



Superplast® 2738 mod.

Superplast® 2738 mod.: A premium mould steel that meets or exceeds standards for grades W 1.2311 and W 1.2738.

Material properties

Prehardened steel for medium and very large - size moulds and tools with good machinability. Consistent texturing and polishing improved by **very low sulphur content**. Reliable repair welding and high thermal conductivity.

For which tools

Plastic injection mould cores and cavities, large - size moulds for bumpers, dashboards, television panels, bottle crates, etc.

For which plastics

Thermoplastics, thermosetting plastics, ABS, transparent melts. Injection moulding, compression moulding, RIM moulding, etc.

PROPERTIES

CHEMICAL ANALYSIS (TYPICAL; IN WEIGHT%)

C	Si	Mn	S	Ni	Cr	Mo	B
0.26	0.10	1.40	0.002	0.30	1.40	0.45	+

CHEMICAL ANALYSIS (TYPICAL; IN WEIGHT%)

Superplast® 2738 mod. is delivered **quenched and tempered to 290 - 330 HB (30 - 35 HRC)**

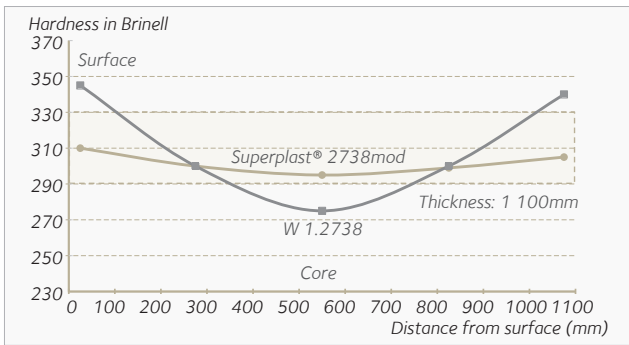
Test thickness	Test hardness	Yield strength	Tensile strength
400 mm	300 HB	895 N/mm ²	1000 N/mm ²

PHYSICAL PROPERTIES

		25 °C	100 °C	200 °C	300 °C
Thermal expansion coefficient (from 25 °C)	10 ⁻⁶ /K		11.0	12.5	12.8
Thermal conductivity	W/mK	41.5	41.0	39.0	36.0
Young modulus	kN/mm ²	205			



PROPERTIES



THROUGH HARDENABILITY

Thanks to an optimal balance of alloying elements (especially Boron metallurgy) and high quality heat treatment, Superplast® 2738 mod. exhibits a **very consistent hardness through large sections** (up to 1300 mm thick). On the opposite the hardness of standard W 1.2738 is highly heterogeneous from surface to core.

DELIVERY CONDITIONS

TYPICAL DELIVERY SIZES

Manufacturing process	Thickness	Width
Hot rolling	15 - 150 mm	1000 - 2000 mm
Hot forging	150 - 1300 mm	1200 - 2000 mm

PLATE PROCESSING

WELDING

Cores and cavities can be polished and/or textured following welding data provided below. Please consult the user guide for detailed information.

Process	Filler material	Preheating	Post heating	PWHT
GTAW	SP300 WELD - E DIN 25 CrMo 4	min. 150°C	150°C - 2h	550°C - 2h



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Technical data and information are to the best of our knowledge at the time of printing. However, they may be subject to some slight variations due to our ongoing research programme on steels. Therefore, we suggest that information be verified at time of enquiry or order. Furthermore, in service, real conditions are specific for each application. The data presented here are only for the purpose of description, and considered as guarantees when written formal approval has been delivered by our company. Further information may be obtained from the address opposite.