TECHNICAL DATA SHEET

TERNALLOY 39 MN

Brazing alloys, Cadmium Free

EN ISO 17672:2016 -
AWS A5.8-92 -
ISO 3677:1997 -
DIN 8513
(EN 1044:1999) -

Nominal Composition [%]

Ag	Cu	Zn	Sn	Si	
39	30	-	-	-	31 (Zn+Ni+Mn)

Technical Data

Melting Point	c.a. 670 - 720 °C
Working Temperature	c.a. 690 °C
Density	8,9 gr/cm3
Tensile strength	250-300 Mpa
Elongation	20%
Electrycal Conductivity	5,70 m/? mm²
Operating temp. of brazed joint	c.a. 700° C

Applications

Silver based alloy with excellent fluidity, capillarity and mechanical resistance. Suitable for brazing cemented carbides and difficult to wet materials such as tungsten, molybdenum, tantalum and chromium.
The presence of Manganese and Nickel increases the corrosion resistance properties of the alloy and guarantees greater mechanical resistance of the brazed joint.
Normally the mechanical resistance of TERNALLOY 39 MN exceeds that of the base metals, even if this is however influenced by some elements of the brazing process.
If not used in a reducing atmosphere, it requires the use of a specific flux.

Suggested Flux

F9 PS - F4 PS

Base Metals

Carbon steels and steel alloys. Also tungsten and molybdenum, tantalum and chromium;

Heat Sources

Flame or induction

Bare rods	Fluxcoated	Wire < Ø 1,0	Wire > Ø 1,0	Foil	Preforms	Paste
X	-	X	X	X	X	-

Our information about our products and equipment as well as our systems and procedures are based on comprehensive research and application technological experience. We communicate these results, but take no liability for respective single contracts that are exceeding thereof. We reserve the right to make technical changes in the process of product development in spoken and written terms to the best of our knowledge. Only as an exception do we give guarantees for appearance and workmanship or durability that has been specifically documented in an individual contract. Furthermore, our application technology services are available at your convenience for more detailed consultation such as the involvement in solving manufacturing and application technology problems. This does not however, release the user from their own responsibility for checking the input and recommendations we give for their own use prior to using that input or recommendation. This is especially applicable for foreign deliveries. This also applies to the trade mark rights of third parties, for applications and procedures that are not specifically given by us. In the event of damage or loss our liability is limited to indemnification of the same admeasurements as is foreseen in our general terms of sales and delivery in reference to deficiencies in quality.