



钢铁之家

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全球钢号百科!

Global Steel Grade Encyclopedia



涵盖的行业或国家与地区类别



国际材料与试验协会

GJB

国家军用标准



动力机械工程师协会

EU

前欧洲标准化

AISI

美国钢铁学会



德国工业标准

AMS

航空航天材料规范



国际标准

JASO

日本汽车标准组织

EN

欧洲标准

JB

中国机械行业标准

UNS

统一编号系统

UNI

意大利标准



美国机械工程师协会

SS

瑞典标准



国家标准



日本工业标准

Cryodur 2436

X210CrW12

C 2.10 Si 0.35 Mn 0.35 Cr 12.00 W 0.70

Steel properties

12 % ledeburitic chromium steel with very high wear resistance and cutting edge retention as well as improved hardenability in comparison to Cryodur 2080.

Standards

AISI ~D6 AFNOR Z210CW12-01

Physical properties

Coefficient of thermal expansion

at °C	20 – 100	20 – 200	20 – 300	20 – 400	20 – 500	20 – 600	20 – 700
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	10.9	11.9	12.3	12.6	12.9	13.0	13.2

Thermal conductivity

at °C	20	350	700
$\text{W}/(\text{m} \cdot \text{K})$	16.7	20.5	24.2

Applications

Heavy-duty blanking dies for cutting transformer and dynamo sheets up to 2 mm thickness as well as for paper and plastics, deep-drawing tools, drawing dies and mandrels, shear blades, stone pressing tools.

Heat treatment

Soft annealing °C

800 – 840

Cooling

Furnace

Hardness HB

max. 250

Stress-relief annealing °C

650 – 700

Cooling

Furnace

Hardening °C

950 – 980

Quenching

Air, oil or saltbath, 500 – 550 °C

Hardness after quenching HRC

64

Tempering °C

HRC

100

200

300

400

500

600

63

62

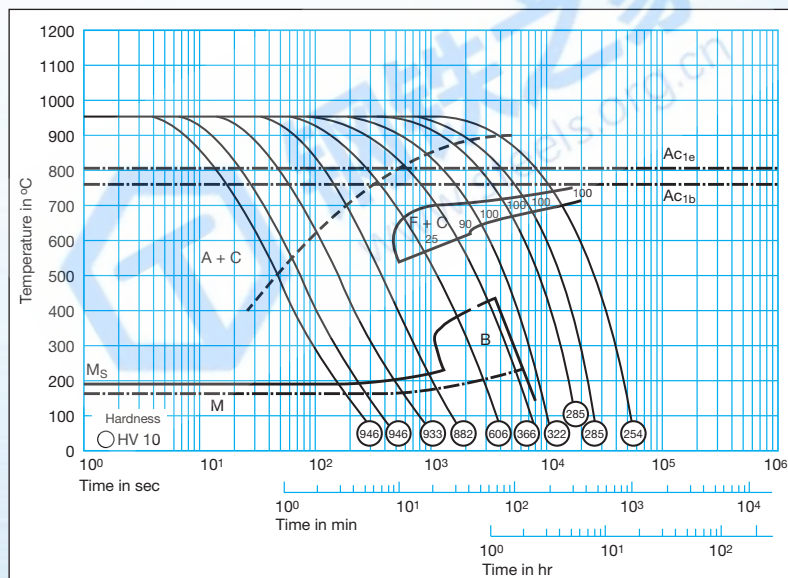
60

58

56

48

Time-temperature-transformation diagram



Tempering diagram

