COPRA[®] FEA RF 2021.2



COPRA[®] Finite Element Analysis for Roll Forming



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COPRA[®] FEA RF

NEW

Professional

Version

What's new in version 2021.2

With over 25 years of FEA simulation experience in research and industry our specialists have contributed to the COPRA[®] FEA RF continuous improvement. The target of the new 2021.2 version is to:

- Increase software capabilities
- Enhance software performance and minimize calculation time
- Enlarge the number of forming processes that can be simulated

Advanced Restart from a Symmetrical to an Asymmetrical Model:

Symmetrical parts frequently require asymmetrical forming strategies - e.g. to form parts with difficult accessibility areas - and asymmetrical parts are sometimes formed from symmetrical profiles, which only become asymmetrical in a later station.

In order to accelerate such numerical analysis, COPRA[®] FEA RF 2021.2 introduces the possibility to create advanced restarts from a symmetrical to an asymmetrical model. This feature allows users to easily simulate only half of the model until the station where the forming stops being symmetrical, saving calculation time. From that point on the simulation can be restarted, the mesh and results are automatically mirrored and the asymmetrical simulation continues.

Additionally, often roll forming is not the final forming step but rather an intermediate one. Restarting from a symmetrical to an asymmetrical model helps to create a model for subsequent forming operations.





NEW

Wire Drawing Process Simulation using COPRA® FEA RF WireRolling:

Wire drawing is a metalworking process used to modify the cross-section of a wire by pulling it through a single, or a series of drawing dies. Wire drawn products can be either round or shaped and can be found in a variety of applications, such as electrical wiring, cables, tension-loaded structural components, springs, paper clips.

With the new version of COPRA[®] FEA RF WireRolling users have the possibility to simulate wire drawing in a fast and simplified numerical approach as well as wire rolling. This new feature enlarges the portfolio of manufacturing processes that can be simulated using software from the COPRA[®] product family.



Additional Developments and Notes

- + Improved visualization of rolls in COPRA[®] FEA RF WireRolling
- + Marc/Mentat 2021.3.1 included (also for COPRA® FEA RF WireRolling)
- + General usability improvements



