

Flat bars and bars



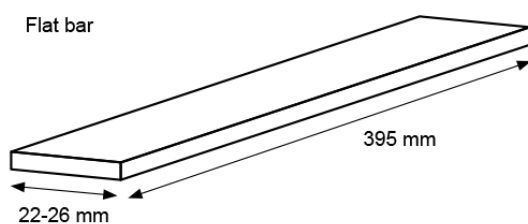
Flat bars and bars are made from pure metals or alloys and are available in different types of packaging. These products are mainly used in building, the automotive industry, the electrical and electromechanical industries, electronics and white metal casting. They can be used alone to fill and/or top up tinning baths. They are also used for traditional brazing. In this case, they are combined with a flux so that the parts can be pickled before soldering. The METACONCEPT Group collects used baths, off-cuts, scraps and white metal oxides. [Contact our recycling department](#) to find out more.

Characteristics

Item no.	Designation	Composition	Dimensions	Density g/cm ³	Solidus / Liquidus	Approximate weight	Packaging
FE055013	Flat bar META 30	Sn30 - Pb70	26 x 22 x 9 x 395 mm	10.13	183°C - 250°C	800 g	25 kg bundle
FE054993	Flat bar META 33	Sn33 - Pb67	26 x 22 x 9 x 395 mm	10.01	183°C - 243°C	800 g	25 kg bundle
FE054992	Flat bar META-ZINC	Sn - Pb + additives	26 x 22 x 9 x 395 mm	10.14	183°C - 245°C	800 g	25 kg bundle
FE055016	Flat bar META 40	Sn40 - Pb60	26 x 22 x 9 x 395 mm	9.72	183°C - 235°C	800 g	25 kg bundle
FE028929	Pure lead flat bar	Pb100	26 x 22 x 9 x 395 mm	11.35	327°C	800 g	25 kg bundle
FE055015	Flat bar META 50	Sn50-Pb50	26 x 22 x 9 x 395 mm	9,32	183° - 212°	800 g	25 kg bundle
FE035273	Pure tin flat bar *	Sn100	26 x 22 x 9 x 395 mm	7.28	232°C	800 g	20 kg bundle
FE051719	Alloy bar	Sn - Pb - Bi	26 x 22 x 9 x 395 mm	10.12	183°C - 253°C	1 kg	25 kg bundle
MF051688	Bar Sn60 Pb40	Sn60 - Pb40	380 x 28 x 10 mm	8.9	183°C - 190°C	1 kg	20 kg box
FE051726	Bar SAC305*	Sn96.5 - Ag3 - Cu0.5	20 x 20 x 295 mm	7.32	217°C - 219°C	1 kg	20 kg box
FE051691	Bar *	Sn96.5 - Ag3.5	20 x 20 x 295 mm	7.38	221°C - 230°C	1 kg	20 kg box
FE052236	Bar *	Sn99.3 - Cu0.7	20 x 20 x 295 mm	7.29	230°C - 240°C	1 kg	20 kg box

(*) Lead-free alloys - European standard no. 2000 / 53 / CE

Dimensions and weights are always given for informational purposes only and may vary depending on the production run.



Fluxes for flat bars and bars

Item no.	Designation	Packaging	Comments
DE031855	Flux PC1 (liquid) - 250 ml	Bottle with applicator brush	Together with META 28,30,33,40,50 and META-ZINC flat bars
EO700960	Flux ZN11 (liquid) - 1 l	Can	Together with META 28,30,33,40,50 and META-ZINC rods
CO011269	Flux Radsol (liquid) - 25 l	Can	Together with "EN alloy" bar
CO010454	Flux Alpha A83 - 25 l	Can	For electronic and industrial electrical applications

Applications

Designation	Uses
Sn30 - Sn33 - Sn40 and META-ZINC flat bars	Zinc metal work, coverings, plumbing, tinning baths
Pure lead flat bars	Ballasts, munitions
Pure tin flat bars	Surface treatments including tinning cookware, brassware.
"EN" bars	Dip tinning for baths. This alloy has been developed for high temperature applications such as soldering materials insulated with a polyurethane layer and for which a high temperature is essential for burning off the insulating layer and enabling the tinning process. Very slight oxidation of the bath
Sn60 bars	Tinning and industrial, electrical and electromechanical assemblies.
SAC305, Sn96.5 - Ag3.5 and Sn99.3 - Cu0.7 bars	Lead-free alloys specifically for use in tinning baths for copper wires and electronic components. For feeding wave soldering machines For industrial electrical and electromechanical applications.

Implementation

The product safety information sheet below is available upon request from the METACONCEPT Group.

Solder bars are generally used to fill baths for assembling parts via dipping or passing them under a wave (performed on the surface of the bath). In all cases, the parts being assembled must be pre-treated (cleaned + fluxed).

The temperature of the bath must be brought to around 20°C above the liquidus temperature.

The T010-type deoxidising powder traps oxides that may be present on the surface of the bath.

Covering the bath with grease also helps to prevent the appearance of oxides.

Flat bars can be used as described above and, more generally, in manual procedures using a propane or oxy-acetylene blow torch or a soldering iron.

The parts must be brought to a temperature of around 15°C to 20°C above liquidus.

Melt the filler metal onto the parts being assembled to form a regular bead.

Allow the parts to cool without moving them. When the parts have returned to room temperature, brush the soldering beads using a metallic brush. If necessary, clean the assembly with fresh water or water with a touch of citric or formic acid (1 to 2 %).

Precautions for use

To prevent burns caused by the molten metal, it is advisable to wear a protective apron, shoes, gloves, helmet and glasses.
Do not smoke at the workstation.
The workstation must be well ventilated.
Wash your hands when leaving the workstation.

Comments:

Always use a flux suited to the intended use. [Contact our technical department](#) to ascertain which product is most suited to your application.

All of the information contained in this document is provided for informational purposes only and the METACONCEPT Group will not be held liable for it.