

Capability sheet

Custom rubber and silicone components, made to your drawing

Elastobras holds no catalogue and no shelf stock. Every part is customer-specific on two axes at once: a dedicated tool, and a compound formulated for that application. This sheet is a working reference for deciding whether to send us a drawing — not a product list.

FOUNDED 1995	EMPLOYEES 50	PLANT 1,500 m ²	INJECTION 16 machines	EXTRUSION 3 lines	CERTIFIED 20+ years
------------------------	------------------------	--------------------------------------	---------------------------------	-----------------------------	-------------------------------

WHICH PROCESS SUITS YOUR PART

PROCESS	INSTALLED	BEST FOR	LESS SUITABLE FOR
Injection moulding	16 machines 80–240 t clamping	Repeat series · tight dimensional repeatability · complex geometry · minimal flash · inserts	Very large parts · one-off prototypes
Extrusion	3 lines hot air tunnel vulcanisation	Continuous sections cut to length · tube · cord · profile · high volumes	Parts with features in more than one axis
Compression moulding	3 presses	Thick sections · larger parts · short runs · prototypes and first articles	High volumes · very tight tolerances

DIMENSIONAL TOLERANCES — DIN ISO 3302-1

PROCESS	STANDARD CLASS	BY AGREEMENT
Injection moulding	M2	M1 on functional dimensions – in series on silicone parts holding sealing diameters to ± 0.10 mm and 0.70 mm membranes to ± 0.10 mm
Extrusion	E2	Tighter on request, after feasibility review
Compression moulding	M3	M2 on selected dimensions

Tolerance is worth spending where it does work. Tell us which dimensions are functional and we quote accordingly, rather than pricing the whole part at its tightest feature.

MATERIAL SELECTION — TYPICAL PROPERTIES

FAMILY	TEMPERATURE	OIL & FUEL	WEATHER, OZONE, UV	WATER & STEAM	ABRASION	CHOSEN WHEN THE PART MEETS
NBR nitrile	–30 ... +100 °C	good	poor	fair	good	Oils, fuels, hydrocarbons, greases
EPDM	–45 ... +150 °C	poor	good	good	fair	Outdoor exposure, hot water, steam, cleaning chemistry
VMQ silicone	–60 ... +200 °C	fair	good	good	poor	Temperature extremes, low compression set, inertness
SBR	–40 ... +100 °C	poor	poor	fair	good	Abrasion and general dynamic service
NR natural	–50 ... +80 °C	poor	poor	fair	good	Resilience, tear strength, dynamic loading, impact
CR chloroprene	–35 ... +100 °C	fair	good	fair	good	Moderate oil combined with weather resistance

Indicative values for general-purpose compounds. Because we formulate in-house, actual performance is set by the compound we develop for your application – these ranges are a starting point for the conversation, not a specification. Hardness across all families: 25–90 Shore A.

TOOLING AND FINISHING

Tooling	Designed and produced with partner toolmakers, to customer drawing
Tooling transfer	Existing moulds and dies can be transferred and requalified
Inserts	Rubber-to-metal and rubber-to-plastic bonded assemblies
Finishing	Deflashing, dimensional inspection, packing to specification
Extruded parts	Cut to length on automated equipment with 100% inline inspection

Transferring existing tooling is usually faster and cheaper than starting from a drawing, and it is the most common way a first order happens.

Francis Brune — Partner & Managing Director
francis.brune@elastobras.com · +55 41 3376-4363
linkedin.com/in/francisbrune · elastobras.com

Elastobras Indústria de Artefatos de Borracha Ltda
Rua Bom Jesus de Iguape 1007 · 81610-040 Curitiba – PR – Brazil
CNPJ 00.760.666/0001-48 · Page 1 of 2



SAVE CONTACT

COMPOUNDING

Compounds are mixed in-house, and **compound formulation is inside the scope of our ISO 9001:2015 certificate** — not only manufacture. A processor that buys ready-made compound is certified for what it moulds; we are certified for what we formulate as well, which is where most variation in an elastomer part originates.

Mixing equipment	1 internal mixer (Banbury type) and 2 open mills
Batch size	up to 30 kg
Batch release testing	Rheometer curve and hardness, on every batch
Formulation development	In-house, against the service condition of the part
Colour	To requirement — no supplier minimum order quantity

The rheometer curve shows the full cure behaviour of a batch, not only the final property. That is what catches a formulation or weighing deviation before it becomes a moulded part.

QUALITY AND CHANGE CONTROL

Certificate	ITAC-OCS-0024/2024 · ABNT NBR ISO 9001:2015
Valid to	23 March 2027
Accreditation	INMETRO/Cgcre OCS 0035 — IAF Multilateral Recognition Arrangement
Certified scope	Compound formulation and preparation, and manufacture of rubber articles
Traceability	Delivered lot → part lot → compound batch → raw material lot

Once a compound is approved for a customer part, the formulation is frozen. No change to formulation, raw material supplier, tooling or process without prior written notification and approval — including changes that would be invisible in the finished part.

REACH. We supply REACH declarations, including SVHC statements, on request and per delivered part.

Testing. Hardness and rheometer curve in-house on every batch. Tensile, elongation, compression set, ageing and media resistance through partner laboratories to the applicable standard.

Audit. Open to customer audit of production and compounding, including formulation and batch records under confidentiality — by your own staff, a third party, or as part of a supply chain due diligence programme.

LOGISTICS

Shipments leave from Curitiba, with three deep-water ports within reach — **Paranaguá, Itapoá and Itajaí** — and an international airport in the city for air freight when lead time matters more than cost. We ship regularly across South America and have supplied to Europe and North America.

HOW A PART IS DEVELOPED

- Drawing, sample or problem.** A part can start from a technical drawing, from a physical sample to be reproduced, or from a component failing in service.
- Compound proposal.** We propose an elastomer family and formulation against the service condition, with property data, before tooling is committed.
- Tooling.** Moulds designed and produced with partner toolmakers to the approved geometry.
- First article.** Sample parts with dimensional report and material data for your approval.
- Series production** under frozen formulation, with the rheometer curve of every batch on record.

Every new part requires a dedicated tool. Tooling is an initial investment quoted separately from the piece price, and it pays back above a certain annual volume. Existing tooling held at another supplier can often be transferred and requalified instead — usually faster and cheaper than starting from a drawing.

What to send with an enquiry

- ☐ Drawing, sketch or physical sample
- ☐ Annual quantity and order pattern
- ☐ Operating temperature range
- ☐ Media the part will contact — oils, fuels, chemicals, foodstuffs, cleaning agents
- ☐ Required hardness, or the function it has to perform
- ☐ Colour requirement, if any
- ☐ Existing supplier's material, if replacing a part
- ☐ The failed part itself, if it is failing in service

If a part is failing, the failure mode usually tells us more about the right compound than the original drawing does. Send it.

A NOTE ON FOOD CONTACT

We produce components for equipment used in food and agricultural processing, but **we do not currently hold food-contact conformity certification** and do not claim compliance with EC 1935/2004, FDA or equivalent frameworks. Tell us at the enquiry stage if your part requires it, so we can say plainly whether we are the right supplier.

MARKETS

Outdoor network infrastructure · banking automation · beverage equipment · automotive · vacuum handling · agro-industry and food processing equipment · industrial diaphragms.

