

RAW ecompact[®] – Innovative drive concept reduces investment and operating costs in ring production



With the RAW ecompact[®], producers of seamless rolled rings cut their operating costs – the new electrohydraulic drive concept reduces energy consumption by comparison with conventional ring rolling machines between 25 and 50 percent. Investment costs and emissions are also significantly lower. The key to the savings lies in the newly developed drive concept: Instead of a large central hydraulic system, several small self contained electro-hydraulic drives provide the necessary energy on demand.

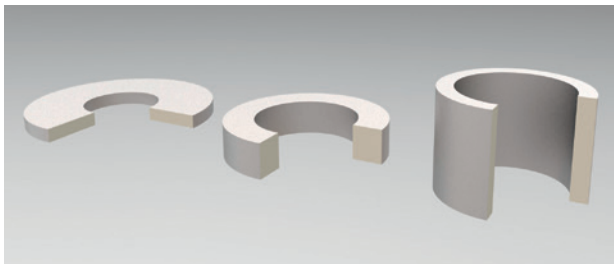
Benefits at a glance

- Low investment costs
- Reduced operating costs
- Lower noise emissions
- Less space requirements
- Complete package with automatic control and technology software
- Short delivery times and fast commissioning

Cost-effective complete package

Cost advantages for procurement and operation

The RAW ecompact® is a fully automatic CNC-controlled ring rolling machine for production of rings with rectangular and profiled cross-sections. The machine concept is based on decades of experience of the SMS group ring rolling specialists. The RAW ecompact® incorporates the know-how of over 500 ring rolling machines built to date. This applies also to the control and technology software. With the proven CARWIN and ROLLTECH Rings programs, ring rolling machine owners are ensured reliably and consistently reproducible ring quality.



Efficient hydraulic concept, quick return on investment

On the RAW ecompact®, SMS group has replaced the central hydraulic system with electro-hydraulic direct drives which are directly mounted on the rolling axes. This design offers two major advantages: First, the investment costs are far lower compared to conventional ring rolling machines because elimination of the central hydraulic system also eliminates the complete machine and foundation pipework. This also reduces space requirements and the foundation costs. Second, the design provides savings in operating costs. The energy consumption is reduced by between 25 and 50 percent (depending on the application). In addition, the use of hydraulic oil is reduced by more than half and the noise level is lowered by around 15 percent. The costs for energy, oil and soundproofing measures can thus be reduced significantly.

Fast delivery and commissioning

The RAW ecompact® permits short delivery times as well as quick erection and commissioning. The standardised acceptance procedure for verifying the performance parameters ensures that the machine reaches its full performance in a minimum of time.



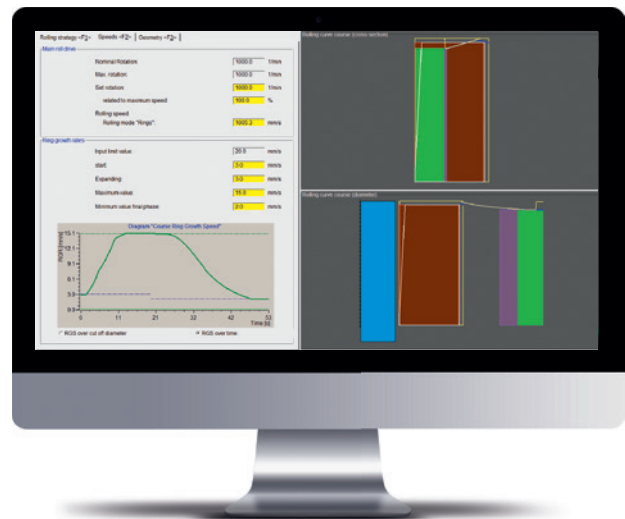


Complete package from the system provider

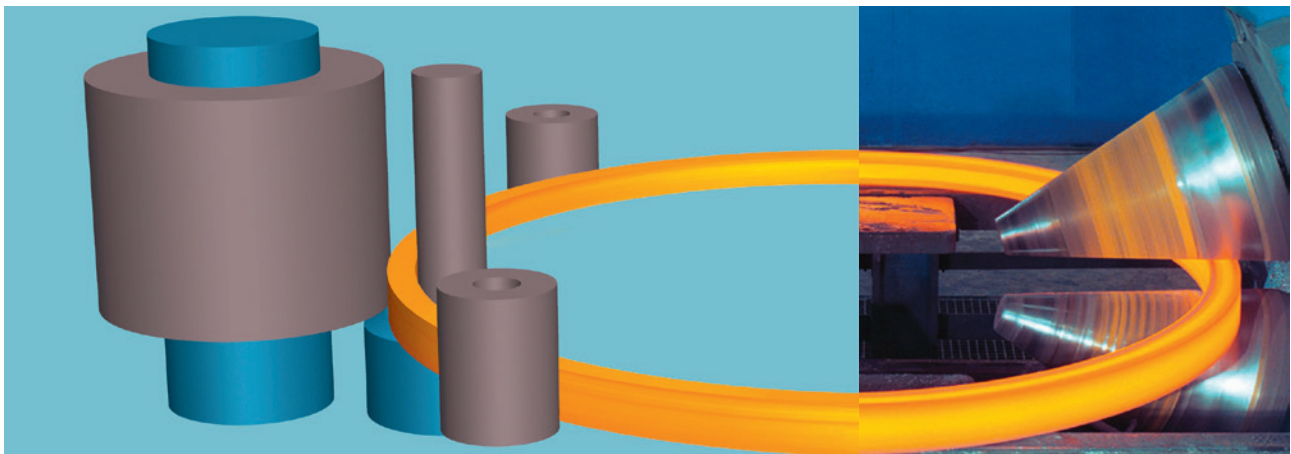
SMS group supplies complete packages, including the software: The CARWIN (Computer Aided Rolling under Windows) control program and the ROLLTECH Rings technology software. Ring producers can thus manufacture successfully from the very first ring – and reliably reproduce products once manufactured. Programming is carried out in seconds – whether for individual rings or ring series.

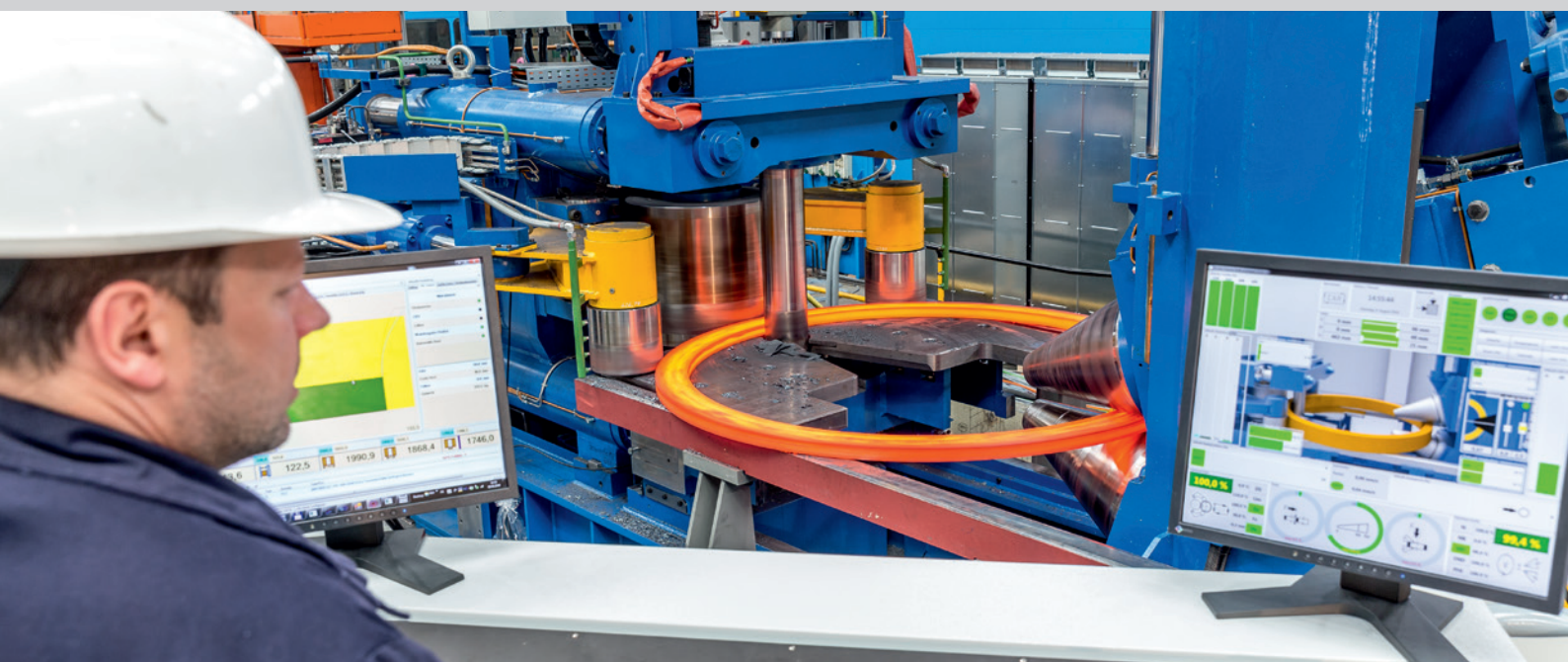


CARWIN controls the rolling process: After input of the target data for the rings to be produced, the software checks all the data for plausibility and then ensures an automatic rolling process together with the CNC system of the ring rolling machine.



Two licenses for our proprietary technology software ROLLTECH Rings are included in the scope of supply. The software can be used for workflow scheduling and marketing purposes. It can be used to simulate the ring rolling process in order to ensure the rollability of the proposed products and generates all the necessary process parameters: The operating personnel enters the finished ring geometry and the material, ROLLTECH Rings calculates the necessary machine settings on the basis of stored process models.





Available models

Machine size	Ring data		Machine data			
RAW ecompact®	Outside diameter*	Height	Rolling force		Drive power	
			radial	axial	radial	axial
	[mm]	[mm]	[kN]	[kN]	[kW]	[kW]
50/40 - 1600/250	200 - 1.600	25 - 250	500	400	100	2 x 63
63/50 - 2000/315	250 - 2.000	25 - 315	630	500	110	2 x 75
80/63 - 2500/400	300 - 2.500	30 - 400	800	630	140	2 x 90
100/80 - 3000/480	350 - 3.000	30 - 480	1.000	800	160	2 x 110
125/100 - 3600/560	400 - 3.600	30 - 560	1.250	1.000	200	2 x 160

* maximum outside diameter with horizontal unloading

SMS group GmbH

Forging Plants
Ring and Wheel Rolling

Stockumer Straße 28
58453 Witten, Germany
Phone: +49 2302 7098-3439
ringrolling@sms-group.com
www.sms-group.com

SMS India Pvt. Ltd.

286, Udyog Vihar, Phase 2,
Gurugram, Haryana-122016, India
Phone: +91 124 435 1500
smi.forging@sms-group.com
www.sms-group.com

"The information provided in this brochure contains a general description of the performance characteristics of the products concerned. The actual products may not always have these characteristics as described and, in particular, these may change as a result of further developments of the products. The provision of this information is not intended to have and will not have legal effect. An obligation to deliver products having particular characteristics shall only exist if expressly agreed in the terms of the contract."