

ROBERT 15 DIN CK 75 FINE CARBON STEEL

CHEMICAL COMPOSITION : EN 10132-4

C	0.70-0.80%
Si	0.15-0.35%
Mn	0.60-0.80%
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° 1.1248
ROBERT LAMINAGE 915 or ROBERT 15
EN : C 75 S
DIN : CK 75
AFNOR : C 75 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 810-840 °C

QUALITY OF EDGES :

Slit edges

CONDITIONING :

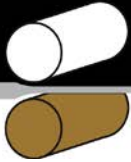
- a) In coils
- b) Cut to length, from 0.5 up to 3 m

AVAILABLE SIZES :

Widths from 2 up to 170 mm
Thickness from 0.01 up to 2.5mm

TOLERANCES :

Depending on product



MECHANICAL PROPERTIES :

ROBERT 15 DIN CK 75

ROBERT LAMINAGE NORM

TEMPER	Hardness vickers	Rm (MPa)
Soft	145-175	480-600
1/4 hard	170-200	580-680
1/2 hard	195-220	660-770
3/4 hard	215-245	750-860
Hard	240-275	840-950
Extra hard	> 270	> 930

EN 10132-4 NORM

TEMPER	Hardness Vickers	Rm (MPa) min max	Rp 0.2 (Mpa)	ELONGATION
Soft cold rolled	210 max	675 max	540 max	12 % mini
Hard cold rolled	320 max	1170 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	390-555	1320-1870	-	-