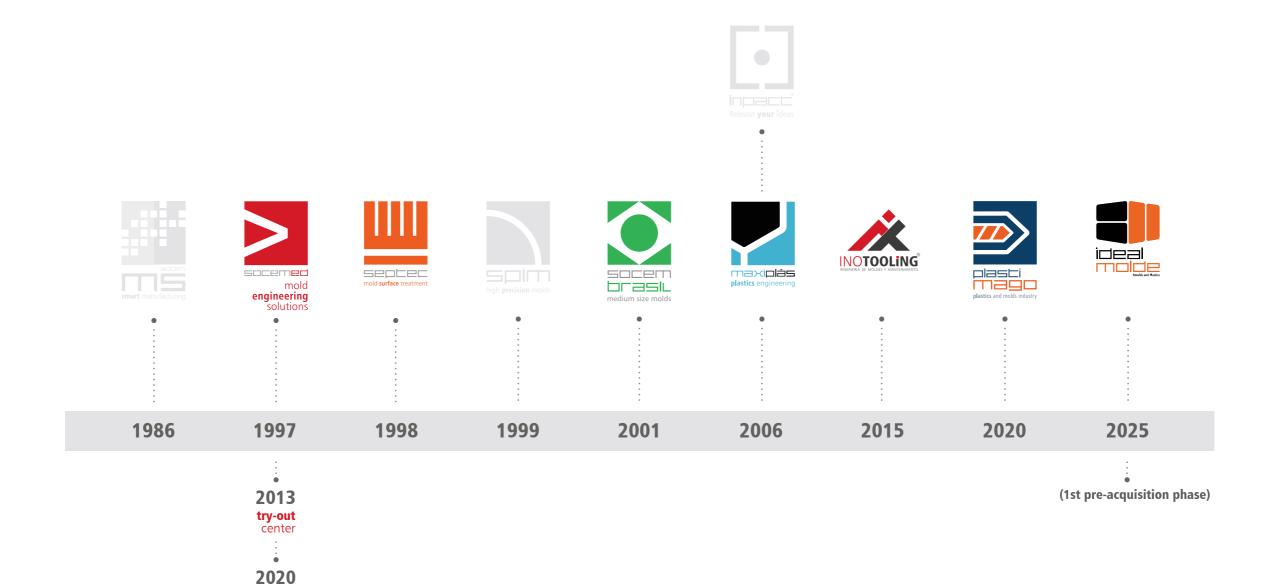


www.socem.pt

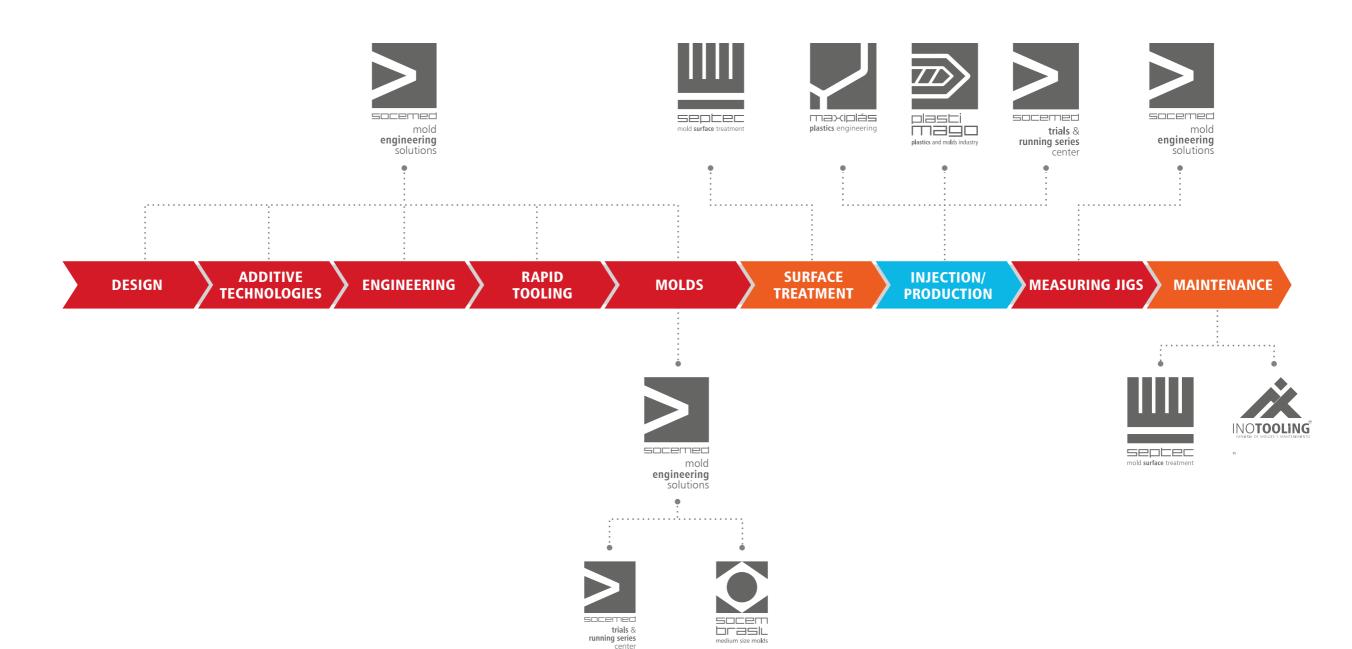


Our History

running series center



Key Expertise and Skills



Global Presence



Plastimago

Production Division – Marinha Grande, Portugal

ica **United States of America**

Tooling & Services

Inotooling Mexico

Tooling & Service Division – Puebla, Mexico





Grupo SOCEM Headquarters

Tooling & Service Division – Martingança, Portugal



Maxiplás

Production Division – Pombal, Portugal

United Kingdom

Tooling & Services

Czechia

Tooling & Services

China

LCC Tooling Support



Tooling & Service Division - Joinville, Brazil



Turkey

Tooling & Services

South Africa

Tooling & Services

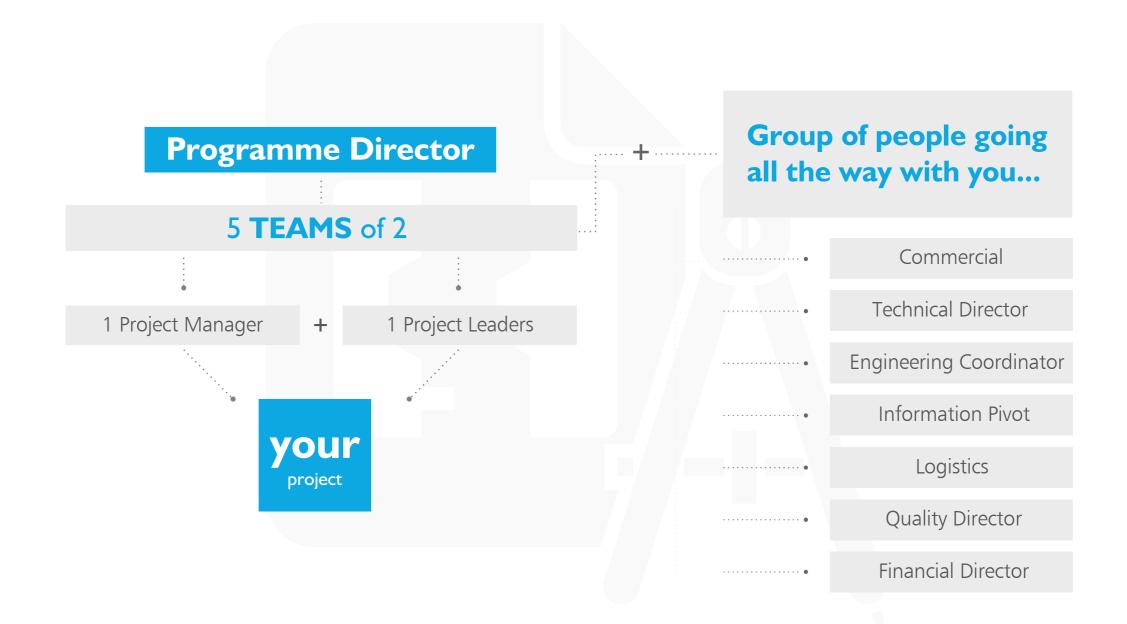
Group Facts and Figures







Programme Management



Mold Engineering Solutions





Our Equipment

10 Conventional Milling

3 Drilling

16 EDM

28 Grinding

6 Wire EDM







Our Equipment

39 CNC Milling (Vert./Horiz.)

6 6 Axis

15 5 Axis

6 Presses







Our Special Equipment

5 3D Printer

2 SLS

1 DMLS

1 SLA

2 FARO Arm

3 3D SCANNER

6 CMMs





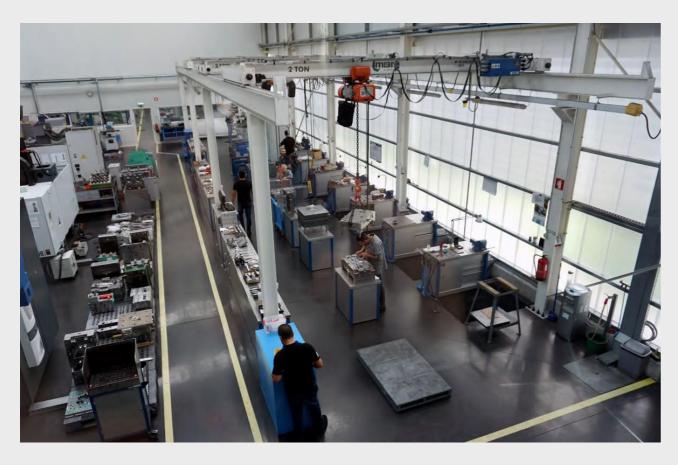














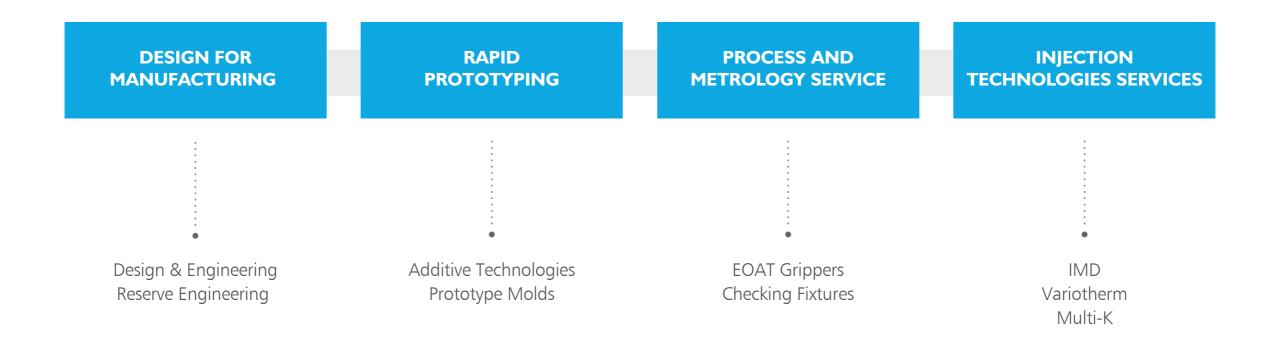






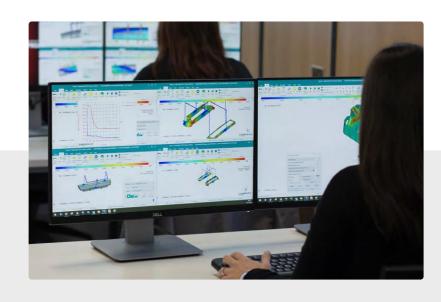












Design & Engineering

Concept design;
Product Optimization;
3D Models;
Mold engineering.

Reverse Engineering

Machine Scanner COMET LED 5M 3D



Rheological Studies: CADMOULD – 3 un.

CAD Design:

TOPSOLID – 30 un.

CAM:

TEBIS – 17 un

- + Product Development and Industrialization
- Deconstruct an artificial object to reveal its
 3D CAD model design
- + FEA analysis | Structural analysis









Additive Technology

1 DMLS **Machine** 3D Systems ProX 300 **Dim. plate** 250 x 250 x 300 mm

Material 2709 Steel

1 MJP

Machine Projet 3000 HD

Dim. plate 298 x 185 x 203 mm

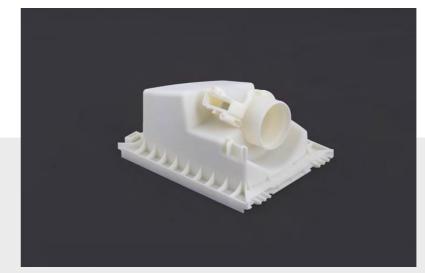
Material Visijet EX 200

+ Parts with low surface roughness |
Conformal cooling channels with complex shapes

+ Parts with greater dimensional accuracy and complex geometries | Less warpage and superior surface detail











Additive Technology

1 SLA Machine 3D Systems ProX800

Dim. plate 650 x 750 x 550 mm

Material Accura ClearVue

2 SLS

0

Machine DTM Sintering 2500 Plus

Dim. plate 381 x 330 x 457 mm

Material:

PA12 (Nylon 12% fiberglass) TPU (Thermoplastic Polyurethane) 2

Machine 3D Systems ProX SLS 6100 **Dim. plate** 381 x 330 x 460 mm **Material**:

Duraform ProX PA12

→ Great precision and surface detail |
Parts with optical properties (excellent transparency) |
Simulation of ABS/PC characteristics

+ Production of rigid or flexible parts |
Allows visualization and functional testing of parts before their final production











Molds Prototyping

Silicone Molds Machine MCP 004PL

Dim. plate 900 x 600 x 600 mm

Material Polyurethane

Aluminium & Steel Molds **CNC Machines:**

4 Axis Milling Machine – I un.

5 Axis Milling Machine – **I6 un.**

6 Axis Milling Machine – **5 un.**

 ↓ Low-production molds |
 Finishing comparable to injected parts |
 Same mechanical and thermal characteristics as materials used in mass-productions
 + Pre-serial production molds |
High speed in project manufacturing







EOAT Grippers

Modular frame construction or machined aluminium;

3D component printing option; Vacuum clamping system and pneumatic clamps/fingers. **Checking**Fixtures

SPCs variable measurements; GNG / GAP & FLUSH; Cubing; Intelligent Checking Fixtures; R&R studies.

Metrology Service **6 Coordinate Measuring Machines**

Max. working capacity: 3000 x 1200 x 1000 mm

2 FARO Arm

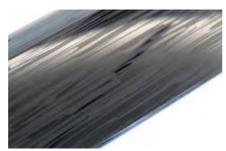
Max. working capacity: Ø 2700 mm

★ Ejection, movement and rotation of parts |
 Cutting and separation of parts and sprues |
 Insertion placement

Complete Solutions:Conforming, Measuring and Assembly

→ Dimensional reports metal and plastic parts













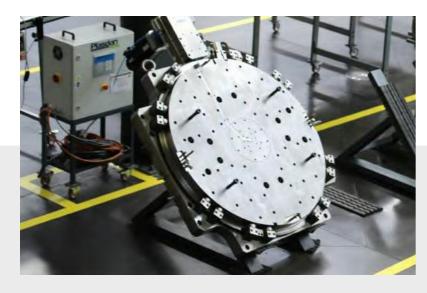


Machine Kurz

Variotherm Technology

Machines: Regloplas P200M Pressurised-water temperature control unit up to 200 °C

 + High-gloss surface parts













4 Rotative Plates:

Ø 650 – 1un.; Ø 800– 1un.; Ø 1350 – 2un.

5 Injection units:

from 50 gr. to 280 gr.

2 IMMs with rotative plate and injection unit:

160T – 30 gr.; 230T – 50 gr



76 Injection Molding Machines 35T – 2800T

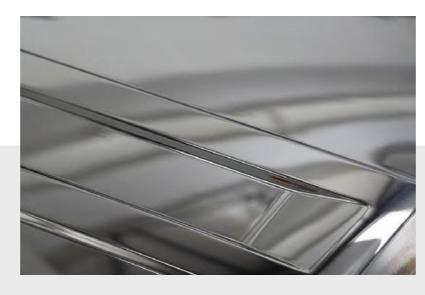
Mono material injection, multi-k injection, injection of elastomers, injection molding of metal inserts, and in mold decoration IMD (developing partnerships).

IATF 16949:2016 Certification

+ Multiple injection materials

+ Mass Production Parts (Automotive; Home appliances; Electrical and Electronics) | Surface Finishing | Assembly | Packaging and Shipping





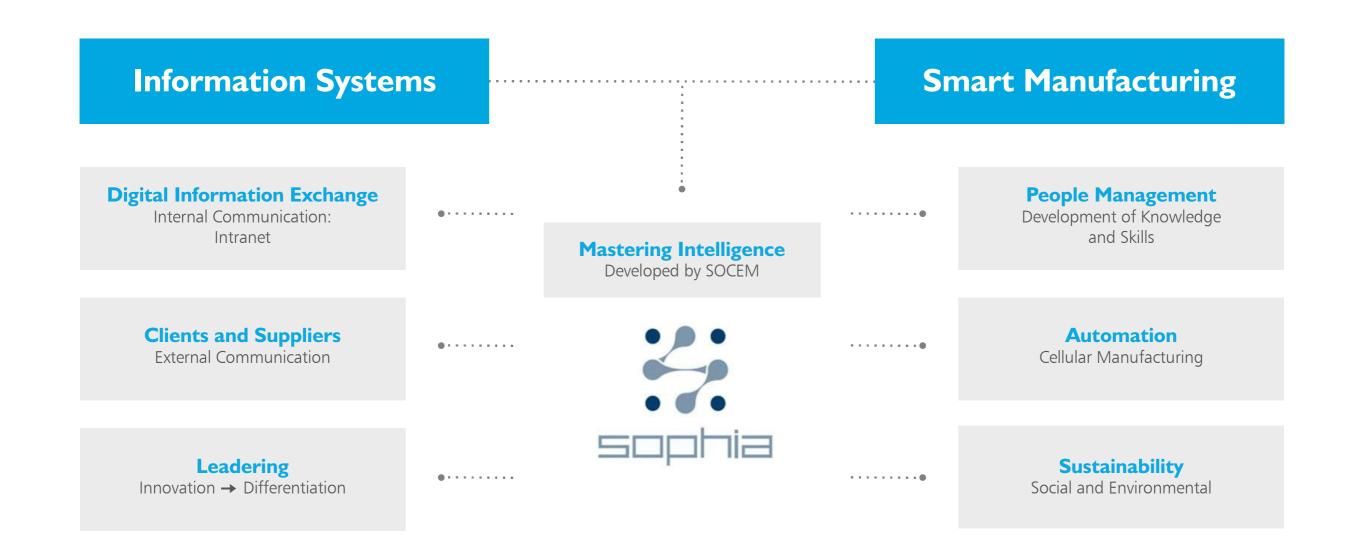


Surface Treatment

Finishing touches through technical or optical polishing, high-gloss and nano-finishing; Graining patterns such as: cork and wood; Zinc-engravings (mold identification plates and coolings); VDI aplication; Micro Leakage Gases and Gas Leakage.

+ Polishing | Chemical Graining | Mechanical and Chemical Engravings | Sand Blast

Optimization and Innovation | Industry 4.0.



Living Greener



100% green energy

The energy consumption of the units in Portugal are 100% renewable!

– Saving our planet from 1592 Tons of CO₂ per year.

3% green energy

of the energy comes from our own production.

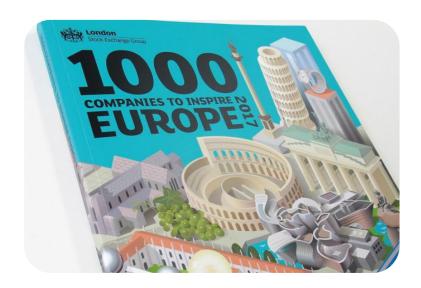
1987un.

Photovoltaic panels.

4578,5 m²

Covered area.

We Are Inspiring Europe







Award-winner 2022 for Innovation in Prevention (environment category).

Portuguese Grand Award-winner 2022 for Innovation in Prevention.



Honored with the Environmental Sustainability Award by the newspaper Região de Leiria in December 2022.



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