



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

DIN

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

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

## Rapidur 3243

HS6-5-2-5

C 0.92 Cr 4.10 Mo 5.00 V 1.90 W 6.40 Co 4.80

**Steel properties** The cobalt content in this high-performance high-speed steel results in high red hardness and tempering resistance. As a consequence, this grade is particularly suitable for conditions involving thermal stresses and discontinuous cutting. Under the name Rapidur 3245, AISI M 35 + S and material number 1.3245, this steel grade is supplied with a higher sulphur content (S = 0.10 %).

**Standards** AISI M35 AFNOR Z85WDKCV06-05-05-04-02

**Applications** Heavy-duty milling cutters of all kinds, highly stressed twist drills and taps, profile knives, machining of high-strength materials, broaches.

Heat treatment	Soft annealing °C	Cooling	Hardness HB			
	820 – 860	Furnace	max. 269			
	Stress-relief annealing °C	Cooling				
	630 – 650	Furnace				
	1st pre-heating °C	2nd and 3rd pre-heating °C	Hardening <sup>1</sup> °C	Quenching	Tempering °C	Hardness after tempering HRC
	up to approx. 400 in an air-circulating furnace	a) 850 b) 850 and 1050	1190 – 1230	a) Saltbath, 550 °C b) Oil c) Air	at least three times 540 – 570	64 – 67

<sup>1</sup> For cold-forming tools with a complex geometry, a hardening temperature at the lower end of the quoted range is recommended. The stated hardening temperatures apply to saltbath hardening only. For vacuum hardening, we suggest a reduction of 10 °C to 30 °C.

