

EDEN[®]

Electrodialysis system for electroless nickel



General Metal Finishing

Electroless nickel

atotech.com



Boost electroless nickel plating productivity



EDEN complies with the high quality requirements of the automotive industry

The EDEN system

The EDEN (electrodialysis for electroless nickel) system is MKS' Atotech answer to all concerns about conventional electroless nickel operation.

Combining process chemistry and equipment, EDEN regenerates the electroless nickel bath by removing by-products and keeping the concentrations of all ingredients within a defined range. This allows constant deposit quality over a potentially unlimited bath life. In addition, customers benefit from reduced chemical usage and waste.

Integrated, highly specialized production system



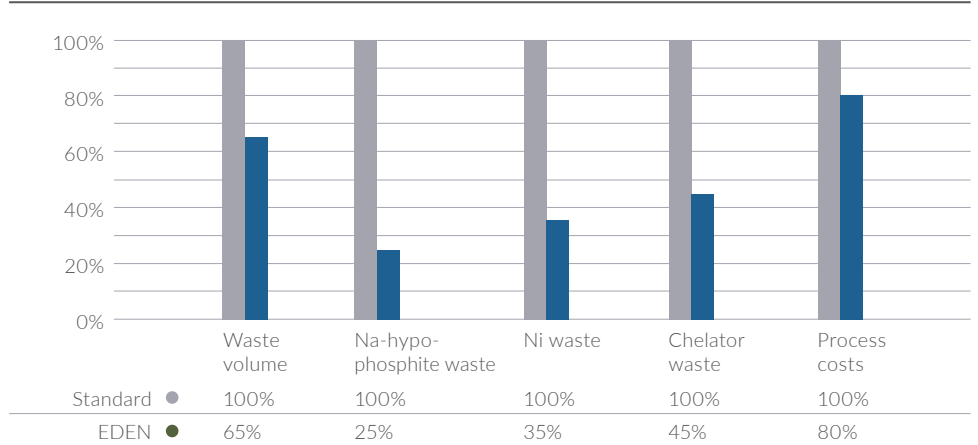
Figure 1:
Bath module of EDEN 3000
Figure 2:
Touch screen of EDEN 3000



ELV and RoHS-compliant system chemistry

	Phosphorus content	Operating temperature	pH	Plating rate (µm/h)	Hardness as plated (HV _{0.1})	Appearance
EDEN 113	8 - 10%	88 - 92 °C	4.8 - 5.3	11 - 18	550 - 650	Semi-bright
EDEN 115	10 - 12%	86 - 91 °C	4.6 - 5.0	8 - 12	520 - 620	Bright

EDEN vs. standard operation for high P electroless nickel application



Features and benefits

- Theoretical unlimited bath-life extension
- Consistent operating parameters
- Higher process stability
- Higher bath loading
- Higher productivity
- Consistent high quality coating
- Easy automation, flexible installation
- Suitable for ISO 9000/14000 operation

