

# TVH® TV-ETP (Cu-ETP)

Density 8,92 g/cm<sup>3</sup> Electrolytic copper

### **Specifications:**

TRAID	TVH®	TV-ETP
ISO		Cu-ETP
USA	UNS	C 11000

#### **Nominal composition:**

Cu	≥ 99,90 %
Others combined	0,0 - 0,1 %

NOMINAL PROPERTIES	UNIT	CONTINUOUS CAST		
Melting point	ōС	1083		
Thermal Expansion	10-6 /K	16,9		
Modulus of elasticity E	GPa	117		
Thermal conductivity	W/m.K	391,1		
Electrical resistivity	IACS	100 %		
Electrical resistivity	10-6 Ω .m	0 <mark>,0</mark> 171		
Proof stress	MPa	50-340		
Tensile strength Rm	MPa	200-400		
Elongation A <sub>5</sub>	%	5-50		
Vickers Hardness	HV	40 to 120		

## **MAIN CHARACTERISTICS**

Corrosion resistance: Either good or excellent in most environments and atmospheres other than those containing ammonia ions. Cold working: Can be readily cold worked. When in the annealed condition, it can be readily bent to shape and has excellent ductility. Hot working: Very readily hot worked.

Heat treatment: Solution treatment or annealing can be done by rapid cooling after heating to 370-650 C.

Machinability: Material has a machinability rating of 20 where brass TVH  $^{\! \circ}$  TV39 is 100.

Weldability: Soldering of TVH® TV-ETP is excellent. Brazability and butt welding are also rated as good. Gas shielded arc welding has a fair rating. All other welding processes are not recommended.

#### **INDUSTRY APPLICATIONS**

General engineering Electronics Busbars Automotive Domestic appliances Cold forming components

Notice: The information given was made with our knowledge indicating our product's possible applications. Existing commercial patents must be observed. These values represent averages taken from samples, so we reserve the right of technical alterations. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at <a href="https://www.traidvillarroya.com">www.traidvillarroya.com</a>. Traidamid, TKG and TVH as well as their logos are registered trademarks of the Traid Villarroya group of companies, in Europe and other countries.