

Cladding composite **INOX-CU** (Copper Alloy, single-side cladded with Stainless Steel)

Brief description

INOX-CU is a single-side cold rolled cladded material composite combining high thermal conductivity of Copper with corrosion resistance of Stainless Steel to come in contact with food stuffs in cooking pots and frying pans.

Standard - raw materials

Position	Material	Description	Material-No.	Standard
Basis	Copper	CuFe2P	CW 107C	DIN EN 1654
Cladding Layer	Stainless Steel (SS)	X5CrNi18-10	1.4301	DIN EN 10088-2

Chemical composition [%]

Copper	Cu	Fe	P	Zn	Pb				
CuFe2P	Rem	2.1 2.6	0.015 0.15	0.05 0.2	0 0.03				

SS	C	Si	Mn	P	S	Ni	Cr	N	
1.4301	- 0.07	- 1.00	- 2.00	- 0.045	- 0.015	8 10.5	17.00 19.50	- 0.11	

Standard sizes

Strip thickness: 0.5 - 2.5 mm
 Strip width: 20 - 500 mm
 Cut-to-length: 500 - 2.500 mm

Nominal layer thickness: Single-side 10% of strip thickness.

Surface quality

Type / Description	Characteristics	Roughness Ra
regular (roll-brightened)	Metallically clean surface, Minimal defects and scratches are acceptable in a scale not impairing the technical function and appearance of both layers	0.15 – 1.3 µm

Mechanical properties

Cladded Layer SS [%]	Strength condition ¹⁾	Yield Point Rp _{0.2} [MPa]	Tensile strength R _m [MPa]	Elongation A ₈₀ [%]
10	LC	min. 250	270 - 370	min. 30

1) Temper rolled (LC) according to DIN EN 101139

Tolerances

Size limits of thickness	- according to classes A, B of DIN EN 10140
Size limits of width	- according to classes A, B of DIN EN 10140
Size limits of length	- according to classes A, B of DIN EN 10140

Edge type

GK according to DIN EN 10140

Delivering types

Strips, sheets

Ordering example

Every order should be specified in consideration of the following information based on this material data sheet:

Product feature	Example 1	Example 2
Cladding composite	INOX-CU	INOXCU
Cladded layer P(side1-side2) [%]	P(10-00)	P(10-00)
Strength condition	LC	LC
Surface quality	regular	regular
Edge type	GK	GK
Delivering type	Strips	Sheets
Thickness (tolerance) x width (tolerance) x length (tolerance)	1.0 (+/- 0.025) x 100 (+/-0.13) mm	1.50 (+/-0.030) x 420 (+/-0.30) x 1500 (-0/+6) mm

Miscellaneous

All information in this material data sheet is referring to INOX-CU materials based on a standard production.

Further product features on request.