



## A new era for conventional plating on plastics

### Setting new standards

Right after its first appearance on the international market, Atotech Adhemax<sup>®</sup> introduced a new era for conventional plating on plastics. Nowadays, Adhemax<sup>®</sup> is still setting new standards, with new highly selective activators and new environmentally friendlier electroless processes in plating on plastic processes for decorative applications.



### Meeting the most demanding requirements

Being capable of handling most plateable ABS, PP and ABS/PC blends, Adhemax<sup>®</sup> is a versatile, high quality process with outstanding selective plating properties. Compared to other plating on plastic processes on the market, Adhemax<sup>®</sup> is extremely stable and offers excellent selectivity on 2K components. It does not produce precipitations in the concentrates and working solutions and eliminates rack metallization.

### Stable and consistent processing

Adhemax<sup>®</sup> is designed for automatic lines, it allows for stable and consistent processing of a great diversity of plastic components with an extended solution lifetime.



### Features and benefits

- Excellent stability – no precipitation in concentrates and working solutions
- Wide working window and versatile process used for ABS, ABS/PC, etc.
- Suitable for plating on 2K components
- Eliminates rack metallization
- Enhanced tolerance to variations in rack coatings
- Extended solution lifetime, less maintenance
- Designed for automatic lines
- Stable and consistent processing

# The innovation for conventional pretreatment of plastics

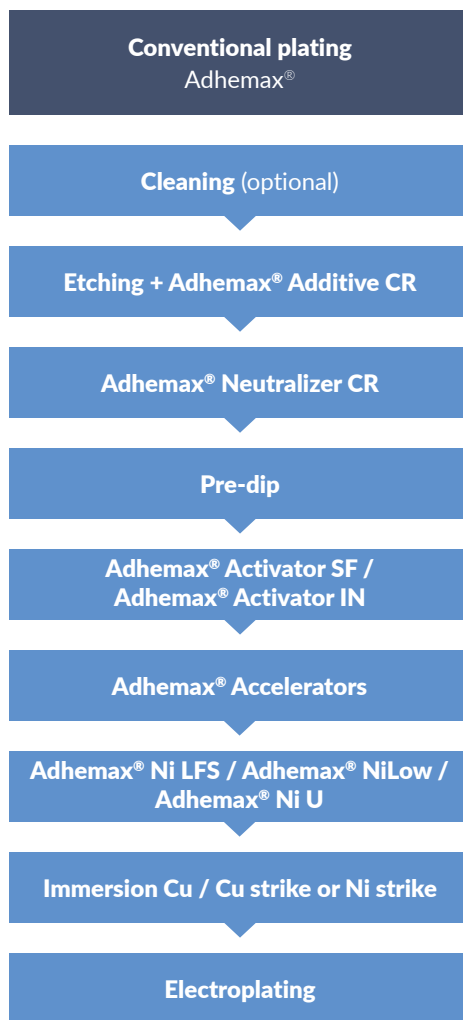


Adhemax® is a versatile process meeting most demanding requirements.



**Adhemax® Ni U**  
Adhemax® Ni U is a stable electroless nickel aimed at reducing maintenance operations, while offering excellent covering properties.

## Adhemax® process sequence



## Electroplating

Atotech offers greatly compatible acid copper systems, especially developed for plating on plastics.

- Cupracid® family (dye-based)
- CuFlex® family (dye-free)

## Step 1: Etching

The etching sets the scene for quality processing of plastic materials. The parameters of the solution are set according to the plastic part and as an option, Adhemax® Additive CR can be used to improve etching and Pd adsorption on complex-shaped parts.

## Step 2: Neutralization

Adhemax® Neutralizer CR is neutralizing any Cr(VI) left from the etching, extending the lifetime of the activator.

## Step 3: Activation

As a complement to the standard Adhemax® Activator SF, a well trusted high performing activator, capable to handle most platable plastic substrates, the Adhemax® Activator IN adds a new dimension with a special focus on selectivity and the processing of 2K components.

## Step 4: Acceleration

Adhemax® Accelerators efficiently expose the Pd that works as a catalyst for the subsequent electroless step.

## Step 5: Electroless nickel plating

Electroless nickel provides the conductive layer necessary for the electroplating of plastics. Apart from the standard Adhemax® Ni LFS, our lead-free and boric acid-free Adhemax® Ni U or our lead, boric and ammonia-free Adhemax® NiLow are used to produce uniform electroless nickel layers.

