

NON SPARKING SAFETY TOOLS

Designed and manufactured according to the standard requirements indicated by the Certifying Authority.

The samples have been tested and have reached a positive outcome in compliance with the standards indicated by the designated Authority in relation to non sparking tools.

They are specifically for safe work in environments with a potential risk of explosion, where flammable liquids or gases are used, or for applications that require the use of perfectly non-magnetic tools, with high resistance against corrosion.

These tools avoid the possibility of generating any sparks created while using the tool: their special composition in Copper-Beryllium (Cu-Be) or aluminium-copper (Al-Cu) guarantees the perfect combination between non sparking characteristics and mechanical resistance.

This special alloy, used throughout the new non sparking range, represents the best possible choice for this type of application, and thanks to the knowledge and experience that has followed our company for years, each tool is studied and researched even in terms of ergonomics and design, in order to achieve the best possible quality.

For every single tool, high quality standards are guaranteed by means of scrupulous control of the material using accurate chemical-physical analyses to ascertain perfect suitability, and through visual inspection of the tool's functional characteristics.

The **FABC^{TOOLS}** non sparking tools ensure the best level of performance, guaranteeing safety requirements in various areas of application, such as: petrochemical refineries, oil tankers, chemical industries, gas and fuel stations and depots, powder storage, mines, distilleries, flour and grain silos, aerospace industries, navy, pharmaceutical industries, and magnetic applications.

They are also particularly useful in work in contact with fresh or salt water, in alkaline solutions and some acid solutions, thanks to their particular resistance to oxidation and corrosion.



Technical specifications of the construction material for **FABC^{TOOLS}** non sparking tools:

Copper-Beryllium (Cu-Be)

Composition: Be 1,5 - 2,3 % - Co+Ni min. 0,2 % - Co+Ni+Fe max. 1,2 % - Cu to compensation
 Hardness: 283 - 365 Brinell
 Yield point: 840 - 880 N/mm²
 Expansion coefficient: 0,000012%
 Extensibility: 1,0%

Resistance to traction: 1117 ~ 1326 N/mm²
 Magnetism: 0
 Specific weight: 8,60
 Resistivity: 8 ~ 6 Ω

Aluminium-Copper (Al-Cu)

Composition: Al 10% - 12% - Ni 4,6% - Fe+Mn <5,8% - Cu to compensation
 Hardness: 229 ÷ 291 Brinell
 Yield point: 450 ÷ 550 N/mm²
 Expansion coefficient: 0,000015%
 Extensibility: 5,0%

Resistance to traction: 782 ~ 989 N/mm²
 Magnetism: 1,2
 Specific weight: 8,10
 Resistivity: 8 ~ 12 Ω