

## → THE BFI

For more than 50 years, we have stood for innovation and applied cutting-edge research in process industry and thus firmly at the side of companies active in this sector.

As a legally independent and non-profit institute, we offer innovative ideas on future challenges and translate them into customized, operational solutions.

Our goal is to advance the companies of the process industry with our experience, expertise and as a dynamic innovation and R&D-partner.

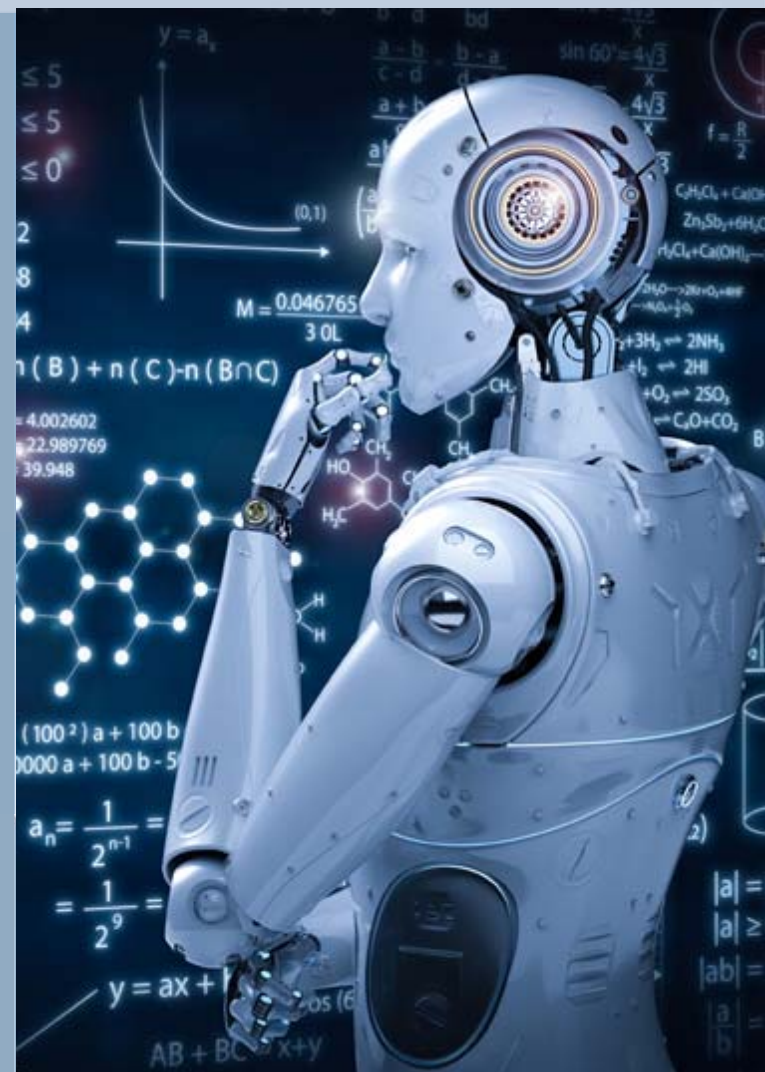
In this sense, we work confidentially, flexibly and efficiently, are nationally and internationally networked and also offer support in applying for national as well as European funding programs.

Our portfolio offers  
**new possibilities** for the  
sustainable improvement  
of your production and  
manufacturing processes

**Please contact us!**



**VDEh-Betriebsforschungsinstitut GmbH**  
Sohnstr. 69 · 40237 Düsseldorf, DE  
Tel.: +49 211 98492-201  
Fax: +49 211 98492-202  
E-Mail: [bfi@bfi.de](mailto:bfi@bfi.de)  
[www.bfi.de](http://www.bfi.de)



**Operational solutions and  
innovations for the challenges of the  
process industry**

**Bfi**

## → Optical diameter and length measuring systems

BFI has been developing customised solutions for automatic optical diameter and length measurement for more than 30 years. We support you from the feasibility analysis to integration into the machine.

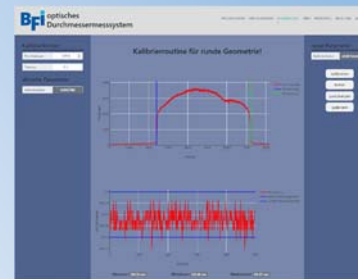
With the new version of the systems for hot material, which have been installed more than 50 times worldwide, BFI has incorporated its long-lasting experience into a completely revised system that is state-of-the-art in terms of design and technology. The sensor system is housed in a sturdy, industrial-grade aluminium housing and now also detects rectangular formats in addition to round material.

## → Technology

Can be used above approx. 600°C,  
typically ~ 1000...1200°C  
With additional backlight <600°C feasible.

Non-contact and maintenance-free,  
Generally no cooling or rinsing media required

Web interface-based  
software and continuous recording with  
50 Hz output frequency  
Averaging optional



Measuring range  
and distance depending on the task  
Distance camera - material: up to 15 m  
Distance camera - evaluation unit  
up to 100 m  
Resolution:  $\pm 1/2000$  field of view



Industrial grade housing

One evaluation unit  
for two cameras



## → Customer-optimised as a full-service solution

Our systems are customised to meet individual customer requirements. Extensive tests in our laboratory help us to select the image processing components that are best suited to the respective measuring task. Together with our browser-based parameterisation and comprehensive service support, our customers receive a full-service solution for industrial diameter and length measurement from a single source. The customer can change all parameters on the system. This means that experienced users can operate the systems themselves. We are happy to support inexperienced users with our expertise and calibration. Our work has already convinced many customers in the forging and forming sectors.