



*Proceedings of Iran International Aluminium Conference (IIAC2018)
April 24-25, 2018, Tehran, I.R. Iran*

How to increase anodizing speed, how to provide better quality and how to reduce costs in conventional and hard anodizing

Walter Dalla Barba, Marcello Rossi
Italtecno Srl, Via G. Marinuzzi 38, 41122 Modena, Italy

Abstract: Hardfast 1020 T consists in a special anodizing process that is obtained with impulse and frequency currents, which are non-conventional or used in known processes obtained with pulse rectifiers with hardware and software that was studied for the described purposes after years of research and experimentation by Italtecno in collaboration with Qualital Servizi laboratories of Novara. These current rectifiers are called "HARDFAST RECTIFIER".

The Hardfast anodizing technology uses a new generation additive (environmental-friendly and non-toxic) called Hardfast Add and it is essential to obtain the qualitative characteristics required by the anodic oxide produced with the Hardfast 1020 T process.

The process is completed by the mixing and cooling system of the anodizing bath. The system is composed of a refrigerator, heating exchange system and a special diffuser circuit type "ITALTECNO EDUCATORS" in order to obtain a constant temperature of the bath with an appropriate mixing of the solution for complete uniformity and quality of the anodic oxide.

Keywords: Hardfast; Rectifier; Additive