

Welcome

We are starting soon...

# Webinar WE4: Crimps, Claws & Hole Patterns With COPRA® RF 2011

Carl Stephenson | data M (UK)



**data M**  
Sheet Metal  
Solutions



# Introduction

- Carl Stephenson Beng (Hons)
  - data M (UK) Ltd
    - UK & North American Clients
  - COPRA® RF User for 17 Years
  - Previously Worked at Two of Largest UK Rollforming Companies

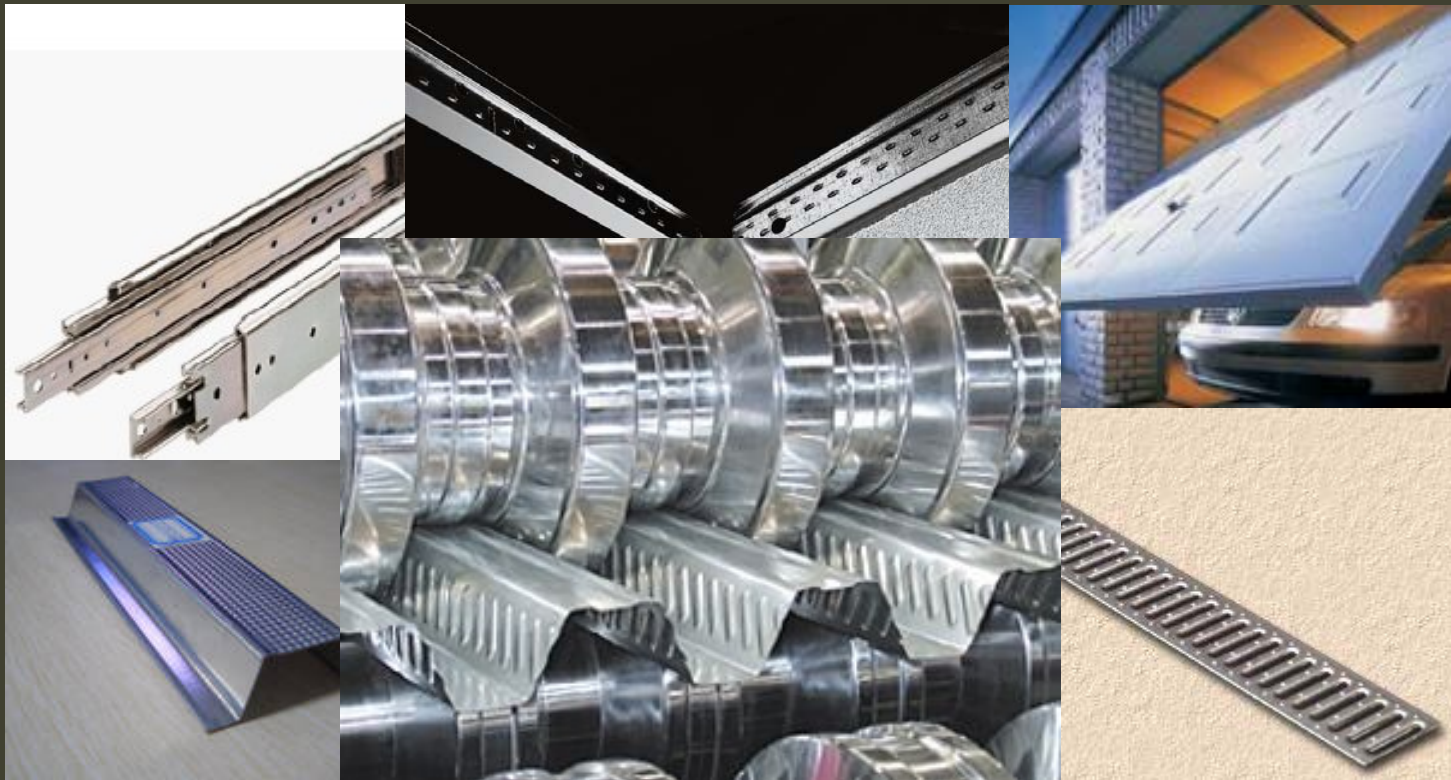


# Crimps Claws & Holes in COPRA® RF 2011

- What is A Crimp & Claw?
  - Creating a Crimp & Claw
  - Viewing Embossing In Roll Design
  - Other Possibilities
- Creating Holes Within COPRA® RF 2011
  - Using Holes From The Library
  - Creating Bespoke Holes
  - Automatically Taking Holes To Our FEA Mesh

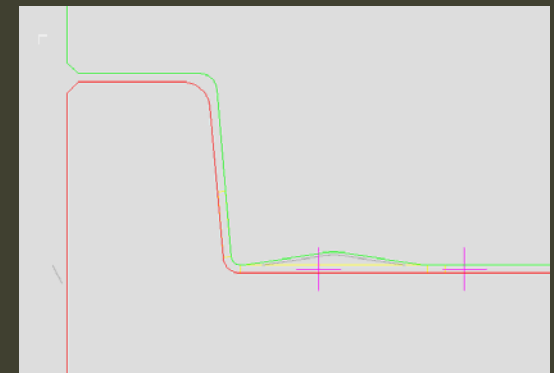
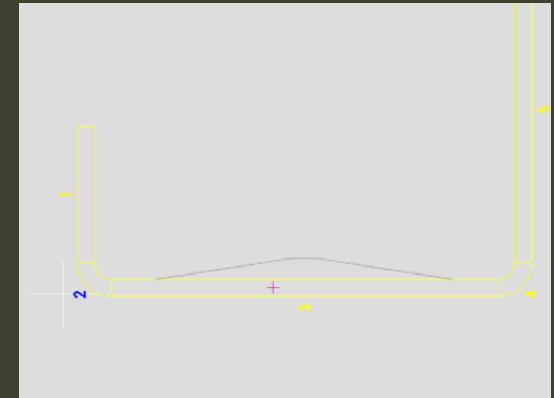
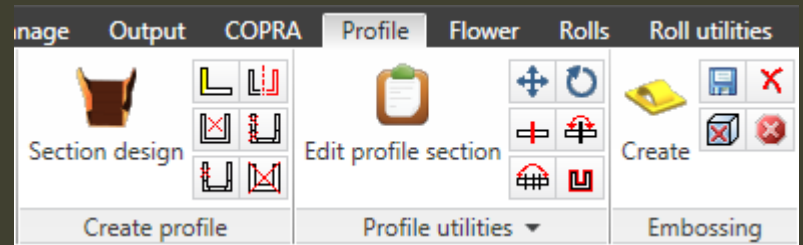
# What Is A Crimp or a Claw?

- Any Embossing/Deformation Of Profile Prior To Rollforming!
- Examples:



# Creating An Embossing

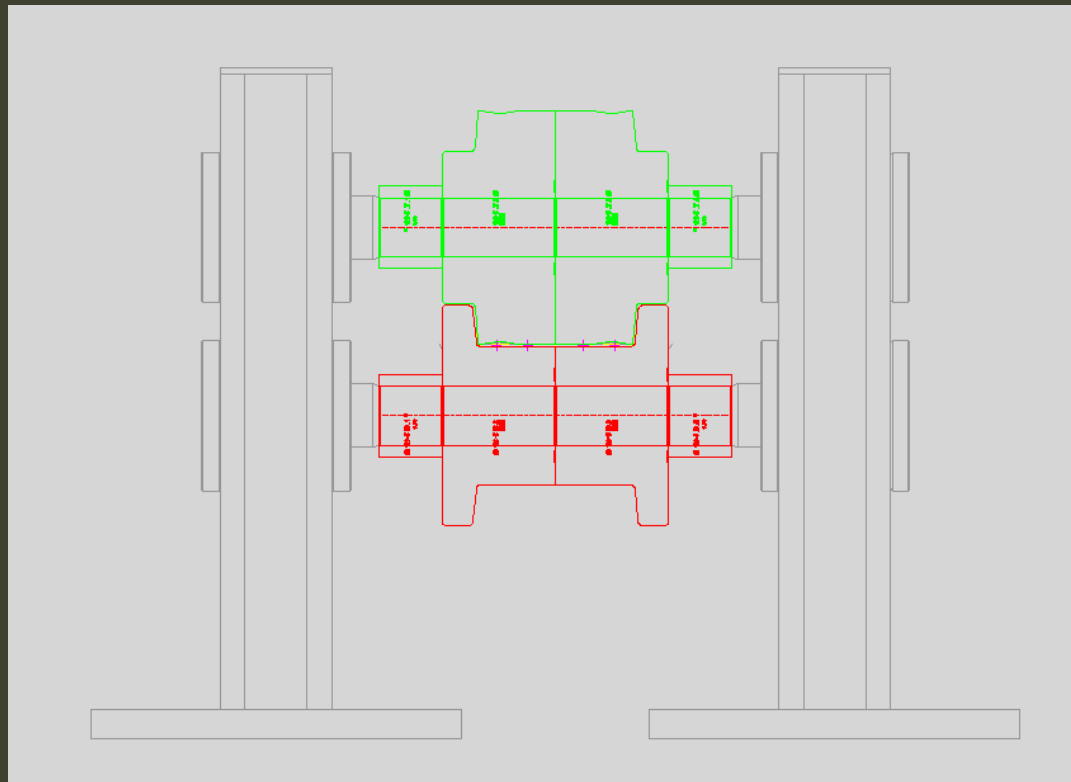
- Define Embossing Geometry
  - Customers Drawing
  - In-House Design
- Create A "Profile" in COPRA RF
  - Using Polyline or "Element Creation" Tools
- Create "Embossing" & Reference Entity
  - Use "Create Embossing Function"
  - Draw or Paste Data To "SK" Layer
  - Save Embossing
- Create "Additional" Embossing
  - Referenced To Different Entities



# Creating An Embossing

- Other Possibilities

- Used to Display Machine Data e.g. Machine Bed or Gear Boxes

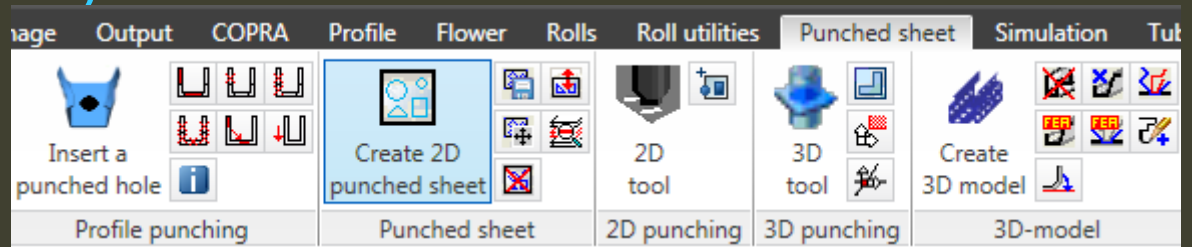




# Creating Holes With COPRA® RF

## ■ Define Hole Geometry & Location

- Customer Drawing
- Product Drawing
- Profile Design

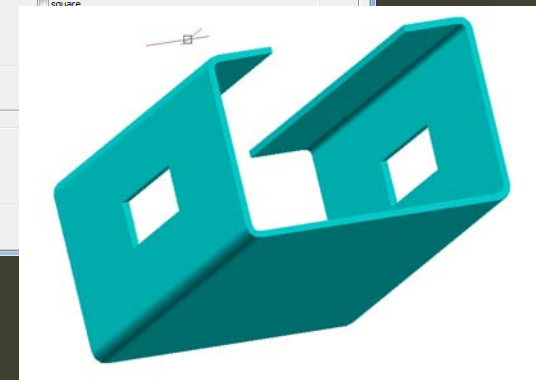
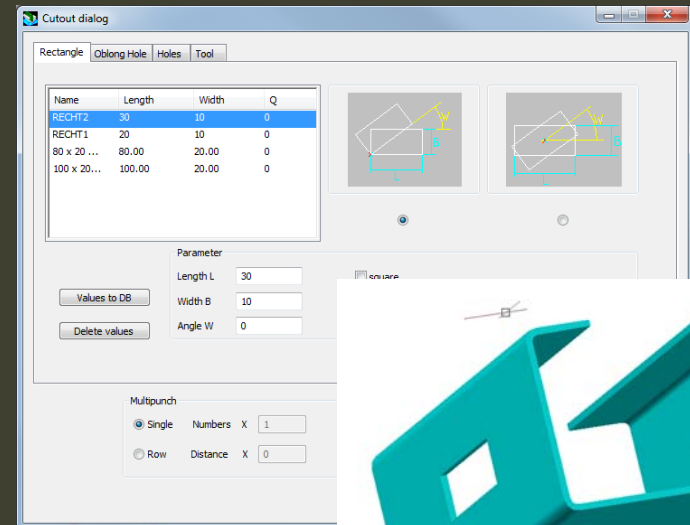


## ■ Use "Library" or "Design" Holes

- Complete Library Of "Standard" Shapes
- Create Single or Rows

## ■ 3D Model & Flower Creation

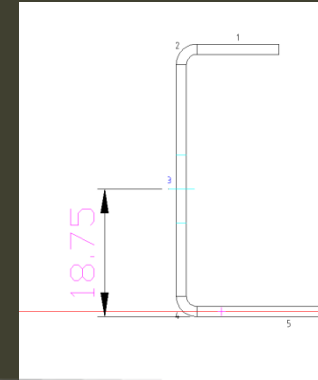
- Product Drawings



# Creating Holes With COPRA® RF

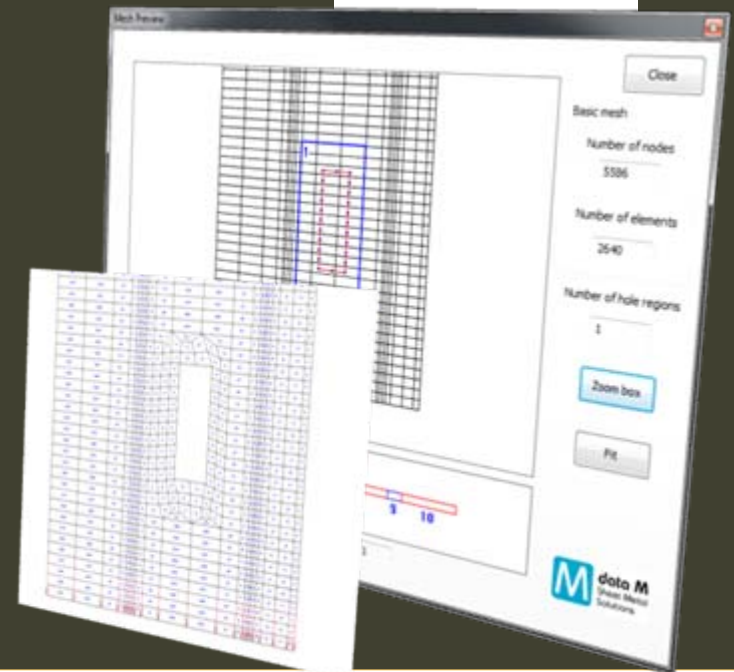
## ■ Accommodate Holes In Roll Design

- Design Relief In Roll Tooling To Avoid Hole Deformation
- Re-Define Slot Positions
- Solve Alignment Issues For Mating Parts



## ■ "Auto-Meshing" of Holes in

- FEA Mesh Creation Tool
- No Hole "Mesh" Editing Required
- Direct to FEA Calculation From COPRA RF



# Creating Crimps & Holes in COPRA® 2011

- Demonstration

The screenshot displays the COPRA 2011 software interface. A 'Create new project' dialog box is open in the foreground, showing fields for project name, comment, document prefix, creation date (03/08/2011 10:46:2), and project path. The background shows a technical drawing of a metal part with crimp and hole patterns, overlaid with a data table. The table lists parameters for various entities (1-11) such as Radius, Angle, Length, and Radius, with values and units (e.g., 3.000, 90.000, 6.597, 3.000, 90.000, 6.597, 3.000, 90.000, 6.597, 3.000, 90.000, 6.597).

Entity	Radius	Angle	Length	Radius	Angle	Length	Radius	Angle	Length	Radius	Angle	Length
1	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
2	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
3	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
4	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
5	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
6	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
7	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
8	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
9	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
10	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597
11	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597	3.000	90.000	6.597

# Discussion and Questions



# Webinars 2011



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Webinars

# Webinar Recordings



[www.datam.de](http://www.datam.de)  
Recorded Webinars

# Online Training

**Training & Support**

- Demo Videos
- Training**
- Support
- Webinars
- COPRA® Software Maintenance
- FAQ

### Learning with data M!

We tailor our COPRA® workshops and training sessions to suit your needs and standards. Our trainers are involved with the COPRA® design processes and that of our customers on a daily basis; therefore they have comprehensive practical expertise to help increasing efficiency in your company. If you would like further information, please [contact us](#).

In addition to COPRA® user training sessions we also offer roll design workshops where we address your typical forming issues.

data M organises trainings either at our offices around the globe, at our head quarters (10 km south of Munich) or at your site.

[Hotels near data M](#)

### New at data M!

#### Online Trainings

Due to busy schedules, different locations, sometimes it is not easy to send your busy design engineers to training sessions, therefore data M offers on-line training sessions, so-called webinars. These enable you to save travelling expenses and your time. You even lower emission by not using a car or plane.

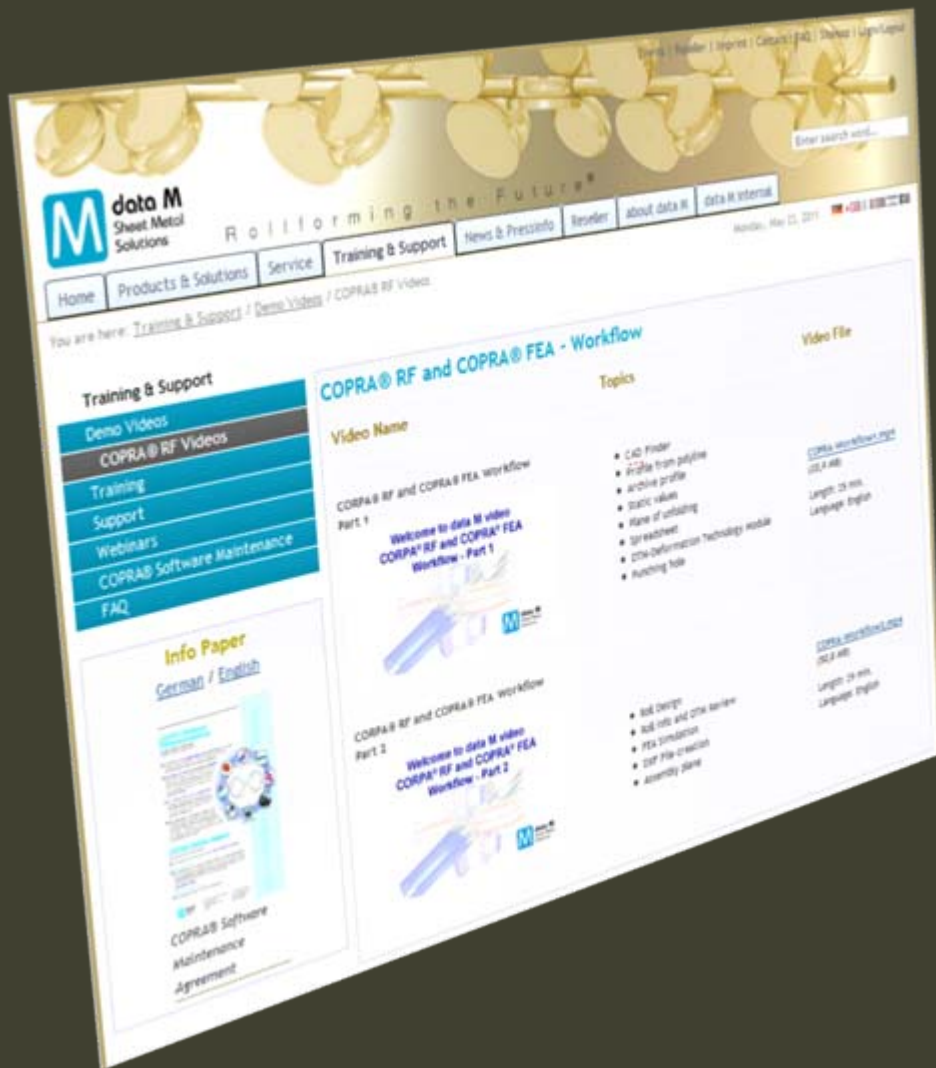
A data M specialist will host the webinar and all participants form the "virtual classroom". All participants sit at their own computer and follow the presentation of a topic on screen. Naturally everybody is participating actively, which means questions can be asked any time.

We gladly hold webinars on your individual roll forming issues, and the duration of a webinar is decided by you.



- Save Time
- Save Money

# COPRA® RF Videos



[www.datam.de](http://www.datam.de)  
Videos

Thank you for your attention!

Goodbye...

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