

Nickel Silver Alloy

Typical Applications

- Costume jewellery
- Nameplates
- Surgical instruments
- Light fittings
- Optical fittings
- Tableware
- Door kicking plates
- Trophies

Product Description

NS103 is a wrought nickel silver alloy containing 60-65% copper, with an alpha phase structure. The material is generally suitable for severe forming operations. NS103, which is slightly yellow in colour, offers good corrosion resistance in marine and rural environments. The alloy has good cold working properties but hot working properties are poor. NS103 is used in a diverse range of applications from tableware to surgical instruments.

Weldability

Excellent soldering & brazing. Good oxy-acetylene welding.

Key features

- Suitable for severe forming operations
- Excellent cold working properties
- Poor hot working characteristics
- Good corrosion resistance to rural & marine atmospheres

Corrosion resistance

Good corrosion resistance

Related material specifications

- NS103
- CuNi10Zn27
- CW401J

Availability

Bar, sheet.

Machinability

Good.

Chemical Composition (weight %)

	Cu	Ni	Mn	Zn
min	61.0	9.0		Rem
max	65.0	11.0	0.50	Rem

Mechanical Properties

	Tensile Strength	Proof Stress 0.1%	Elongation on 2in.	Hardness Vickers
Annealed condition	41 Kg/mm ²	15.10 Kg/mm ²	43%	85 HV
Extra hard cold rolled	68 Kg/mm ²	56.10 Kg/mm ²	3%	201 HV

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast **02895 908 897**
 Smiths Biggleswade **01767 604 704**
 Smiths Birmingham **0121 728 4940**
 Smiths Bristol **0117 971 2800**
 Smiths Chelmsford **01245 466 664**
 Smiths Gateshead **0191 469 5428**
 Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**
 Smiths Manchester **0161 794 8650**
 Smiths Norwich **01603 789 878**
 Smiths Nottingham **0115 925 4801**
 Smiths Redruth **01209 315 512**
 Smiths Verwood **01202 824 347**
 Main Office **0845 527 3331**

Quality & Testing:



www.smithmetal.com info@smithmetal.com