

# 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/mm<sup>2</sup>)

*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 <sup>-6</sup> x m	100	200	300	400	500	600 °C
m x K	10.9	12.6	13.0	13.5	13.8	14.2

Thermal conductivity:	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

