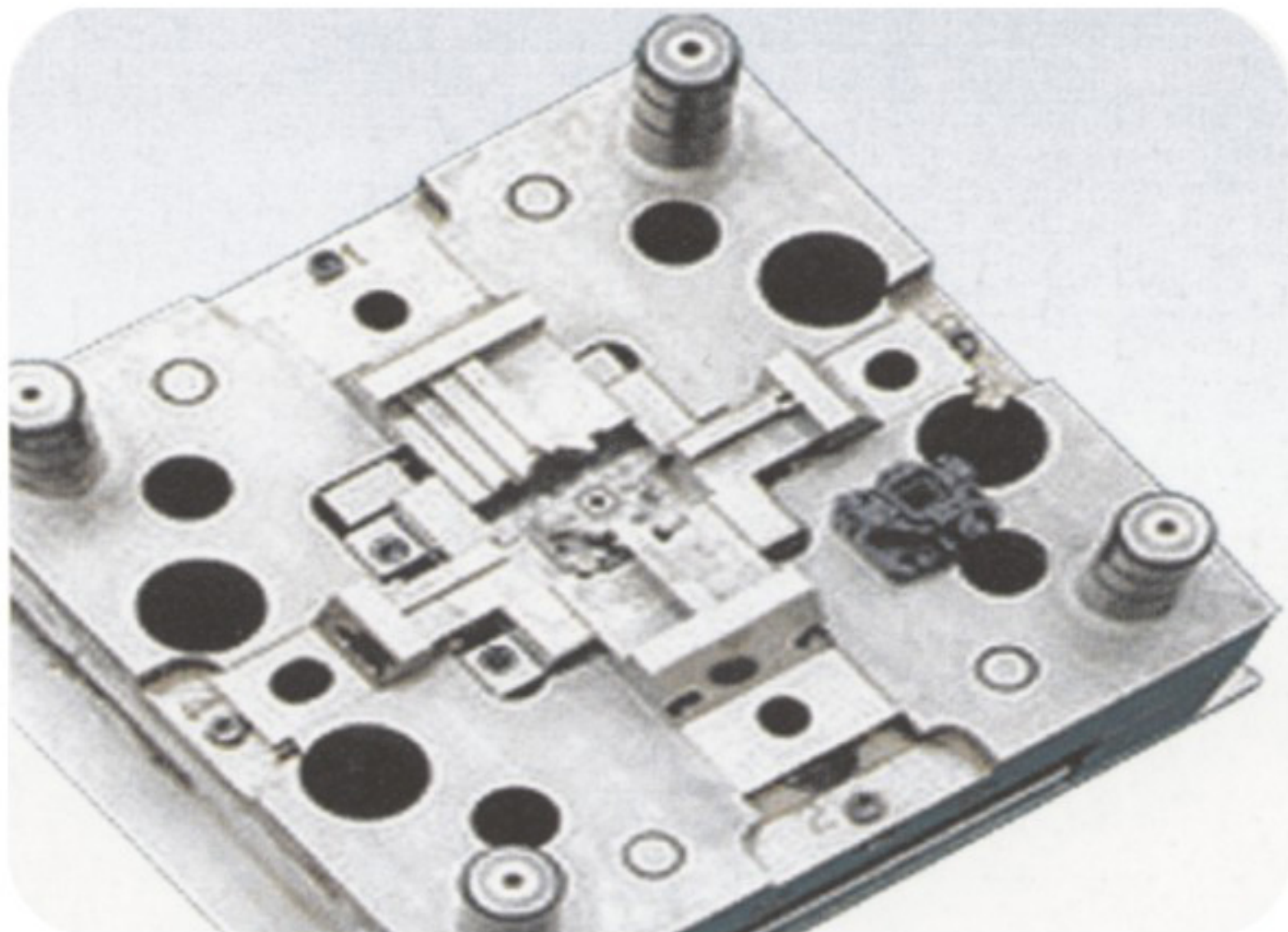


# 1.2083 VICTORY ESR<sup>®</sup>

ESR = ELECTRO-SLAG-RE MELTING

• ANAND MOULD STEELS PVT. LTD. • ANAND MOULD STEELS PVT. LTD. • ANAND MOULD STEELS PVT. LTD.



### GENERAL:

- good corrosion resistance
- good machinability
- good hardening stability and through-hardening
- low distortion
- high wear resistance
- excellent polishability in hardened condition
- high surface finish
- original finish over extended running periods
- very low inclusion content
- low repairing costs
- constant cycle times

### APPLICATIONS :

Moulds for:

- corrosive materials, e.g. PVC,
- moulding abrasive/filled materials,
- including injection-moulded thermosetting grades
- with long production runs e.g. disposable cutlery and containers.
- production of optical parts, such as camera and sunglasses lenses
- for medical containers, e.g. syringes

### CHEMICAL ANALYSIS : %

| C           | Si    | Mn    | P       | S       | Cr          |
|-------------|-------|-------|---------|---------|-------------|
| 0,36 - 0,42 | ≤ 1,0 | ≤ 1,0 | ≤ 0,025 | ≤ 0,002 | 12,5 – 14,5 |

### PHYSICAL PROPERTIES :

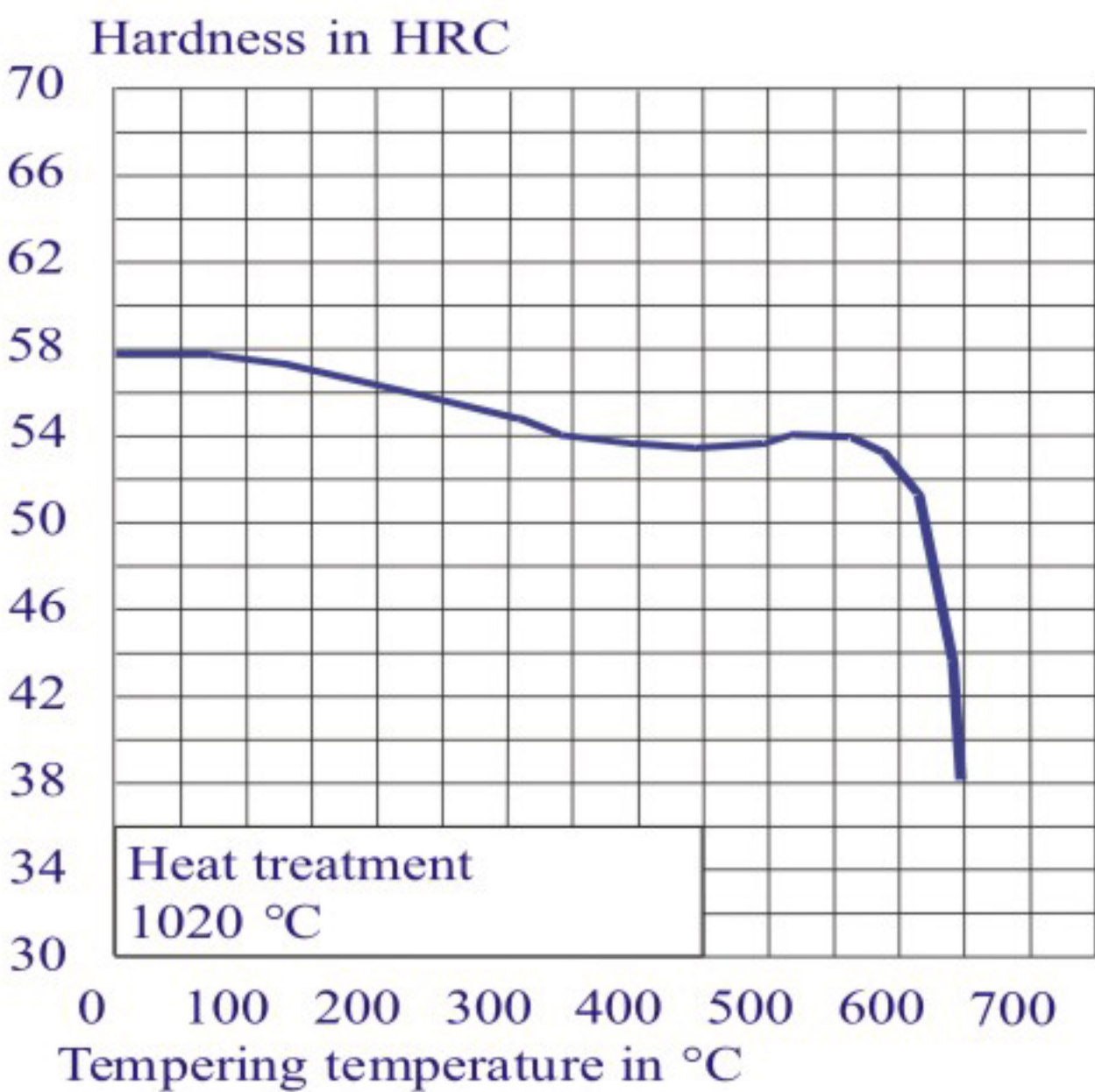
| Coefficient of thermal expansion | 20-100 °C | 20-200 °C | 20-300 °C |  |
|----------------------------------|-----------|-----------|-----------|--|
| [10 <sup>-6</sup> m/(m x K)]     | 10.9      | 11.2      | 11.5      |  |
| Thermal conductivity             | 20°C      | 200°C     | 300 °C    |  |
| [W/(m x K)]                      | 22.0      | 24.0      | 26.0      |  |

### HEAT TREATMENT :

| Hot forming   | Soft annealing | Hardening      | Tempering      |
|---------------|----------------|----------------|----------------|
| 1050 – 850 °C | 760 – 800 °C   | 1000 – 1030 °C | 250 – 570 °C # |

### TEMPERING DIAGRAM : #

values in HRC tested on samples dia. 25 x 50 mm long hardened at 1010 °C in oil

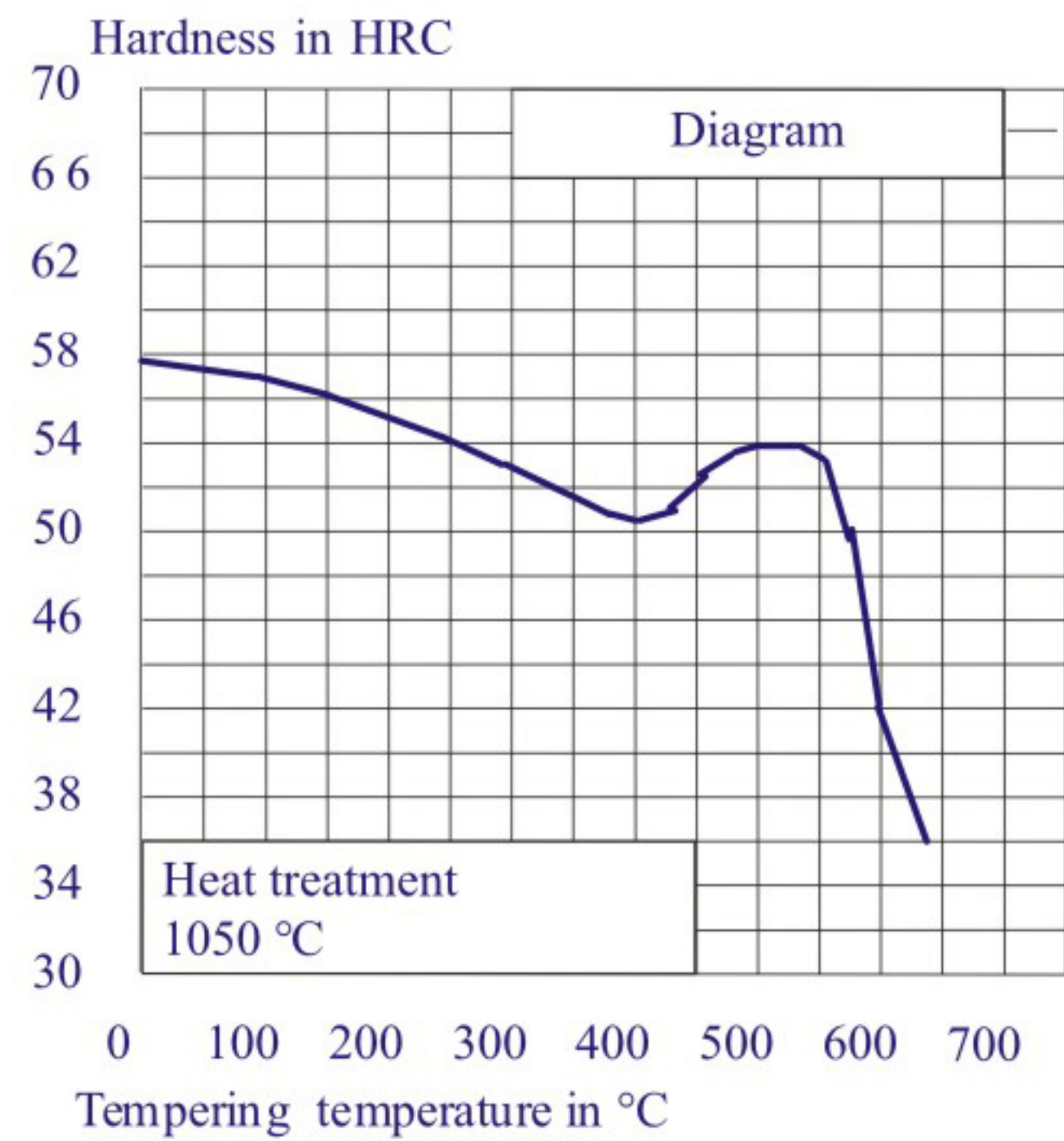


## HEAT TREATMENT :

| Hot forming | Soft annealing | Hardening      | Tempering   |
|-------------|----------------|----------------|-------------|
| 1050-850°C  | 820-840°C      | 1030 – 1060 °C | 500–700°C # |

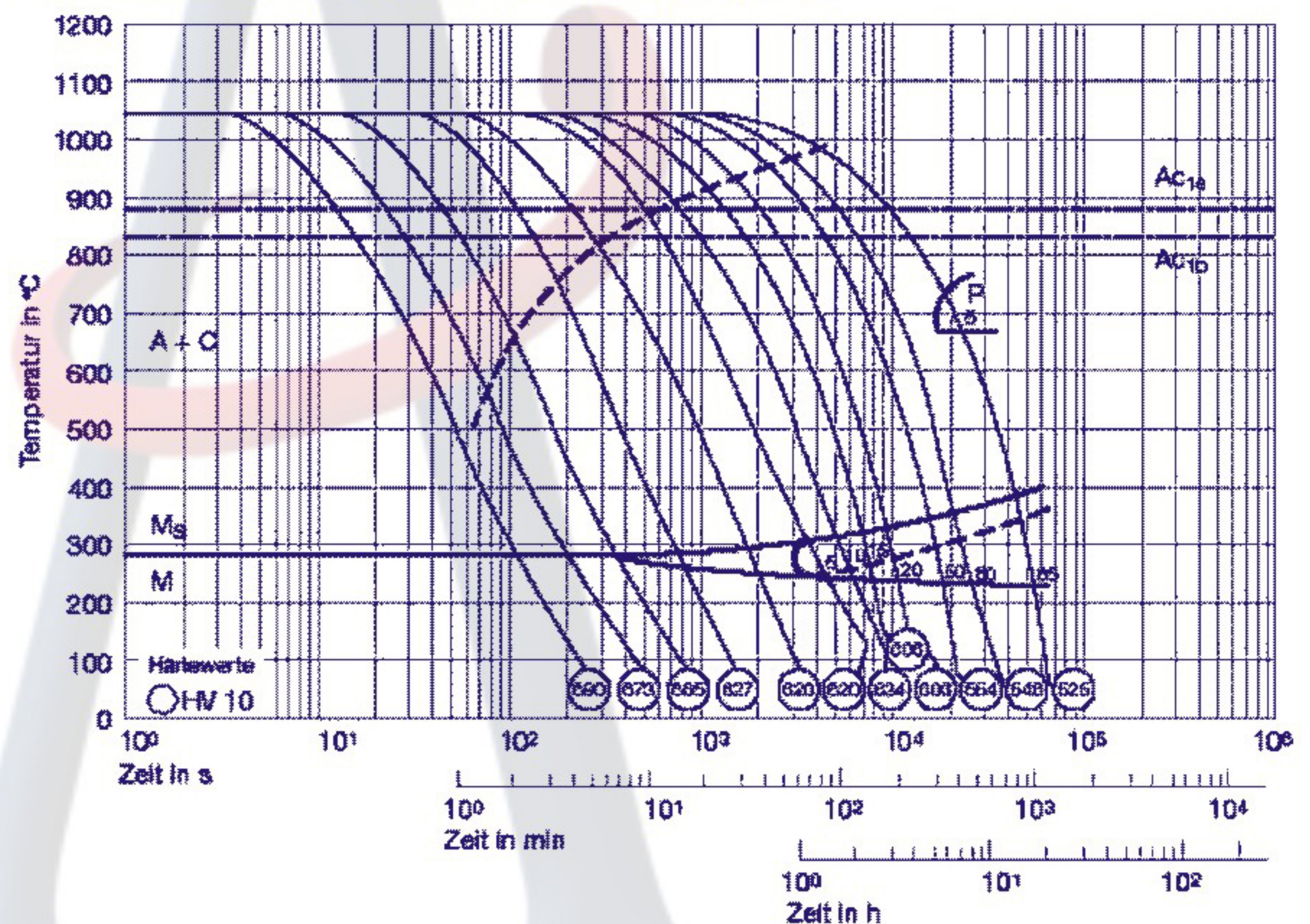
## TEMPERING DIAGRAM : #

values in HRC  
tested on samples  
dia. 25 x 50 mm long  
hardened at 1050 °C in oil



## CCT GRAPH :

Kontinuierliches Zeit-Temperatur-Umwandlungsschaubild



## DELIVERY SIZES :

diameter – up to 600 mm or  
thickness – up to 400 mm or acc. to your request

The details and values in this data sheet are typical values, no guarantee promises. Changes of the material, the qualities and/or performance data we reserve for us.



**Schmiedewerke Gröditz**

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Website: www.anandsteels.com

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Kukatpally (IE),  
Hyderabad - 500 072  
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email : south@anandsteels.com  
website : www.anandsteels.com

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email : north@anandsteels.com  
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Alkapuri, Vadodara – 390 007.  
Mobile : +91 - 9879171221  
email : gujarat@anandsteels.com  
Website : www.anandsteels.com