



COMPARABLE STANDARD

UNI	EURONORM	W Nr	DIN	AFNOR	AISI/SAE	BS
X205Cr12KU	X210Cr12	1.2080	X210Cr12	Z200C12	D3	BD3

COMPOSITION

C	Si	Mn	Cr
2,05	0,3	0,4	12,0

CHARACTERISTICS OF THE PRODUCT

This steel is characterized by good dimensional stability and deep hardenability. After thermal treatment very high values of compression strength and wear resistance are obtained.

PRODUCT APPLICATIONS

This steel is particularly suitable for the manufacture of both cutting tools and tools for cold-forming, i.e. Shear blades, forming dies, highly stressed blanking punches, drawing tools, thread rolling dies and thread chasers, wear plates, dies for compacting of metal powders and ceramics, moulds for synthetic resins; circular cutters, rolling mill rolls, tools for the cold-extrusion of light alloys, tools for the machining of wood and plastic materials.

DELIVERY CONDITION

Annealed for HB ≤ 250.

HEAT TREATMENT

The steel is supplied in the annealed condition for optimum machinability. After the operations of rough-machining (and possibly stress relieving), it is hardened and tempered for the characteristics required by the application.

Soft annealing: heating to 860 ÷ 900°C, holding at temperature furnace, cooling to 650°C (10°C/hour), then cooling in stationary air.

Stress relieving: after rough-machining, heating to 650 ÷ 680°C, holding at temperature furnace, cooling to 500°C. then cooling in stationary air.

Hardening: preheating at 650 ÷ 700°C, austenitization at 960 ÷ 980°C, air or oil quenching or in thermal bath at 400 ÷ 450°C.

Tempering: heating to 150 ÷ 300°C, holding at temperature.

MECHANICAL CHARACTERISTICS

TEMP °C	150	200	300	400	500
DUREZZA HRC	64	62	60	59	56

