

### Industeel

## Mold steels for corrosive applications



### Industeel High quality steels

Industeel mills combine a careful selection of raw materials, high performant electric arc furnace with fine tuned secondary metallurgy, vacuum and special degassing processes to provide our customers high cleanliness stainless steels.

Our 3 complementary integrated mills and our wide know-how about stainless steels brought us up to the leading producers of corrosion-resistant mold steels worldwide, allowing us to select the optimal solution to meet your requirements.

Application	Grade	Werkstoff number	Thickness (mm)	Delivery conditions
Inserts cavities and extrusion dies	2083	1.2083	15-130	Quenched and tempered 280-310 HB
	2316	1.2316	15-225	Quenched and tempered 280-325HB
	17-4PH		200-600	Quenched and tempered 290-350HB
Mold bases and mechanical parts	2085	1.2085	15-350	Quenched and tempered 280-325 HB
	Superplast Stainless	1.2099	15-350	Quenched and tempered 280-330 HB

### **Examples of applications**



### Plastic bottles PET packaging

Molding PET requires narrow temperature ranges and high speeds to achieve the transparency and the quality needed for bottles and all kind of food-contact packaging.

The mold is in permanent contact with high risk of water condensation. Its resistance to corrosion ensures its lifetime.

2085 and SP Stainless are perfect candidates to manufacture all the holders for this kind of molds.



## Molds for medical applications

Medical applications require extreme high cleanliness on all the molding process to fit with most stringent regulations. Corrosion is absolutely not acceptable on any part of the mold.

In this context, 2085 and SP Stainless are the best grades to manufacture all the parts of the mold that are not in direct contact with the plastic.



PVC extrusion dies

During the molding of PVC, some acids are released. These acids are very corrosive and will destroy the mold quickly if this one is not resistant enough to corrosion.

Our 2316 steel is the perfect answer for this kind of plastic parts needing medium polishing. It is available up to 225 mm heavy plate, and even if you need thicker we can provide you alternative grades such as 17-4PH up to 600 mm.



### Superplast Stainless

Superplast Stainless chemistry has been defined to provide

- Homogeneous and reliable metallurgical structure thanks to the low C and addition of B (Superplast<sup>®</sup> concept)
- Higher machining performances for the moldmaker thanks to the balance between Carbon and Sulfur content



Superplast® Stainless provides benefits at each stage of the manufacturing chain:

	Requirements	Superplast® Stainless
	Short manufacturing time	High machinability
Moldmaker	Low tooling cost	
	Reliable and homogeneous quality	Hardness and structure through homogeneity
	Easy design modifications	Easy repair welding
Molder	Reliable mold cost and delivery	Straightfoward & reliable manufacturing
	Shortened injection cycle time	Higher thermal conductivity



### Stock offer

Do you need short delivery time or additional service? Our stock offer has been built for you!

- Reduced delivery time of 2 weeks ex-mill after order placement.
- 4-sawn edges plates.
- Thickness from 15mm to 110 mm, standard 2 meters x 4 meters Flatness tolerance 3mm/2m.
- Cut to size products if needed.



#### For any information

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Your sales contact

# transforming tomorrow

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