ELSYCA Plating Manager

M-VISION electroplating simulation



MacDermid Enthrone Industrial Solutions and Elsyca, working together to provide you with the best platform for analyzing the production performance and quality of your electroplating processes. Simulations are carried out using a virtual mock-up of your inhouse plating line, detailed layer thickness and quality results. These are available for every part on the rack and for every plating step.

The M-Vision graphical simulation is a state-of-the-art platform that simulates the electroplating process and provides detailed information on the layer thickness distribution over the various parts on the rack while highlighting potential problem zones. Alternative part orientations and/or rack configurations can now be calculated in only few mouse clicks. Moreover, additional tooling can be designed and its effect quickly verified. Once the quality is optimized the rack and part lay-out is available as CAD based data to start the construction of the fit-for-purpose racks... more efficient!

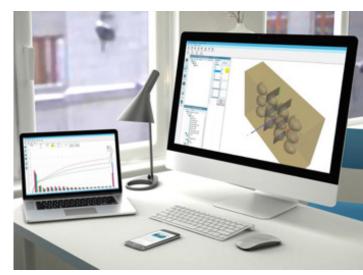
Key benefits

Quality

Potential production issues are highlighted for the various plating steps. The engineer can adjust the rack load and design active or passive tooling in order to optimize their plating processes. The quality manager can also understand which critical parts may need testing.

Time-to-market

You can simulate the plating process even before the first physical part enters your facility. The analysis can start as soon as the part's CAD data is available, providing extra time to design the optimum rack lay-out and have them ready by the time production actually begins.



M-Vision
PlatingManager
is ingenious in its
simplicity. As a user,
you load the CAD
model of the part,
set the process
parameters and press
the simulation button.

It is really that simple!



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Knowledge

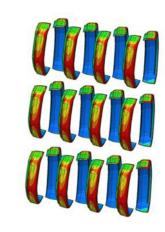
The M-Vision PlatingManager is an investment in knowledge as it helps to build and retain critical company know-how.

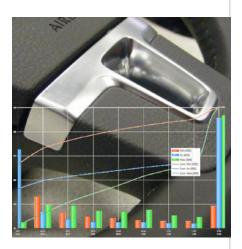
Customer satisfaction

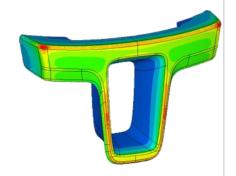
Reduced time-to-market, increased capacity, less scrap, improved quality... it strengthens your company image and helps building excellent customer relations.

Process features

- Your real-life plating line is pre- configured in adjested with MacDermid Enthone and Elsyca
- No more CAD repair or need for a CAD system on your computer: ask
 your colleagues from the CAD department to export the CAD data of your
 parts into STL format (available in every CAD package) and use it for
 simulations in the M-Vision Plating Manager
- User-friendly positioning and automated patterning of parts on the rack; the consistency of the plating package is verified upfront
- Subsequent plating steps (e.g. copper strike, acid copper, semi-bright nickel, bright nickel, micro-porous nickel and chromium plating) can be modeled. Both individual and cumulative results are available
- Robust and fast simulation of current density and layer thickness distribution, all potential quality problems are indicated, 2-D charts and 3-D color plots available
- Easy 'what-if' scenarios to verify the impact of tooling (shielding, auxillary anodes, current robbers), different part load (and thus production capacity) and change of production settings
- Resulting rack/part lay-out is available in STL format for detailed construction of fit-for-purpose racks. Production can now start as soon as physical parts arrive! No need for expensive trial testing and tuning of rack design
- Library of electrolyte data is included
- Automated yet customizable reporting in support of ISO quality processes
- Supports Elsyca XPlorer, the visualization and postprocessing environment that allows sharing 3D simulation results with other stakeholders









For more information, please contact us at: **Email:** ISenquiries@macdermidenthone.com macdermidenthone.com/industrial © 2018 MacDermid Enthone