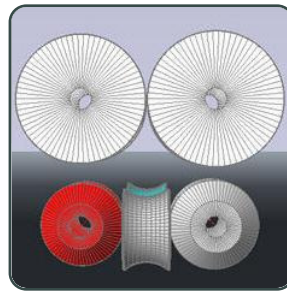
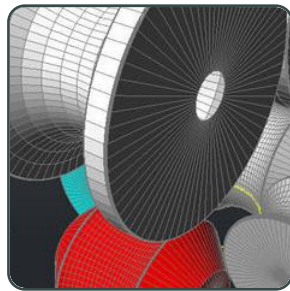
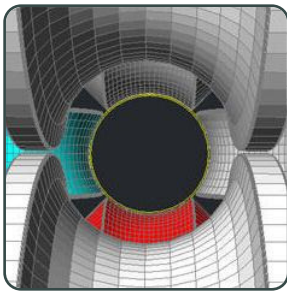


COPRA® RF 2011



Release Notes



2011

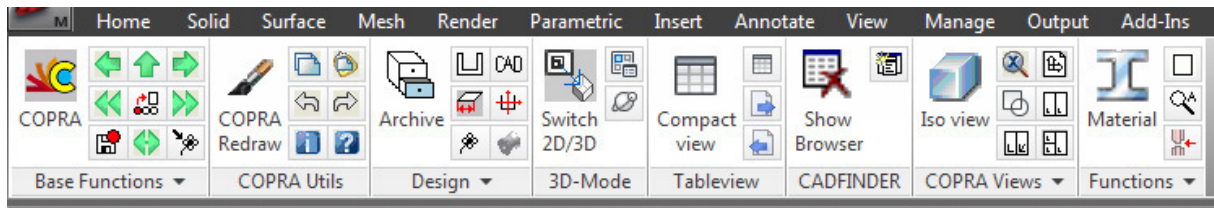
...COPRA® RF 2011
State-of-the-Art
in Design and
Simulation

Trapezoidal Sections
Round & Rectangular Tubes
Shaped Tubes and Drawing Rings
Two-Stage-Simulation with FTM & FEM
Roll Design & Roller Technology
DBMS (Roll Database)
Open & Closed Sections
Flower Technology



New User Interface in COPRA® RF 2011

Besides the known user environment COPRA® RF version 2011 now also supports the new ribbon technology. To improve the handling of the software a completely new system was introduced helping the user to find the respective commands quicker and easier.



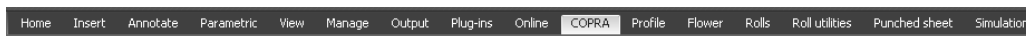
„COPRA® Ribbons“

On the left side of the ribbons the most common functions of COPRA® RF are located: initialise COPRA®, saving a pass, the COPRA® redraw command, scanning through the flower and roll design (with the green arrows).

Selecting a module like “Flower” in the menu bar will show all available commands for the flower design. The size of the mostly used commands is bigger so that these can be found easier.

There are 4 view modes for ribbons:

- Minimizes to tabs



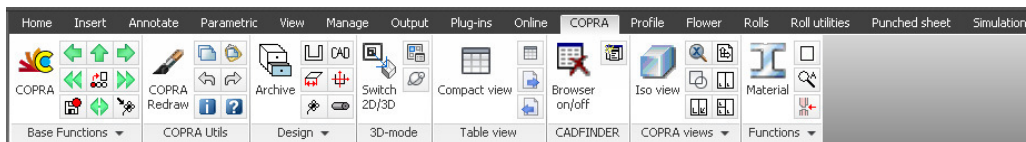
- Minimized to panel title



- Minimized to panel buttons

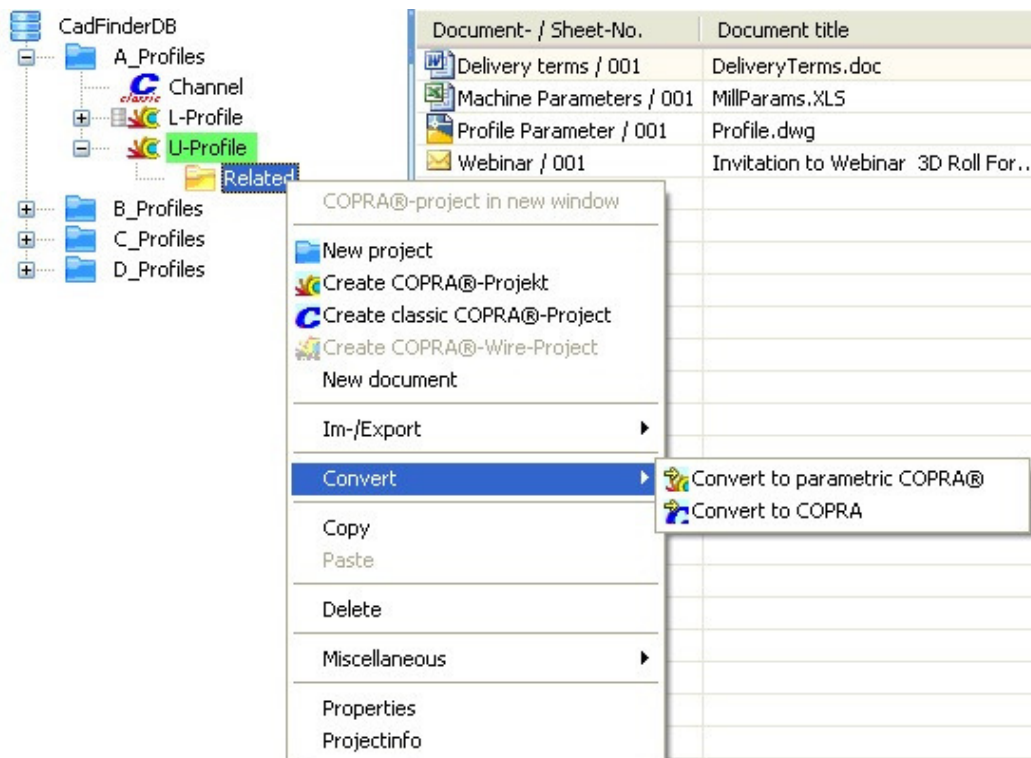


- Full ribbons



New CADFinder Look and Feel

- Extended multi user ability: locking of projects that are currently handled by other users
- Simplified and condensed dialogues (less mouse clicks necessary for the same task)
- Uses the database engine of the current Microsoft® SQL Server® 2008
- New icons show project information and status at a glance
- Reorganised context menus



„CADFinder Context Menu“

Complete integration of COPRA® RF SpreadSheet

Parametric module for flower design in COPRA® RF

In COPRA® RF 2005 a parametric module for flower design was introduced for the first time known as COPRA® SpreadSheet (CSP). Until the 2009 version of COPRA® RF (CRF) this was a separate module, connected via an interface and initialized manually. data M repeatedly pointed out that the aim is to integrate CSP entirely in COPRA® RF: “CSP should no longer be a separate program, a parallel running application, but instead an additional view on one and the same database.”

In COPRA® RF 2011 data M has come a lot closer to achieving this aim. COPRA® RF features a new type of project that offers precisely this functionality.

Innovations and technical integration:

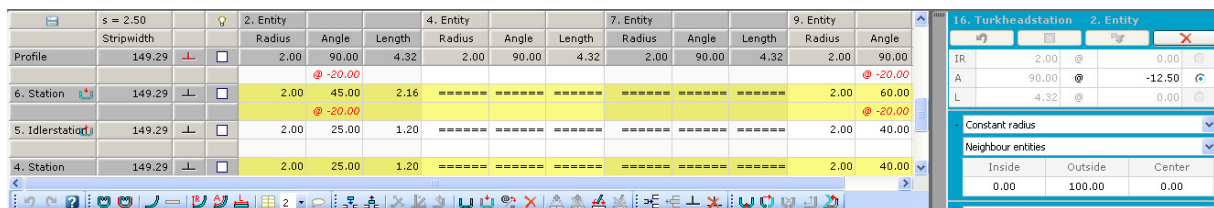
- No parallel active processes any more
- No more parallel databases; interface functions such as initialize and import are no longer required
- Parameterization is available during the whole flower design process; no explicit initialisation is required
- All existing projects can be converted into the new project type automatically; that means parameterization is available even for old projects
- All well known CRF and all CSP unfolding tools remain available
- All section and flower design functions are now working as parametric feature

User interface:

- Fully integrated in AutoCAD
- Output window is the AutoCAD document window

The SpreadSheet-Views

- Tableview
- Elementview



| | s = 2.50 | | 2. Entity | 4. Entity | 7. Entity | 9. Entity | | | | | |
|-----------------|------------|---|-----------|-----------|-----------|-----------|-------|--------|--------|-------|--------|
| Profile | Stripwidth | | Radius | Angle | Length | Radius | Angle | Length | Radius | Angle | Length |
| | 149.29 | ⊥ | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 |
| 6. Station | 149.29 | ⊥ | 2.00 | 45.00 | 2.16 | | | | 2.00 | 60.00 | |
| 5. Idlerstation | 149.29 | ⊥ | 2.00 | 25.00 | 1.20 | | | | 2.00 | 40.00 | |
| 4. Station | 149.29 | ⊥ | 2.00 | 25.00 | 1.20 | | | | 2.00 | 40.00 | |

| 16. Turnheadstation | | 2. Entity | |
|---------------------|-------|-----------|--------|
| IR | 2.00 | @ | 0.00 |
| A | 90.00 | @ | -12.50 |
| L | 4.32 | @ | 0.00 |

| Constant radius | | |
|--------------------|---------|--------|
| Neighbour entities | | |
| Inside | Outside | Center |
| 0.00 | 100.00 | 0.00 |

Contextmenus

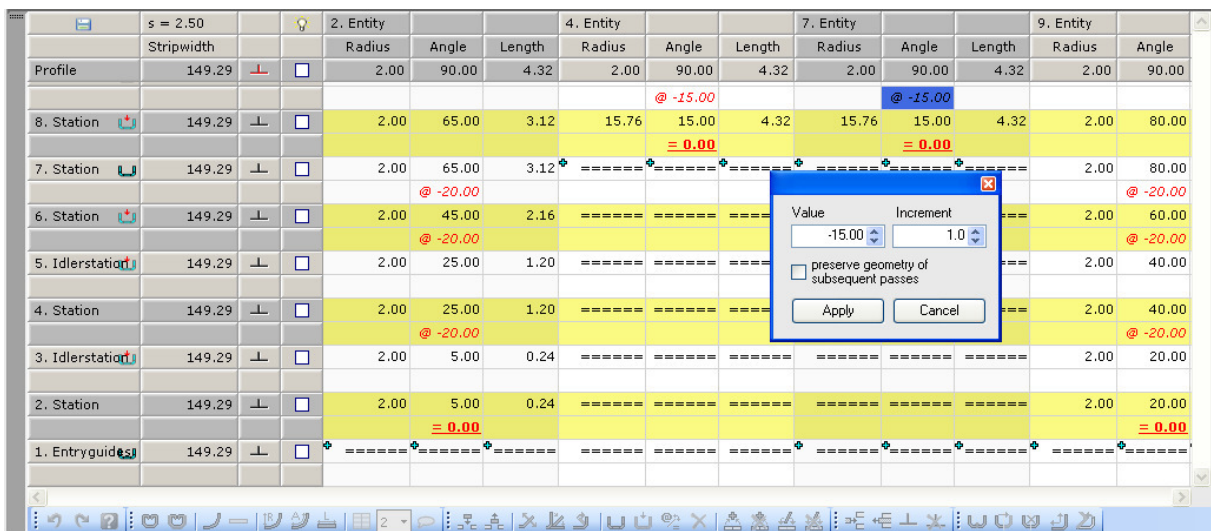
- Profile
- Passes
- Elements
- Flower



| | s = 2.50 | 2. Entity | 4. Entity | 7. Entity | 9. Entity | | | | | | | |
|--------------|------------|-----------|-----------|-----------|-----------|-------|--------|--------|-------|--------|--------|-------|
| Profile | Stripwidth | Radius | Angle | Length | Radius | Angle | Length | Radius | Angle | Length | Radius | Angle |
| | 149.29 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 |
| 8. Station | | 2.00 | 65.00 | 3.12 | 15.76 | 15.00 | 4.32 | 15.76 | 15.00 | 4.32 | 2.00 | 80.00 |
| 7. Station | | 2.00 | 65.00 | 3.12 | 15.76 | 15.00 | 4.32 | 15.76 | 15.00 | 4.32 | 2.00 | 80.00 |
| 6. Station | | 2.00 | 45.00 | 2.16 | | | | | | | 2.00 | 60.00 |
| 5. Idlerstat | | 2.00 | 25.00 | 1.20 | | | | | | | 2.00 | 40.00 |
| 4. Station | | 2.00 | 25.00 | 1.20 | | | | | | | 2.00 | 40.00 |
| 3. Idlerstat | | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |
| 2. Station | | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |
| 1. Entrygui | | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |

Special commands

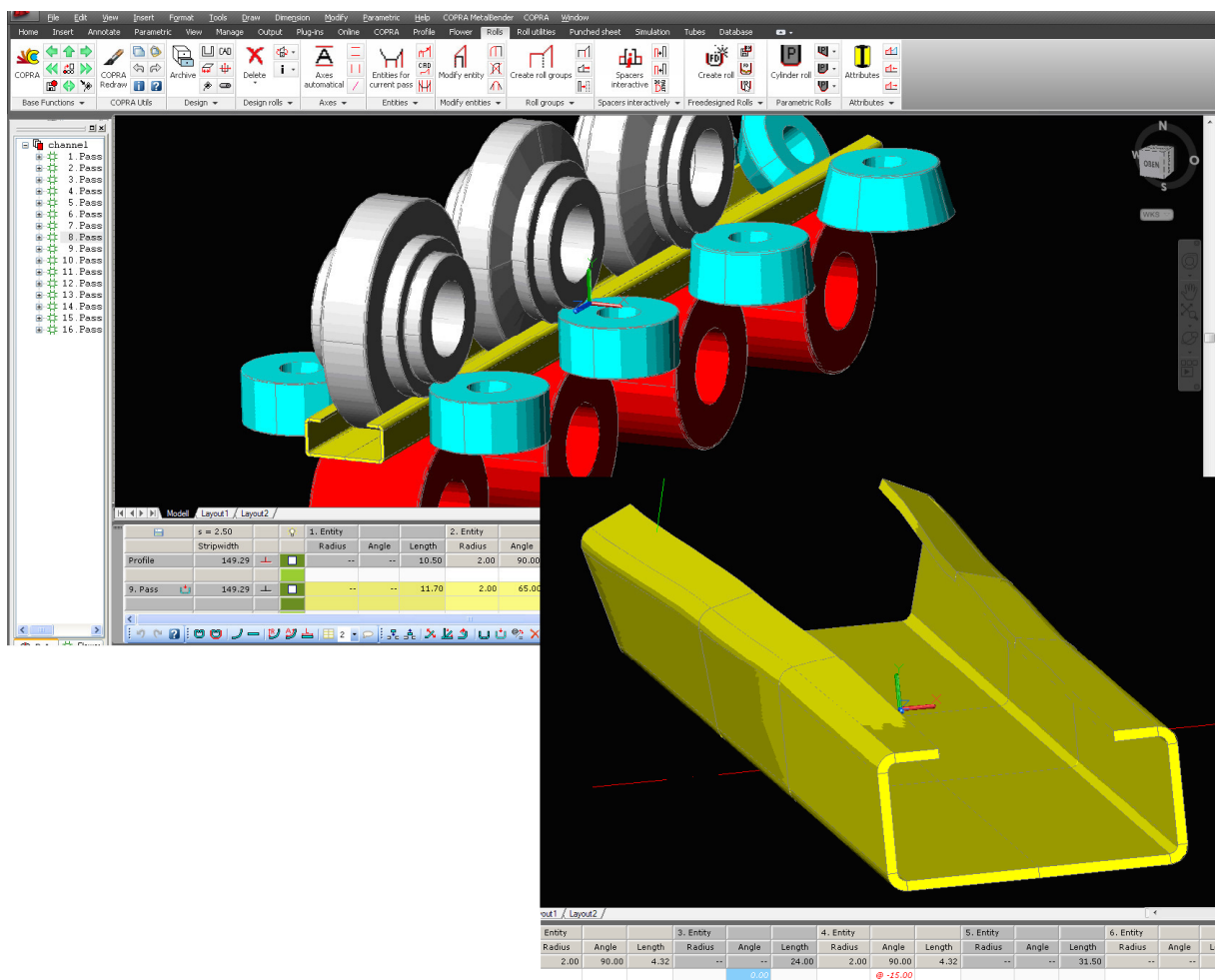
- Create bending sequence
- Dynamic unfolding
- Change Calibrating method over more passes



| | s = 2.50 | 2. Entity | 4. Entity | 7. Entity | 9. Entity | | | | | | | |
|-----------------|------------|-----------|-----------|-----------|-----------|-------|--------|--------|-------|--------|--------|-------|
| Profile | Stripwidth | Radius | Angle | Length | Radius | Angle | Length | Radius | Angle | Length | Radius | Angle |
| | 149.29 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 | 4.32 | 2.00 | 90.00 |
| 8. Station | 149.29 | 2.00 | 65.00 | 3.12 | 15.76 | 15.00 | 4.32 | 15.76 | 15.00 | 4.32 | 2.00 | 80.00 |
| 7. Station | 149.29 | 2.00 | 65.00 | 3.12 | 15.76 | 15.00 | 4.32 | 15.76 | 15.00 | 4.32 | 2.00 | 80.00 |
| 6. Station | 149.29 | 2.00 | 45.00 | 2.16 | | | | | | | 2.00 | 60.00 |
| 5. Idlerstation | 149.29 | 2.00 | 25.00 | 1.20 | | | | | | | 2.00 | 40.00 |
| 4. Station | 149.29 | 2.00 | 25.00 | 1.20 | | | | | | | 2.00 | 40.00 |
| 3. Idlerstation | 149.29 | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |
| 2. Station | 149.29 | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |
| 1. Entryguides | 149.29 | 2.00 | 5.00 | 0.24 | | | | | | | 2.00 | 20.00 |

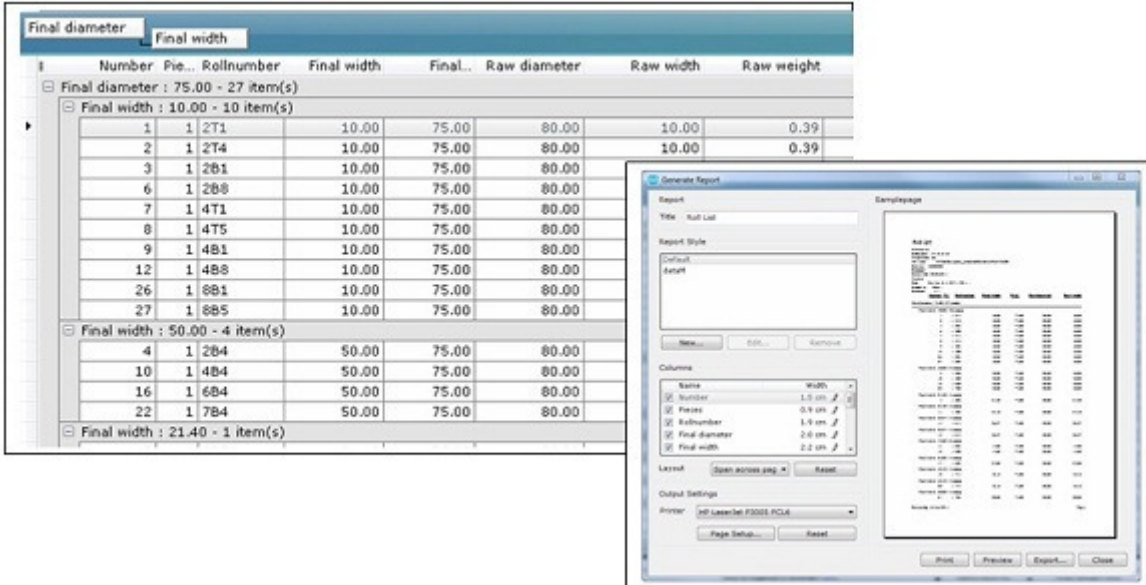
3D-Option

- Rolls and profiles can be displayed three dimensional - independent from DTM (Deformation Technology Module)
- 2D-option is still available
- Possible as region or volume model
- Optical collision control
- Mesh density adjustable
- The station distances can be set in CADFinder
- All 3D options of AutoCAD are available, e.g.:
 - o Parallel or perspective view
 - o Different visual styles
 - o Predefined views
 - o 3D-Orbit
 - o More window views
 - o ViewCube



New flexible Interface for BOMs (Bill Of Material)

- Excel look and feel
- Multiple sorting options
- Reporting tool with previews and template
- Exporting tool
- Multiple print settings



The screenshot displays the BOM interface with a table of items and a 'Generate Report' dialog box. The table has columns for Number, Piece, Rollnumber, Final width, Final diameter, Raw diameter, Raw width, and Raw weight. The 'Generate Report' dialog box has tabs for 'Report' and 'Sample Report', and includes options for Report Style, Columns, Layout, and Output Settings.

| Number | Pie... | Rollnumber | Final width | Final.. | Raw diameter | Raw width | Raw weight |
|-------------------------------------|--------|------------|-------------|---------|--------------|-----------|------------|
| Final diameter : 75.00 - 27 item(s) | | | | | | | |
| Final width : 10.00 - 10 item(s) | | | | | | | |
| 1 | 1 | 2T1 | 10.00 | 75.00 | 80.00 | | |
| 2 | 1 | 2T4 | 10.00 | 75.00 | 80.00 | 10.00 | 0.39 |
| 3 | 1 | 2B1 | 10.00 | 75.00 | 80.00 | | |
| 6 | 1 | 2B8 | 10.00 | 75.00 | 80.00 | | |
| 7 | 1 | 4T1 | 10.00 | 75.00 | 80.00 | | |
| 8 | 1 | 4T5 | 10.00 | 75.00 | 80.00 | | |
| 9 | 1 | 4B1 | 10.00 | 75.00 | 80.00 | | |
| 12 | 1 | 4B8 | 10.00 | 75.00 | 80.00 | | |
| 26 | 1 | 8B1 | 10.00 | 75.00 | 80.00 | | |
| 27 | 1 | 8B5 | 10.00 | 75.00 | 80.00 | | |
| Final width : 50.00 - 4 item(s) | | | | | | | |
| 4 | 1 | 2B4 | 50.00 | 75.00 | 80.00 | | |
| 10 | 1 | 4B4 | 50.00 | 75.00 | 80.00 | | |
| 16 | 1 | 6B4 | 50.00 | 75.00 | 80.00 | | |
| 22 | 1 | 7B4 | 50.00 | 75.00 | 80.00 | | |
| Final width : 21.40 - 1 item(s) | | | | | | | |

„BOM with Report“

Miscellaneous:

- Inventor® 2012 roll-interface
- Compatible with AutoCAD 2012
- The way of station numbering is saved to the project
- Get & show
- Mirrored hole pattern
- Classic 2D hole editor is back
- Drawing dies overworked



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August 2011