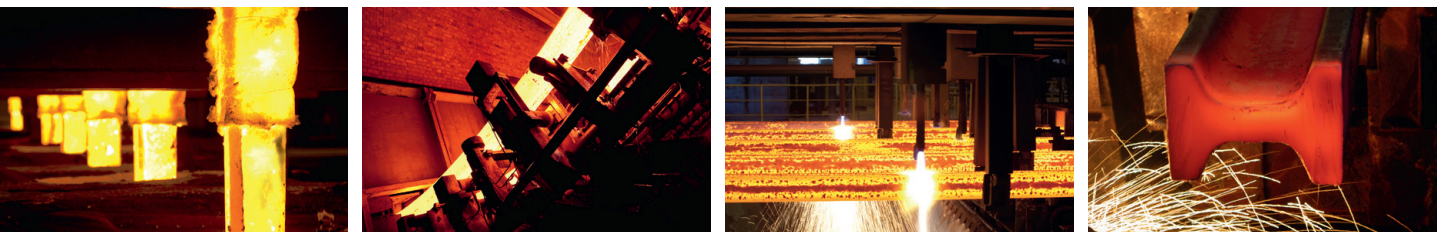
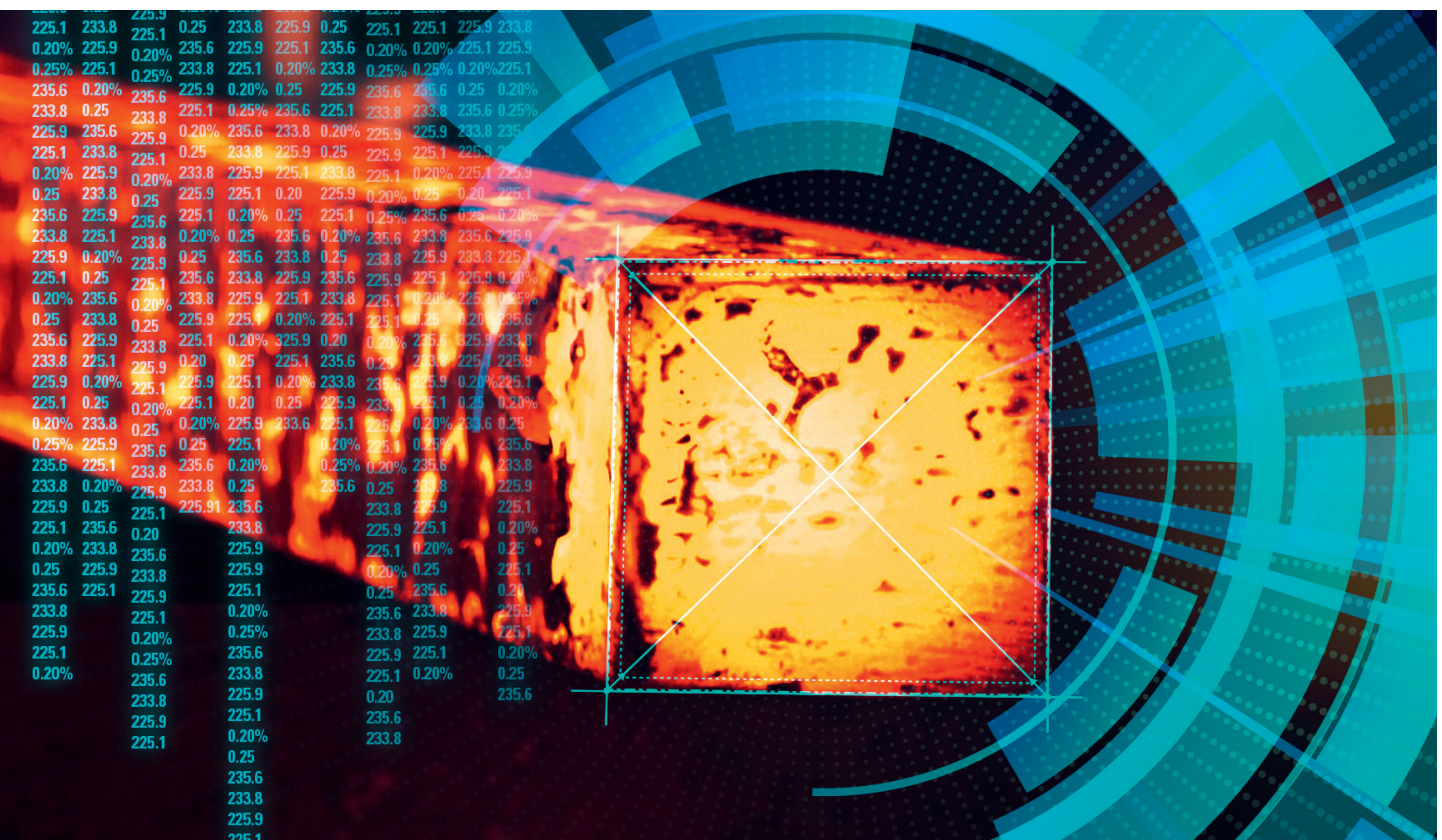


## CONSHAPE ONLINE CROSS-SECTION CHECKER

Online, on-the-fly shape detection for enhanced  
quality and productivity



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# CONSHAPE

## ONLINE CROSS-SECTION CHECKER

On-the-fly shape detection for enhanced quality and productivity

Productivity and quality are every steelmaker's goal. SMS Concast is dedicated to providing steelmakers with solutions to achieve both. Using our proven high-resolution imaging system, our CONSHAPE cross-section checker acquires an image of the precise shape of every billet or bloom and checks it for quality parameters like rhomboidity and bulging. It enables steelmakers to make rapid, on-the-fly adjustments to improve quality and yield.

CONSHAPE: another Industrie 4.0 solution from SMS Concast/SMS group for long-product steelmakers.

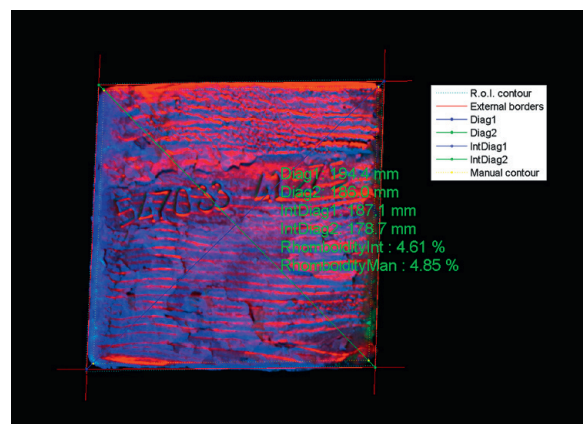
### Application

The CONSHAPE cross-section checker can be retrofitted on any billet or bloom caster. Using proven CONREAD OPR technology, a smart image-processing algorithm acquires relevant data for the real-time detection of rhomboidity and bulging.

CONSHAPE data can be logged with the billet ID for quality tracking and on-the-fly caster adjustments. CONSHAPE's real-time picture can be used to optimize key casting parameters such as lubrication, spray cooling and casting speed. CONSHAPE also helps monitor the state of the mold tube's wear.

If you're already using our CONREAD OPR, all you need is a simple software update\* to activate CONSHAPE. Every installation is tuned on-site for optimal performance. The algorithm is being developed to assess other key quality parameters, including ovality, deburring results, cross section area and billet or bloom sizes.

\*CONREAD and CONSHAPE are CPU-intensive applications, so your PC hardware needs to be robust



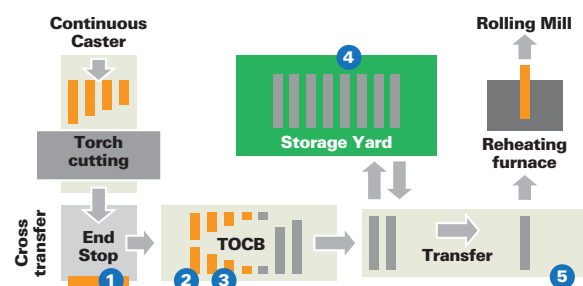
**This CONSHAPE rhomboidity output would trigger an alert so the caster operator can make adjustments on the fly.**

### Ease of use and maintenance

- CONSHAPE is a self-contained system requiring only one data connection to your plant's quality assurance system
- CONSHAPE can be accessed from any authorized workstation or mobile device

### For best results

Combine CONSHAPE with our comprehensive product tracking solution: CONMARK product marking machines, CONREAD optical product recognition, CONYARD warehouse management system and our advanced Level 2 plant automation systems. Please contact us for more information.



**CONSHAPE (3) can be integrated into a comprehensive product tracking system: (1) marking machine, (2&5) OPR, (4) storage yard management system.**

YOUR ADVANTAGES	
	<ul style="list-style-type: none"> <li>• <b>Improved product quality and yield</b> thanks to early online detection of quality deterioration and its causes</li> <li>• <b>Supports proactive maintenance</b> by monitoring the condition of the mold and spray cooling equipment</li> <li>• <b>Bang for the buck:</b> small investment, big impact!</li> </ul>
TECHNICAL DATA	
<b>Main components</b>	Industrial hi-res camera and flash (see CONREAD OPR, workstation)
<b>Process</b>	Advanced image processing algorithm detects product quality
<b>Tracking</b>	Measurements can be logged with billet ID for quality tracking