Chemical nickel coating as a functional protection of metallic surfaces

Reference: TD-DE-1021

TECHNOLOGY DESCRIPTION

In the aerospace industry, surfaces of certain components are coated with electroless nickel. The surface finishing process serves to guarantee the electromagnetic compatibility (EMC), for corrosion and wear protection and to prevent deposits (insulating effect). Almost every metallic base material can be coated with a strong bond, e.g.:

- Steel: hardened or unhardened; low or high alloy
- Non-ferrous metals: aluminium, copper and copper alloys

INNOVATIVE ASPECTS

- With a max. coating temperature of 90°C, the coating process runs completely without surface distortion.
- Almost any metallic base material can be coated without affecting its structure or other properties.
- The surfaces are preserved and there are no edge structures.
- Layer thickness fluctuations are around 4% of the layer thickness. The layer thickness can be freely selected for each application.
- Decoating is possible (chemically).
- All environmental requirements are met.

TECHNOLOGY READINESS (in space application)

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COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS #coating #protect #prevent #corrosion #wear #metallic base

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