

Nickel Additive ICA

Iron impurities in nickel electrolytes lead to faults in deposition as well as due to the precipitation of iron hydrate to clogging of filter and anode bags. Particularly affected are nickel electrolytes which are primarily used for the electroplating of steel and especially for tube material. To avoid this kind of faults, bright nickel electrolytes are often operated in the low pH ranges where iron is precipitated less quickly. Because the highest capacity in levelling of bright nickel electrolytes can only be achieved at higher pH values a decrease in the efficiency is the consequence in many cases.

By the use of Nickel Additive ICA, iron, which exists as a impurity, can be co-deposited during the nickel plating process. At the same time the iron(III) compounds are reduced in the divalent form so the electrolytes clean themselves during operation. The co-deposition of iron in the nickel coating isn't detrimental to the visual or corrosion-technical effects. The percentage of the co-deposited iron in the nickel deposition is < 1 %.

Bright nickel electrolytes operated with Nickel Additive ICA, can therefore also be operated at higher pH values, this ensures that a constant efficiency is achieved all the time. Annoying side effects like such as frequent changes of the filters are eliminated at the same time.

The information in this data sheet is based on laboratory as well as practical experience. Figures quoted for operating limits and replenishment quantities are for guidance. Actual values necessary will depend on the components being plated (material and geometry), their application and plating plant conditions.

Important:

Please read this instruction carefully prior to the use of the process and carefully follow all the parameters that have a direct influence on the operation. We reserve the right to make technical changes. In the interest of safety, please pay attention to the hazard warnings on the labels of the containers. The minimum shelf life of the products is included on the labels and is also available in the appropriate Quality Assurance (QA03).

The current IMDS number of the layer deposited from the process is available on the internet at www.schloetter.com/downloads.

For the storage of chemical products the TRGS 510 must be followed.

If the additives used in this process contain a SVHC-substance, then this will be specified in the corresponding Material Safety Data Sheet, section 15.

