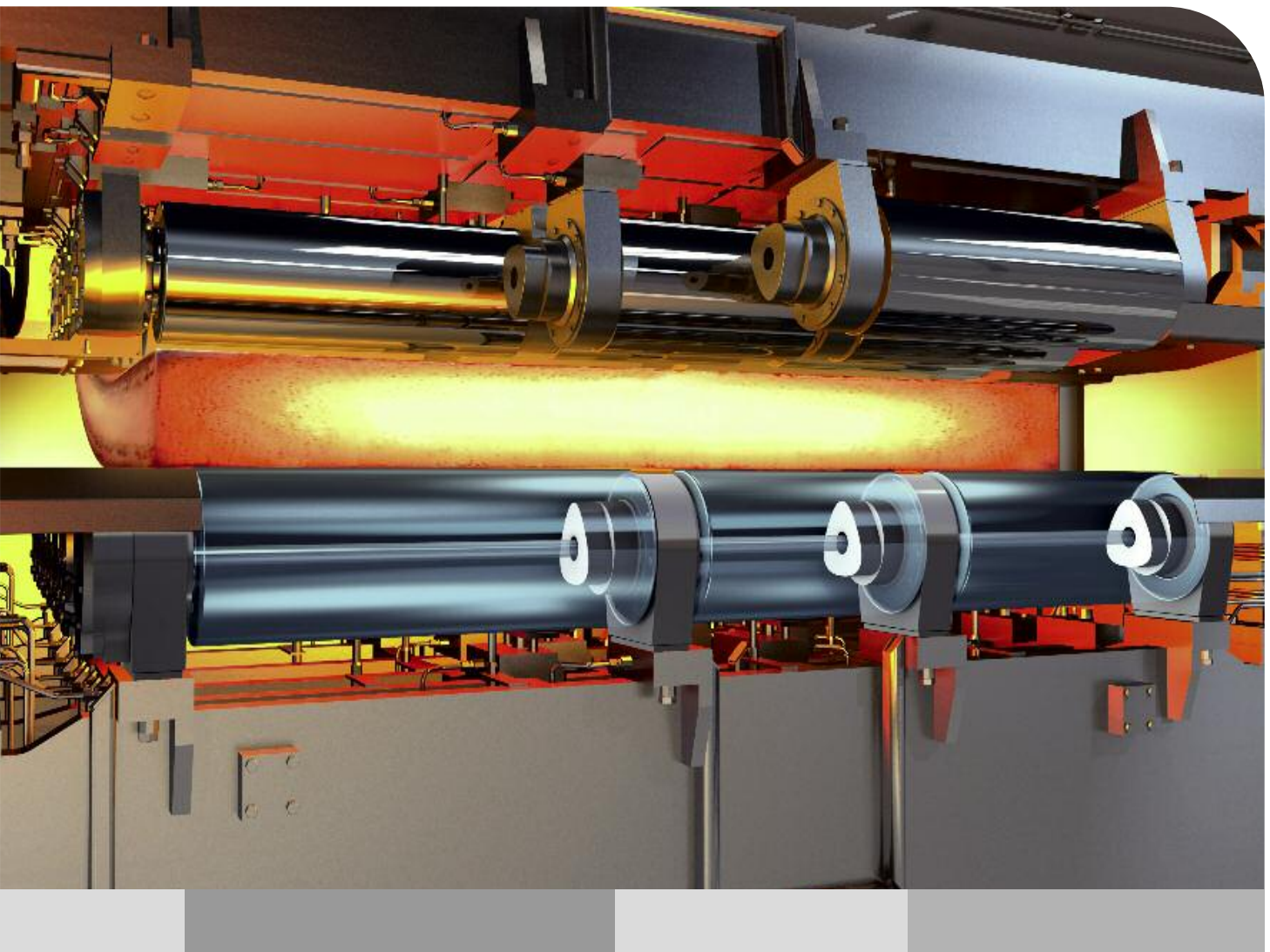


STEC-Roll[®]
GOOD USE OF POTENTIAL
High endurance, easy maintenance



SIMPLE INSTALLATION, LONG SERVICE LIFE

The strand guide rollers play an essential role in achieving the optimum casting process for creating high-quality steel slabs.

Through intensive exchange with the owners of continuous casters from various suppliers, SMS group has succeeded in discovering and utilizing as yet unused potential in the existing roller concepts. For example, at ArcelorMittal in Eisenhüttenstadt, the service life is able to be doubled by using the STEC-Roll®. At the same time, the maintenance work required is reduced significantly.

STEC-Roll® is already being used in new plants from SMS group. Even axle rollers with rotating axles from competitors and drive rollers with split bearings can be replaced with the STEC-Roll®.

BENEFITS

The STEC-Roll® optimizes the casting process and sets new standards for cost-efficient maintenance.

- Long service life of the roller material and the bearing.
- Maintenance-friendly.
- Quick dismantling and installation.
- Rollers can be reused several times.

YOU TOO CAN TAKE ADVANTAGE OF THESE BENEFITS AND INSTALL THE STEC-ROLL®

- when revamping continuous casters from any plant supplier
- when introducing new secondary cooling concepts
- when replacing worn rollers. The precisely tailored design allows replacement of the rollers step by step during the maintenance intervals
- when replacing driven rollers with split center bearings



STEC-Roll®: Just a few assembly steps, and it is ready.





OPTIMUM CASTING PROCESS WITH THE STEC-Roll®

- The STEC-Roll® optimally supports the strand thanks to its minimal bearing window width.
- All roller bodies are mechanically interlinked, also in the case of narrow slab formats.
- SMS group has developed various cooling concepts for the STEC-Roll®.
- The modern design prevents undesired cohesion between axle and roller.

A variation of the internal roller cooling allows dry casting of challenging steel grades such as microalloyed heavy plate or API grades. The temperature no longer falls short of the optimum surface reference temperature of the slab of 920 – 950 degrees Celsius.

With the STEC-Roll® in combination with a suitable cooling concept, this target temperature can also be attained in the crack-susceptible edge zone.



STEC-Roll® with internal cooling via central bore ...

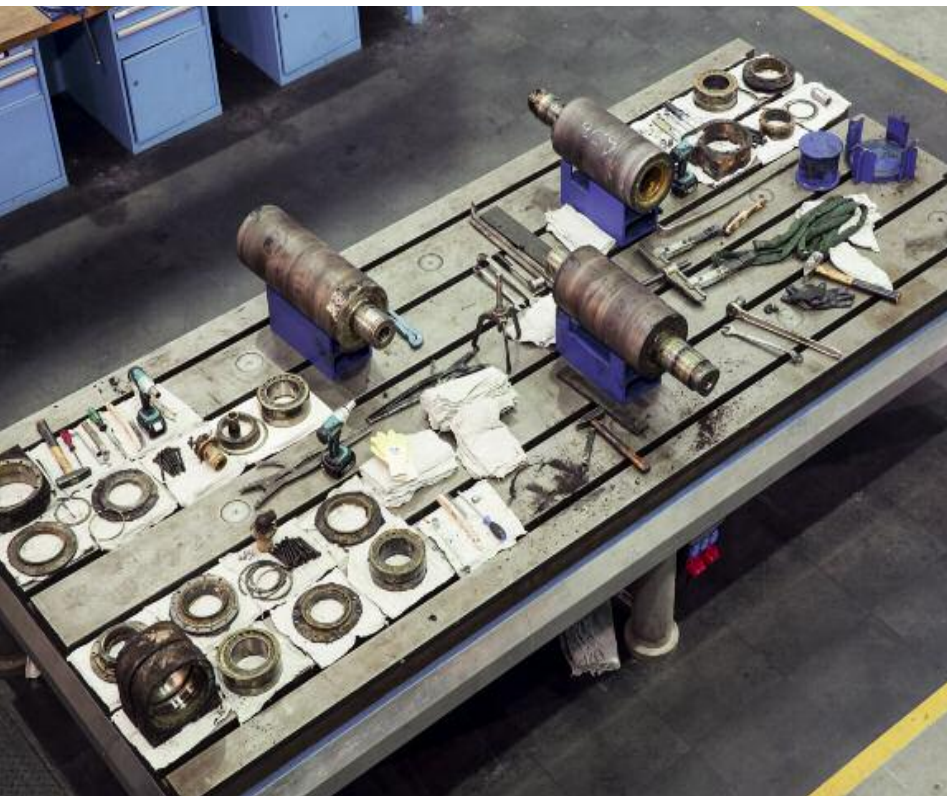


... and with revolver bore for dry casting.

THE NEW, MODULAR STEC-ROLL®

Reduced maintenance costs thanks to high efficiency

- The high endurance of the roller material and the reliable design make the STEC-Roll® an important economic factor in the continuous caster.
- Here, proven and tested self-aligning roller bearings with consistently long service lives are used. This reduces both costs and delivery time.
- For drive rollers with split center bearings, the STEC-Roll® is a reliable alternative, significantly increasing plant availability. The one-piece bearing housings of the STEC-Roll® prevent the ingress of water and significantly increase the service life of the bearings at similar load ratings.
- Thanks to the easy-to-maintain STEC-Roll®, a roller line can be dismantled in less than 60 minutes and installed in less than two hours (each with two operators). There is no need for special tools as required for rollers from competitors. In combination with the ability of the rollers to be re-used several times, this helps to significantly reduce the maintenance costs.



Only a few auxiliary devices are needed: Work bench after dismantling of a STEC-Roll®.



<http://www.sms-group.com/qr/stec>

Convincing performance after 17 months of continuous operation at ArcelorMittal Eisenhüttenstadt. Trainees dismantle STEC-Roll® in record time.

BENEFITS OF THE STEC-Roll® AT A GLANCE

- Production of high-quality slabs with SMS group cooling concepts
- Reduced maintenance costs
- Quick and easy installation and dismantling
- Uncomplicated conversion to STEC-Roll® without need for segment modification

COMPARISON BETWEEN STEC-Roll® AND OTHER ROLLERS

	Rollers from other suppliers	SMS group solid rollers	SMS group STEC-Roll®
Narrow bearing window	✓	-	✓
Mechanically interlinked roller bodies	✓	-	✓
Simple dismantling	-	✓	✓
No special tools required for installation	-	✓	✓
Driven roller without gear coupling	✓	-	✓
Cooling concept for minimum spray water	-	✓	✓
Cooling concept for dry casting	-	✓	✓

TIME SAVED WITH THE STEC-Roll® IN SLAB CASTER MAINTENANCE

Complete dismantling of an axle roller (competitor)

1 roller line	16 man-hours
200 roller lines	3,200 man-hours

Complete dismantling of a STEC-Roll®

1 roller line	2 man-hours
200 roller lines	400 man-hours

Time saved

1.5 man-years



Can your plant be retro-fitted with STEC-Rolls®?

**We are happy to assist you!
Please do not hesitate to contact us.**

Technical Sales Continuous Casters
 Phone: + 49 211 881 6187
 Fax: + 49 211 881 77 6187
 E-mail: cc-plants@sms-group.com



SMS group GmbH

Metallurgical Plants and
Environmental Technology Division

Eduard-Schloemann-Strasse 4
40237 Düsseldorf, Germany

Phone: +49 211 881-6710

Telefax: +49 211 881-4841

E-mail: cc-plants@sms-group.com

Internet: www.sms-group.com

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