

## ES Antikor S

**Name:**  
**X 33 CrS 16**

**Material No.:**  
1.2085 mod.

**Typical analysis in %:**

C	Si	Mn	Cr	S
0.3	0.5	1.0	16.0	0.1

**As-supplied condition:**  
Quenched and tempered to 280-325 HB  
(950-1100 N/mm<sup>2</sup>)

**Characteristics:**  
Corrosion-resistant steel with considerably better machinability compared to material 1.2316

**General fields of application:**  
Mould frames, tools for processing corrosive plastics. This steel is recommended where the main requirement is for machinability with good corrosion-resistance.

**Special note:**  
Normally ES Antikor S is used in the as-supplied condition. Further heat treatment is not recommended. ES Antikor S is suitable for technical polishing only. For other types of polished surfaces we recommend ES Antikor 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:

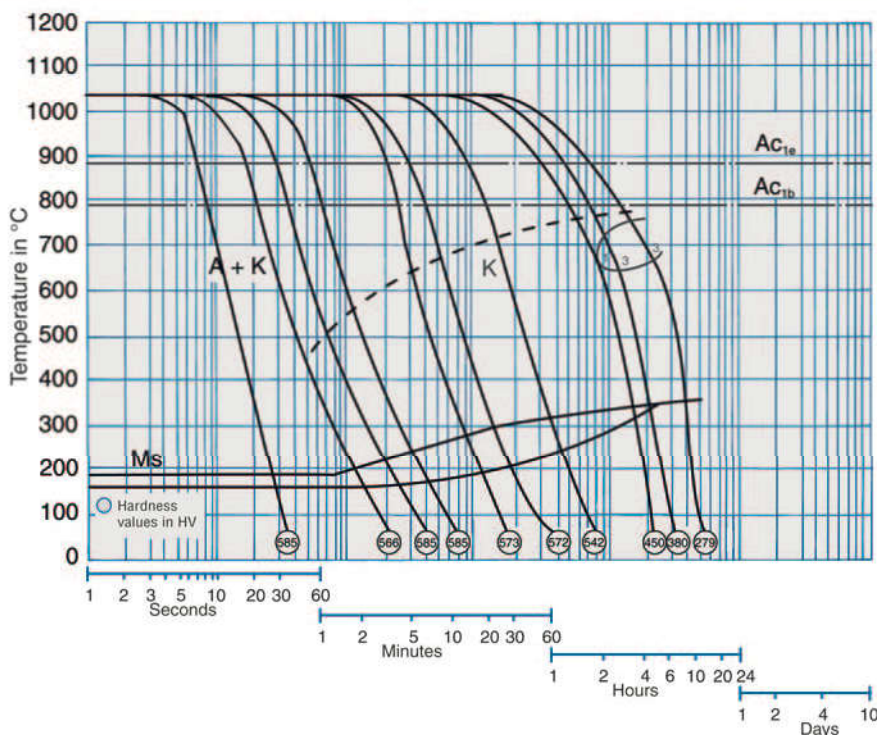
10 <sup>-6</sup> x m	100	200	300	400	500	600	700 °C
m x K	12.2	12.9	13.5	13.9	14.2	14.5	14.8

**Thermal conductivity:**

W	20	350	700 °C
m x K	39.5	36.5	33.5

**Normal working hardness:** Used in the as-supplied condition

### Continuous time-temperature-transformation diagram



### Tempering curve

