

ROBERT 14 DIN CK 67 FINE CARBON STEEL

CHEMICAL COMPOSITION : EN 10132-4

C	0.65-0.73%
Si	0.15-0.35%
Mn	0.60-0.90%
P	0.025% Max.
S	0.025% Max.
Cr	0.40% Max.
Mo	0.10% Max.
Ni	0.40% Max.

ALLOY DENOMINATIONS :

WN/MATIÈRE DIN N° :	1.1231
ROBERT LAMINAGE :	914 or ROBERT 14
EN :	C 67 S
DIN :	CK 67
AFNOR :	C 68 RR

PHYSICAL PROPERTIES :

Density 20° C	7.86	Kg/dm ³
Melting point	1400-1500	°C
Modulus of elasticity, longitudinal	210	GPa
Thermal Conductivity	45-55	W/M . K
Electrical Conductivity	7.7	M/Ω mm ²
Electrical resistivity	0.13	Ω mm ² /M
Coefficient of linear expansion from 20 up to 300°C	12 x 10 ⁻⁶	°C ⁻¹
IACS (International Annealed Copper Standard)	13	%

WORKABILITY :

Coldworking	Good
Machining	Good
Polishing	Very Good
Annealing temp.	650-750 °C
Non cémentable	

MAIN APPLICATIONS :

Deep moulding, deep drawing
Watch components, dials, hands, tirettes, ponts
Stamping, Folding, Cutting

THERMAL TREATMENT :

Oil soaked 815-845 °C

QUALITY OF EDGES :

Slit edges

CONDITIONING :

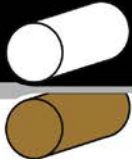
- a) In coils
- b) Cut to length, from 0.5 up to 3 m

AVAILABLE SIZES :

Widths	from 2 up to 350mm
Thickness	from 0.01 up to 2.5mm

TOLERANCES :

Depending on product

**MECHANICAL PROPERTIES :****ROBERT 14 DIN CK 67****ROBERT LAMINAGE NORM**

TEMPER	Hardness vickers	Rm (MPa)
Soft	120-145	380-480
1/4 hard	140-170	480-570
1/2 hard	165-190	550-630
3/4 hard	185-215	610-700
Hard	210-240	680-800
Extra hard	230-260	780-880

EN 10132-4 NORM

TEMPER	Hardness Vickers	Rm (MPa) min max	Rp 0.2 (Mpa)	ELONGATION (%)
Soft cold rolled	205 max	660 max	530 max	13 mini
Hard cold rolled	315 max	1140 max	.	-
Hardened heat treated	370-580	1200-1900	-	-

DIN 17222 NORM

TEMPER	Hardness Vickers	Rm (MPa) min max	Rp 0.2 (Mpa)	ELONGATION (%)
Soft	190 max	640 max	-	12 mini
Hardened heat treated	365-525	1230-1770	-	-