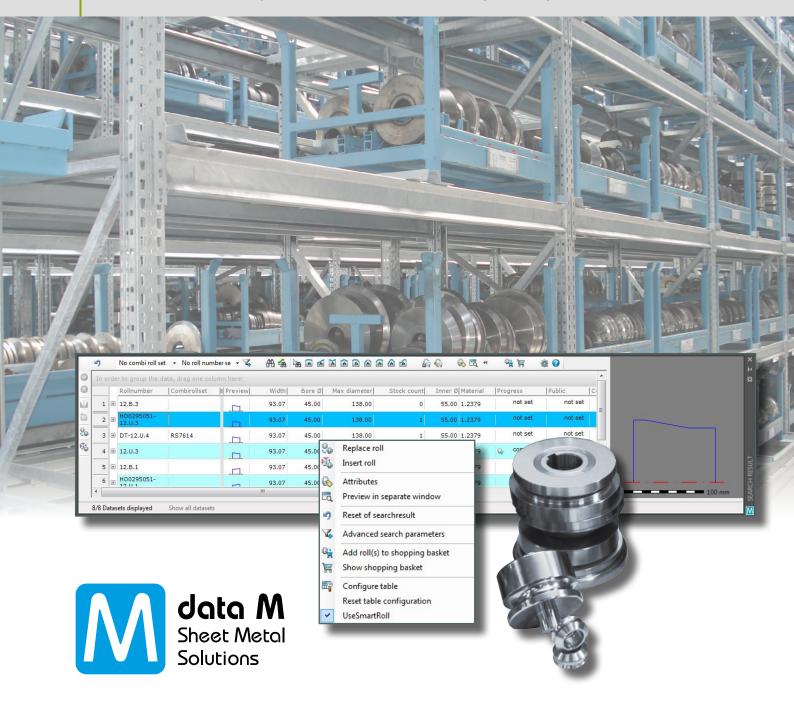
# COPRA® Roll Lifecycle Management

Keep track even of large stocks by intelligent roll management features with COPRA<sup>®</sup> RLM. Save time and expenses through flexible reusing of discarded rolls. The new feature SmartSearch allows a fully automatic real-time search during the design process.



### Manage large roll stockings easily and quickly

Nowadays, roll formers face the problem of having to stock and manage large amounts of roll tool sets. As many rolls are needed for the production of new profiles, manufacturers frequently encounter delays due to time consuming manual search of the required rolls. With intelligent stock management, bottlenecks will be avoided and suitable roll sets can be composed by the data base.

COPRA<sup>®</sup> RLM allows searching of the inventory by means of definable categories and thus facilitates finding the required rolls quickly. The software is based on Microsoft SQL Server. Rolls can be returned and further processed to design through full integration into the COPRA<sup>®</sup> workflow.

			Attributes		[=]	Search
		x	Width	•	= 🗸	42.67
	V	×	Bore Ø	•	= 🗸	63.00
	V	X	Adjoining diameter left	+	= 🗸	140.00
		x	Adjoining diameter right	+	= 🗸	193.99
		X	Max diameter	•	= 🗸	193.99
		x	Rollnumber	+	= 🗸	*5*
P		X	Intersecting diameter left	+	= 🗸	140.00
An		X	Intersecting diameter right	•	= 🗸	193.99
				-	-	

### RLM SmartSearch – quick real-time search during design

To handle time pressure between incoming orders and delivery, engineers often resort to copying CAD drawings of standard rolls into the new design. In some cases, time can be saved compared to defining roll parameters and searching the data base. But the roll will then not be available as a COPRA® object. That means that the complete roll design has to be converted in case of a required FEA-simulation. Also, the composing of order lists and other steps cannot be processed automatically. The actual advantages of an efficient stock management are therefore reduced to absurdity. Additionally, further costs arise due to production and stocking of supplemental rolls. RLM SmartSearch allows automatic search of the relevant rolls simply by clicking on the profile element. The user can then select the matching rolls from the visually displayed search results. Definition of roll parameters in this way becomes obsolete and up to 30% of designing time can be saved. Additionally, it unburdens stock management and the life cycle of a roll can be traced in detail.

### Creation of order lists and checking out rolls

With reference to the current roll stock and information about the required rolls, RLM automatically creates order lists. For frequent changing of tool sets, rolls can be classified for usage, reworking or scrapping by common handheld scanners. It is thus ensured that the stock is kept up to date and only the actually needed rolls will be ordered.

oupplier			Date of delivery			Add rolls to combi roll set automatically				
		-	Mittwoch ,	4. November 2	2015 💷 🗸	No com	oi roll set selected	•		
Comme	ent									
										_
In o	rder to group the									
	Rollnumber	Stock	Order	Reserves	Width	Bore Ø	Max diameter	Inner Ø Material	Pro	gress
1	1-01	0	1	0	149.55	63.00	193.62	0.00 1.2379		comple
2	12-01	0	1	0	29.02	63.00	135.89	0.00 1.2379	Q,	compl
3	12-02	0	1	0	41.95	63.00	196.00	0.00 1.2379	Q,	comple
4	12-03	0	1	0	29.02	63.00	135.89	0.00 1.2379	Q,	comple
5	12-U1	0	1	0	100.00	63.00	140.00	0.00 1.2379	Q.	comple
6	12-L1	0	1	0	45.00	35.00	100.00	0.00	Q,	comple
7	12-R1	0	1	0	45.00	35.00	100.00	0.00	Q.	comple
8	11-01	0	1	0	25.93	63.00	136.61	0.00 1.2379	Q,	compl
9	11.02			0	40 14	62.00	106.00	0 00 1 3270	10.3	comple

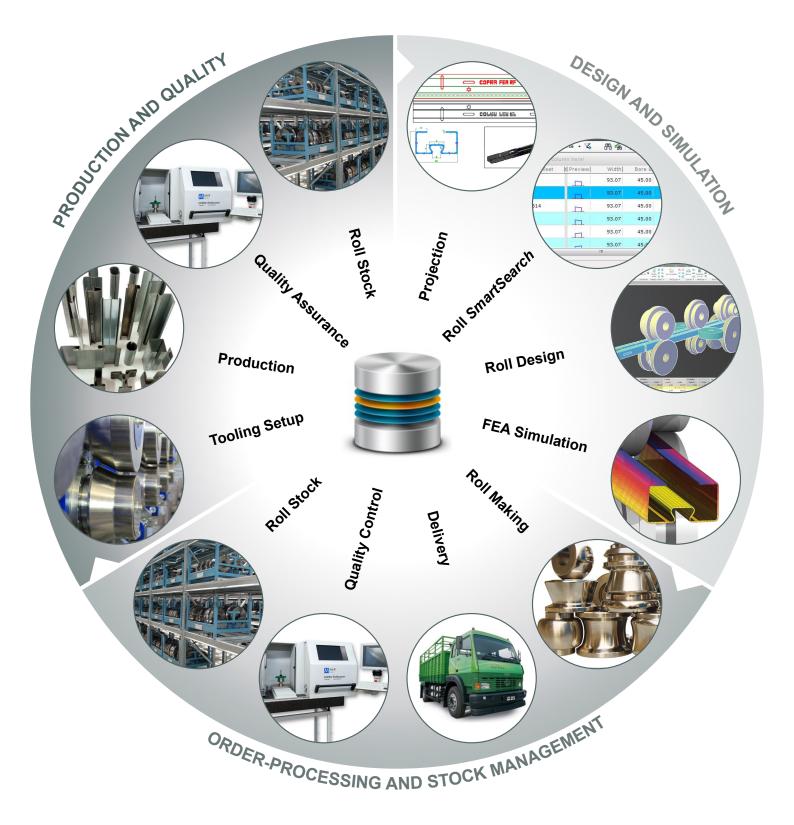
### Save cost through consistent usage of roll stock

RLM furthermore offers the possibility to efficiently reuse existing rolls. During roll design for new profiles or tubes, the data base can be continuously accessed. It is thus possible to verify if rolls within the required dimensions are in stock. The roll contour is displayed in a preview – behind it the already existing roll that could be used for the tool set.

Worn rolls can also be reintegrated into the production process by intelligent roll management. Respective inventories are often unused for years, although rolls could be used again by means of simply returning them. By definable attributes like bore diameter or roll width, the rolls will be loaded from the data base, adjusted and thus be recycled. This potential is frequently ignored in the industry, although significant cost reduction can be achieved by reworking instead of making of a new roll. This is because 70% of manufacturing costs are related to raw material and hardening, only the remaining 30% for design and turning. Our experience shows that the total cost can be reduced to approximately 15% by reworking of a used roll as it can be produced with only little cutting effort.

Particularly companies with a large stock of recycling rolls will benefit from a significant cost reduction for equipping roll forming machines. This is achieved mainly by time savings through recycling instead of producing new rolls.

## **Closed Loop Roll Management with COPRA® RLM**



### Transparency in Design, Manufacturing and Production

www.data-m.com

### Industry 4.0 with RLM and COPRA<sup>®</sup> RollScanner – efficient stock management and quality control

If rolls are self-made or ordered: With COPRA® RollScanner, even large numbers of tools are easily and quickly checked regarding their quality. The designed roll contours will automatically be loaded from the RLM data base in order to compare them with the scanned data. After the completion of a project and before registering to the stock, rolls are once again scanned so the roll contours can be updated. With this procedure, not only the nominal but also the current roll contours will be available. Even old roll stocks without dimensioned drawings can be reintegrated into the production process.

With our innovative data base, we provide a true industry 4.0 application. Be prepared for the future and save time and cost with intelligent roll management.



### COPRA® RLM - Stay cost efficient in the long run

Like other branches, the roll form industry faces tremendous time- and cost pressure. The setup of an efficient and integrated roll management is often omitted or incomplete. With long term experience in process optimization, we steadily enhanced the RLM data base. Our intelligent and interconnected roll management helps you keep competitive in the long run.

### **COPRA® RLM – intelligent roll management**

- I Full integration into the COPRA® workflow
- I Real-time roll search during design with RLM SmartSearch
- Basic and advanced search function based on the required roll attributes
- I Functions for reuse of existing rolls
- I Definable parameters (bore diameter, roll width etc.)
- I Grouping of frequently used rolls to combination toolings
- Automatic compiling of order lists based on current stock
- I Roll management tools (Booking in/out, scrapping)



data M Sheet Metal Solutions GmbH Am Marschallfeld 17 I D-83626 Valley Tel.: +49(0)8024-640-0 datam@datam.de I www.datam.de