



3-roll RSB® 5.0 with 4D EAGLE profile measurement system and SCS® currently operating in Korea

EFly0000218E

**FRIEDRICH KOCKS  
GMBH & CO KG**  
P.O.Box 100 743  
40707 Hilden / Germany  
Tel. +49 - 2103 - 79 00  
Fax +49 - 2103 - 5 12 49

**KOCKS MANUFACTURING  
GMBH & CO KG**  
P.O.Box 140 228  
28089 Bremen / Germany  
Tel. +49 - 421 - 52 08 01 00  
Fax +49 - 421 - 52 08 01 20

**KOCKS TECHNIK  
GMBH & CO KG**  
P.O.Box 100 753  
40707 Hilden / Germany  
Tel. +49 - 2103 - 79 00  
Fax +49 - 2103 - 5 12 49

**KOCKS PITTSBURGH  
COMPANY**  
504 McKnight Park Drive  
Pittsburgh, Pa. 15237 / USA  
Tel. +1 - 412 - 367 41 74  
Fax +1 - 412 - 367 36 48

**KOCKS BEIJING METALLURGICAL  
EQUIPMENT LTD.**  
Unit 1607 Jia 302, 3rd Area of Jinsong,  
Chaoyang District, Beijing 100 021 / P.R.China  
Tel. +86 - 10 - 87 21 60 50  
Fax +86 - 10 - 87 21 60 51



---

# 4D EAGLE

Masters of perfect vision

---

[www.kocks.de](http://www.kocks.de)

The superior profile measurement system with  
rolling defect detection for long product rolling mills

---

# MASTERS OF PERFECT VISION

---

As the absolute leading manufacturer of 3-roll sizing blocks for bar, wire rod and tube rolling mills, KOCKS also has become a provider of integrated automation and software solutions for long product rolling mills.

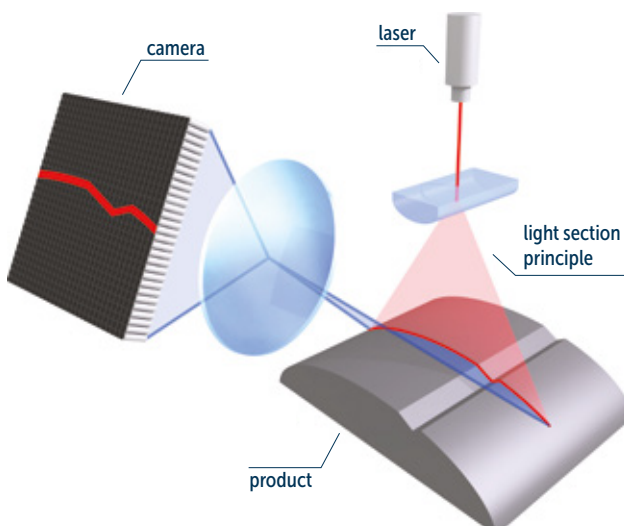
The 4D Eagle profile measuring gauge is a standalone device which fits into any rolling mill for long products. Key feature of the measuring gauge is the light section measuring principle. With highest measuring rates complete cross sections of the individual profile are taken synchronously by the individual lasers.



The 4D Eagle is powered by AUTOMATION W + R/Germany which are experts in surface inspection and measuring technology. For decades they are mainly serving the automotive industry.

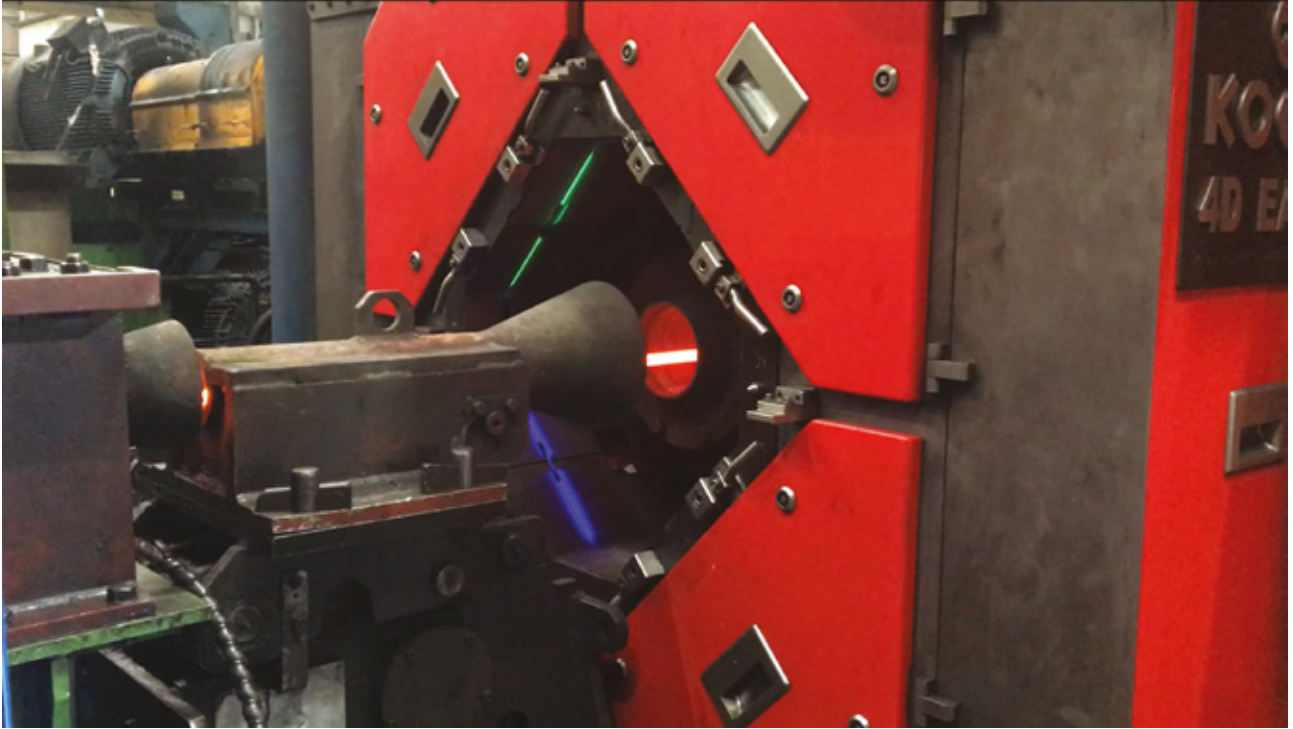
The 4D Eagle integrates the newest technologies and meets all requirements of most modern rolling mills for highest measuring accuracy and frequency. In this sense, the 4D Eagle gauge is suitable as standalone solution for any application in long product rolling mills. Applications can be any profiles such as round bars, wire rods, hexagons, rebar, square, sections, rails, tubes and other long products.

The monitoring and the subsequent high resolution display of the complete surface of the cross section allows the detection of local and periodical surface defects and/or dimensional variations of the rolled product.



Thanks to the measuring frequency in combination with outstanding software algorithms, the 4D Eagle identifies defects of the rolled products immediately and countermeasures can be taken in the shortest possible time.

This drastically supports operators to identify faulty products, and in consequence increases the mill profitability.



---

## HIGHLIGHTS

- + Use of innovative materials together with smart design to avoid thermal expansion
- + Highest measuring frequency
- + Electrical cabinet integrated
- + Stainless steel housing to ensure reliable long-term operation
- + Fully-sealed measuring cell, resistant against scale, water, and dust
- + Automated monitoring of the finished dimension
- + No process water consumption, cooling concept with closed-loop water circulation

---

## SOFTWARE FEATURES

- + Statistical evaluation
  - + Calculation of "cold"-values
  - + Process capability and data archiving functions
  - + Optional integration of length and temperature measurement
-