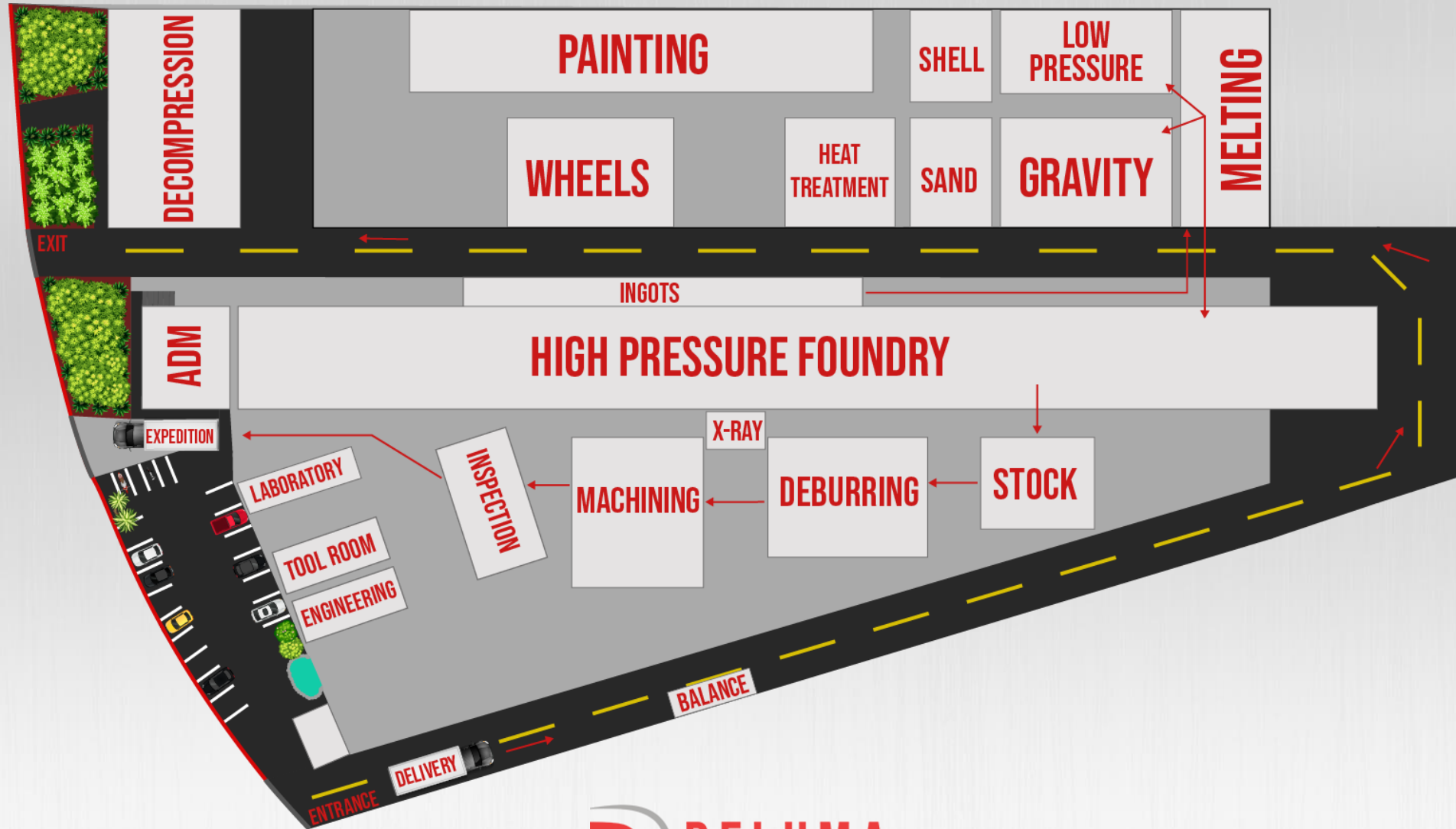
SEW
KARCHER
EATON
TOSHIBA
TECNOWATT
PLP
UNICOBA
JULGANO – EXP
SX
SONERES

SEVERAL

SEMIKRON
CONAUT
MOPA
FANEM
VINIGAS
DIAMANFER
FLEXFORM



LAYOUT - PROCESS FLOW



ENGINEERING

DEVELOPMENT ENGINEERING

- ★ From APQP to PAPP;
- ★ Projects in 2D and 3D;
- ★ 3D printing and Prototype;
- ★ Simulation of the die-casting process (high and low);
- ★ Specialized team providing Quality and Guarantees;
- ★ Optimized costs and deadlines.



TOOL ROOM

TOOL EXECUTION

- ★ 01 CNC lathe;
- ★ 01 Lathe;
- ★ 01 Boring machine;
- ★ 03 Machining Center;
- ★ 01 Radial drill;
- ★ 02 Electrode by electrical discharge –
Machining by electrical discharge;
- ★ 01 Adjustment press;
- ★ 02 Tool milling machines;
- ★ 01 Flat grinder;
- ★ 01 Branch;



LABORATORIES

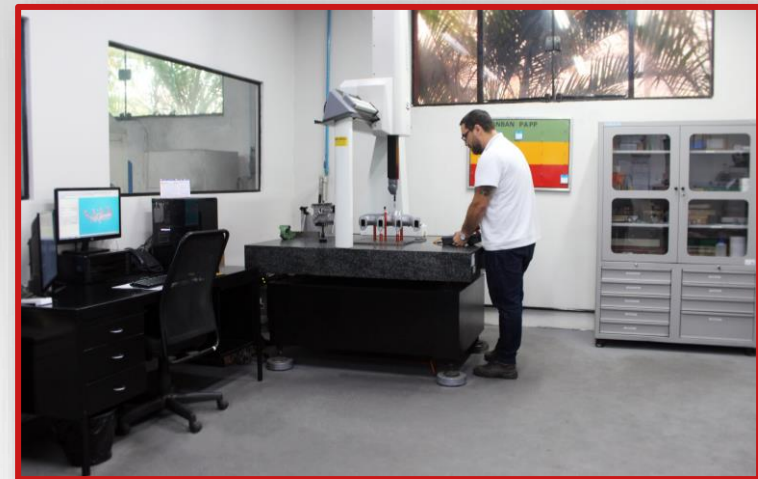
METALLOGRAPHIC

- ★ Microscope;
- ★ Stereoscope;
- ★ Sanding Polishing Machine;
- ★ Humidity Determination Scale;



PHYSICAL / MECHANICAL

- ★ MMC Hexagon – Inspector – Course x 800mm, y 1000mm, z 600mm;
- ★ Profile projector;
- ★ Borescope;
- ★ Traction Machine;
- ★ Durometer HRC and HB;
- ★ Torquemeter;



LABORATORIES

NON-DESTRUCTIVE TESTS

- ★ Fluoroscopy (X-ray) UM-20F-Phillips, Foundry;
- ★ Fluoroscopy (X-ray), Rhodes;
- ★ UV LIGHT – Liquid Inspection Penetrating Fluorescent;
- ★ LPC – Inspection for Colored Penetrating Liquids;



CLINICAL ANALYSIS

- ★ Optical Emission Spectrometer;
- ★ SAG – Gas Analysis Equipment;
- ★ Mold for Oxide Analysis;



MERGER PROCESS

Deluma uses aluminum ingots from different alloys such as 305, 306, 309, ENAC 43000, AlSiMg, ALSi9MgTA according to SAE standard and specifications similar to ABNT 6834 standard;

MELTING FURNACES

- ★ 01 Closed barrel furnace – 250 Kg/h melting;
- ★ 01 Dry hearth furnace – 350 Kg/h melting;
- ★ 02 Open barrel ovens – 250 Kg/h melting each;
- ★ 01 Closed barrel furnace with a capacity of 3500 Kg of metal and melting of 600 Kg/h;
- ★ 01 Closed barrel furnace with a capacity of 1200 Kg of metal and melting of 400 Kg/h;



Ingots



Melting furnace 636



Melting furnace 661



Dry hearth oven



MERGER PROCESS

We use transport pans for liquid metals with refractory coating.



LPG gas plant with O₂ gas vaporization units of 250 Kg/LPG and O₁ vaporization unit of 300 Kg/h LPG to feed melting furnaces and mold heating.

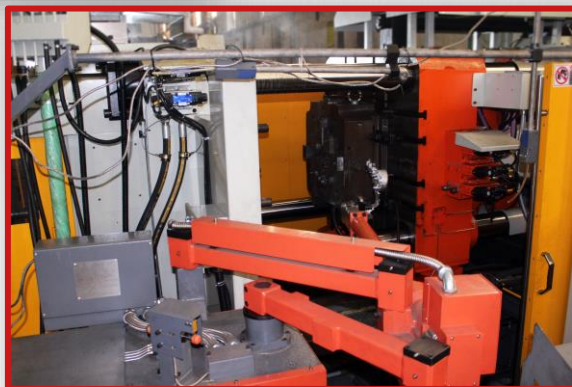


We use FDU (Foundry Degasification Unit) which works with a nitrogen inclusion rotary system which, in turn, provides “micro” bubbles, causing all oxides and impurities to come to the surface of the aluminum bath, facilitating their removal and improving the quality of the fused.



HIGH PRESSURE FOUNDRY

- ★ 25 high-pressure injection machines;
- ★ Injection machines from 260 tons up to 1200 tons of closing force;
- ★ Monthly production capacity of 250 tons;
- ★ Ability to produce technical parts from 30 grams to 20 kg;
- ★ Injector with graph, injection for process stability;
- ★ 52% actual spare capacity.



02 x C.F 1200 Ton (PRINCE)

01 x C.F 1150 Ton (BÜHLER)

01 x C.F 1000 Ton (BHUÜLER)

01 x C.F 800 Ton (KUX)

01 x C.F 700 Ton (ROMI)

01 x C.F 630 Ton (WOTAN)

01 x C.F 630 Ton (WANGARTEN)

01 x C.F 550 Ton (AGRATE)

04 x C.F 500 Ton (LK)

01 x C.F 500 Ton (HAITAI)

01 x C.F 500 Ton (HIDRA)

01 x C.F 480 Ton (SEMERARO)

01 x C.F 450 Ton (AGRATE)

02 x C.F 280 Ton (LK)

02 x C.F 280 Ton (WOTAN)

01 x C.F 280 Ton (SEMERARO)

01 x C.F 120 Ton (PETERSEN)



LOW PRESSURE FOUNDRY

★02 Machines – Itaipresse

Machine features:

- ★Space between columns: 1770x995mm;
- ★Movable base: 1295mm;
- ★Distance between mobile and fixed table: 520mm;
- ★Opening force: 20 Ton;
- ★Closing force: 25 Ton;
- ★Injection Force: 25 Ton;
- ★60mm (22") diameter capacity;
- ★Weight: 8 to 20 kg;



GRAVITY AND SHELL

GRAVITY DIE CASTING

- ★ 2 Conventional machines;
- ★ 5 Tipping machines;
- ★ Production capacity from 0.1 to 30KG.

Products:

Carter; Steering wheel heads;
Engine mounts; Intake
manifolds; Radiator box; Tubes,
connections.



SHELL

We have a Shell foundry process.
Shell males from 0.05 kg to 10 kg.



MACHINING AND DEBURRING

MACHINING

- ★ Double Pallet Machining Centers;
- ★ Machining Centers with 3 and 4 axes (stroke up to 1500mm);
- ★ Drilling and Threading Center (High Speedy);
- ★ Bench and Multispindle Drills;
- ★ CNC lathes with capacity \varnothing 400 x 500mm;
- ★ Sealing test (differences of pressure and immersion);
- ★ Vacuum impregnation;
- ★ Machining and Sealing Process.



DEBURRING

- ★ Hydraulic presses;
- ★ Sander;
- ★ Polishing;
- ★ Sand and blasting;
- ★ Roto finish;



VACUUM IMPREGNATION

We guarantee the elimination of the air vacuum contained in the micro porosities of the parts, replacing it with a sealant applied under pressure.

Product used: Alkaline Sodium Silicate

Tank Capacity: Ø 0.55m x 0.40m

LEAKAGE

2 equipment for Leakage Test by Diff. in pressure

1 equipment for Leakage Testing by Immersion



HEAT TREATMENT AND PAINTING

POWDER PAINTING

Deluma has an electrostatic (powder) painting line with surface treatment for aluminum, rotary blasting, continuous linear oven with capacity for pieces up to 500mm long, 1200mm high and 450mm wide. Continuous curved greenhouse for smaller batches.

We work with polyester and hybrid inks that have excellent resistance to weathering, good flexibility.

Powder paint, in addition to having better resistance, does not use solvent in its composition, avoiding environmental degradation.

Providers:

- ★ WEG
- ★ Sherwin Williams;
- ★ Pulver;
- ★ Metalcoat;



HEAT TREATMENT

- ★ Capacity of 3,000 kg/day;
- ★ 2 complete lines with: Cooling tank/solubilization and aging furnaces.



CERTIFICATES

- ★ In 1998, Deluma achieved ISO 9001 Certification, and was the first foundry company to achieve this feat in Brazil;
- ★ And in 2002, it reached a new milestone, achieving the TS 16949 Certification;
- ★ Since 2018 we have been certified according to the IATF 16949 automotive standard;

Certificado BR18/10189
O sistema de gestão de

Deluma Indústria e Comércio Ltda.
Avenida Amâncio Gaiolli, 641, Agua Chata
Guarulhos, SP, 07251-250, BR

Foi auditado e certificado encontrando-se em conformidade com os requisitos da norma

ISO 9001:2015

Para as seguintes atividades

Projeto e fabricação de peças fundidas em alumínio e zamak e montagem de componentes e subconjuntos. Projeto e fabricação de ferramentais de fundição sob pressão e gravidade de alumínio e zamak.

Design and manufacture of casting parts in aluminum and zamak and assembly of components and sub-assemblies. Design and manufacturing of tooling for die casting and gravity casting for aluminum and zamak.

Informações adicionais a respeito do escopo e da aplicação dos requisitos da norma ISO 9001:2015 podem ser obtidas consultando a organização

Este certificado é válido de 4 de agosto de 2021 até 4 de agosto de 2024 e mantém-se válido sujeito a auditorias de acompanhamento satisfatórias. Auditoria de recertificação devida com, no mínimo, 60 dias de antecedência da data de expiração. Revisão 2. Certificado desde 4 de agosto de 2018

A auditoria que deu origem a este certificado teve início em 10 de maio de 2021. O certificado anterior era válido até 4 de agosto de 2021

Autorizado por

Thiago Doretto
Thiago Doretto
Gerente Nacional

SGS ICS Certificadora Ltda.
CNPJ: 00.272.073/0007-28
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www.sgsgroup.com.br

Gestão da Qualidade
NBR ISO 9001
OCS 0009

Accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management Systems

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Certificado IATF 0422078
Certificado SGS BR18/10203

The management system of

Deluma Indústria e Comércio Ltda.
Avenida Amâncio Gaiolli, 641,
Agua Chata, Guarulhos, SP, 07251-250, Brazil

Has been assessed and certified as meeting the requirements of

IATF 16949:2016
Edition 1

For the following activities

Manufacture of casting parts in aluminum and zamak and assembly of components and sub-assemblies.
EXCLUSIONS: 8.3 Product Design

3 Year certification is valid from 02 September 2021 until 01 September 2024 and remains valid subject to satisfactory surveillance audits
Version no. 2 Current version updated 02 September 2021

Autorizado by

Veto Power
Veto Power Authority

Contracted Office: SGS United Kingdom Ltd, Station Road, Oldbury, S69 4LN, UK
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BUSINESS DEVELOPMENT

- ★ Prospection: Approach – Visits – Positioning
- ★ Elaboration of Proposals - Visibility Search:
Tooling (Mold / Grinders / Devices / Calibrators)
Parts (Rough, Machined, Painted, Assembled in Subassemblies)
- ★ Business Generated: Project / Objectives: Quality, Time, Cost
Mold: Lifetime Guaranteed / Replacement
- ★ Parts: Acceptance Criterion / PPM / Supply

ESTABLISH POLICIES

Supply / Quality / Prices

AND WE SIGN A PARTNERSHIP



DELUMA / MARKET

VISION IN THE PRESENT

Functional Plans: Compatible with the Strategic Plan - Principles

Focus: Customer with Potential

improvement: Constant for better Performance – (competitiveness)

Structure that allows low risk for both businesses

VISION IN THE FUTURE

Defined: Principles/Business Plan - Action

Opportunities: Exist – Accompanied by Risk

Search: Healthy Business (Needs / Possibilities Analysis)

Goals: Competitiveness (Market)
Attractiveness (Employees)
Be Preferred Supplier



CREDIBILITY

COMPETITIVENESS

CONTINUITY

