In the suggested method of brazing Al, the protective coating is applied to Al cleaned from the oxide film, and the coating is removed at the moment of solder application. The cleaning of Al from oxides is carried out in a 10% NaOH solution. Al is covered then with an amalgam layer, and for this purpose it is dipped into Hg placed immediately under NaOH solution. The amalgam protects the clean Al surface from oxidation. When Al covered with amalgam is immersed into the solder fusion, the amalgam evaporates and a strong metallic bond of Al with the solder is formed. When a quick solder is used, the recommended fusion temperature is 280 - 320°C. When large pieces are brazed, NaOH solution is applied to the joint, then Hg is applied from the solution and after the amalgam has been formed, the solder is applied by any known method. The solvent rests are removed with 10% HNO₃.

[Abstractor's note: Complete translation]