

ES Aktuell 1200

Name:

Special alloy

Typical analysis in %:

C	Mn	Cr	Ni	Mo
0.25	1.4	1.3	1.0	0.5

+ trace elements

As-supplied condition:

Quenched and tempered to a hardness of 310-355 HB (1050-1200 N/mm²)

Characteristics:

Uniformly high hardness over the cross section, very good weldability, good polishability and graining suitability, high thermal conductivity, higher tool service life

General fields of application:

Plastic mould steel for large moulds with high wear resistance, moulds for vehicle bumpers, dashboards, moulds for the largest external car body parts, refuse container moulds and other large moulds

Special note:

ES Aktuell 1200 – a steel designed for the harshest conditions with uniform high strength right into the core – perfectly engineered for the best mould.

Improved specifications for increased quality and productivity in the mould making and plastics industries.

ES Aktuell 1200 is usually supplied in EST grade.

Heat treatment data:

	Temperature	Duration	Cooling
Stress-relief annealing	max. 480 °C	min. 4 h	furnace

We recommend stress-relief annealing for more than 30 % machining before finish machining.

Physical characteristics:

Coefficient of thermal expansion: between 20 °C and:

$10^{-6} \times m$	100	200	300	400	500	600 °C
m x K	10.9	12.6	13.0	13.5	13.8	14.2

<i>Thermal conductivity:</i>	W	20	350	700°C
m x K		38.0	40.1	40.8

Normal working hardness: Used in the as-supplied condition

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Tempering curve

