



Ensuring value, securing trust. INSPECTION SOLUTION FOR THE SECURITY INDUSTRY

OVER 30 YEARS OF EXPERIENCE IN
OPTICAL INSPECTION

ISRA
VISION

*ISRA Systems inspect
more than 80 %
of the global
banknote production*

ISRA VISION – pioneering technology from the market leader. 100 % Optical Quality Inspection

For more than 30 years, ISRA has been gathering valuable experience in the field of optical inspection technology. Our systems continuously help manufacturers of a broad variety of materials achieve best quality results and increase yields.

ISRA is well aware of the responsibilities and challenges related to the quality control of security documents. This is why we only use state-of-the-art technology and our long standing expertise to compose an uncompromising level of safety along the entire production line. Major security paper suppliers around the world already trust ISRA technology to attain immaculate quality – more than 80% of global

banknote paper is inspected by using machines delivered by ISRA.

We will be glad to create confidence for your business. Take our word for it and challenge us.

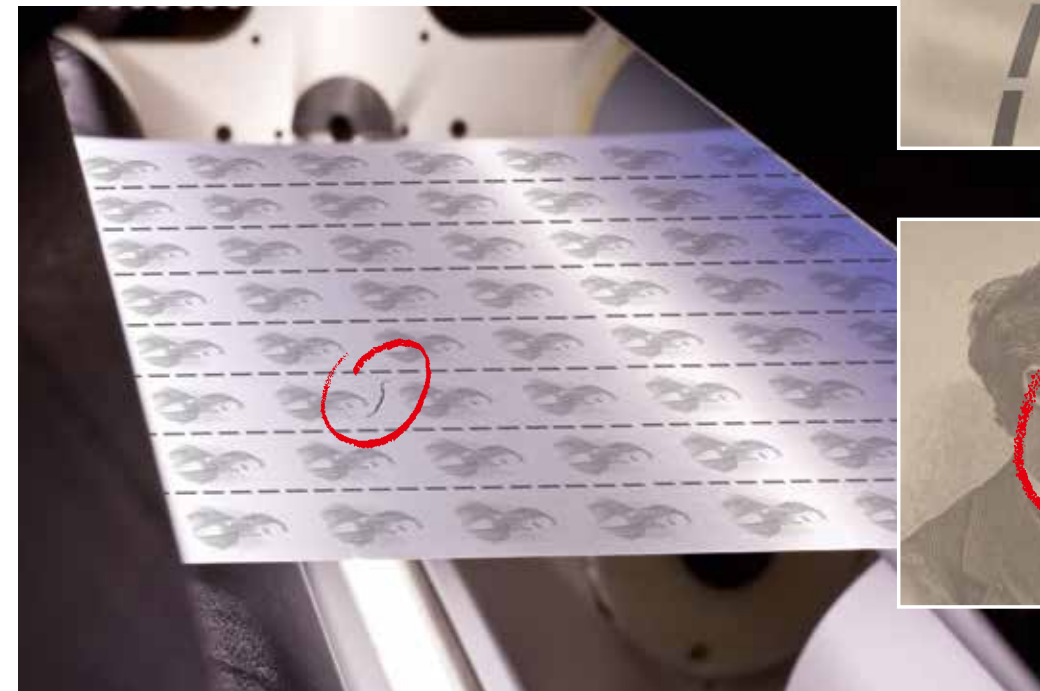
Focus on service:

According to the ISRA philosophy, the customer relationship does not end with the installation of a system. Our global service and support network is only one phone call away, ready 24/7 to offer quick assistance wherever you are.

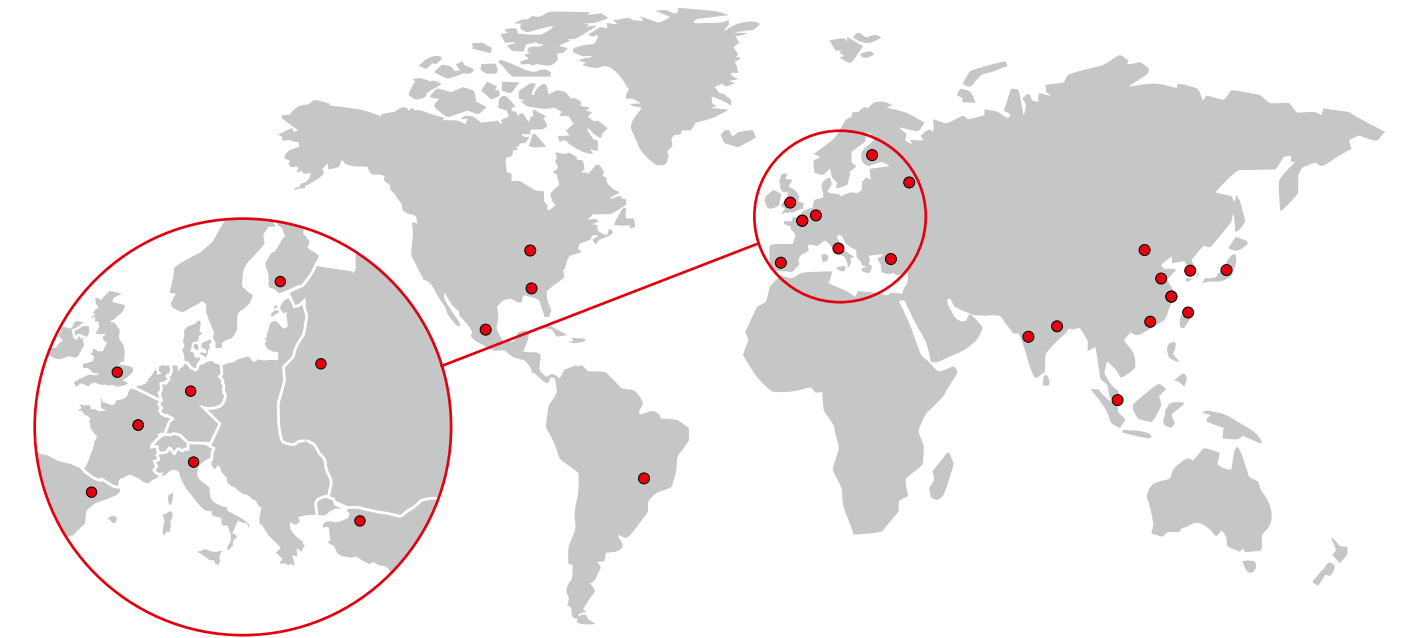
Our commitment. Your benefits:

- 100% product quality
- Unmatchable security standards along the entire production chain
- Avoidance of added value to defective material
- Process optimization for decreased production costs
- Global service and support network

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Innovations in Automated Optical Inspection for all Advanced Materials



**We are the innovators in optical inspection.
Best practice. Best system. Best service.**

For over three decades, ISRA VISION has become a leading manufacturer of highly accurate automated optical quality inspection systems.

More than 10,000 successful applications reference our sustainable experience in the field of machine vision products – and our ability to innovate.

Today our products are operating worldwide in such industries as glass, plastics, foils, print and automation. It is our goal to set system standards for total process control in these industries.

Customers choose ISRA for the ability to develop products consistently to their requirements. More than 900 employees at 25 locations worldwide are working to contribute to your success.

Your global partner for surface inspection.

We offer our experience and a highly qualified team of experts to design and implement solutions for advanced applications.

We assure that our mission continues beyond our shipping dock. Just challenge our Customer Support and Service Center (CSSC).

We guarantee excellence to our customers – from consulting to service, from tailored solutions to worldwide support. We can make your business more competitive.

**Challenge Us.
Inspect to Control – with ISRA VISION**

ISRA VISION

Germany
Tel.: +49 (2366) 930 00

Belgium
Tel.: +49 (2366) 930 00

Spain
Tel.: +34 (93) 839 70 32

France
Tel.: +33 (0) 155 681 250

Italy
Tel.: +39 (0464) 490 603

UK
Tel.: +44 (1442) 261 202

USA
Tel.: +1 (770) 449 77 76

Brazil
Tel.: +55 (11) 347 611 32

Turkey
Tel.: +90 (212) 285 97 45

Russia
Tel.: +7 (921) 055 63 30

P.R. China
Tel.: +86 (21) 685 002 88

Japan
Tel.: +81 (45) 534 99 11

Korea
Tel.: +82 (31) 806 973 00

Taiwan (R.O.C.)
Tel.: +886 (3) 250 01 48

India
Tel.: +91 98 23 16 24 55

Optimize your ROI with the technology leader **ISRA**
info@isravision.com www.isravision.com

BankSTAR

Advanced in-line inspection technology based on over 30 years of experience

The **BankSTAR** product line provides the highest inspection reliability for security paper, security foil and all applied security elements. Enjoy the confidence of a 100% inspection of materials such as banknote paper, security printing, passports, stamps, certificates, ID-documents, checks, customs banderoles and tickets. High-end technology components

like high-speed, high-resolution line-scan cameras, ultra-bright illumination modules, such as visible, ultraviolet and infrared lighting, and real-time processing deliver precise and reliable inspection results at any stage within the production process.

Achieve superior quality and improve process efficiency based on highest security standards!

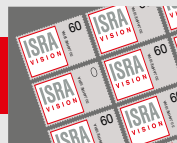
Why choose BankSTAR?

- 100% defect detection on security paper, security foil and on all applied security elements
- Outstanding inspection at highest processing speeds
- Reliable real-time classification
- Avoid adding value to waste material
- Low maintenance requirements
- Increase saleable product
- Short ROI quick setup, easy usability
- Complete process monitoring
- Yield optimization

Security Threads



Security Print



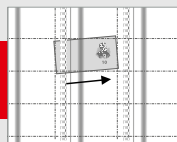
Substrate Defect



Thin Places / Pinholes



Sheet Desquareness



E-Types



Holographic Objects



Contamination



Iridodin Print



OVI Print



Color Measurement



Watermarks



ISRA optical inspection systems: providing top-level security where it is needed the most.

The best
just got better!

Security is crucial. Confidence is priceless. It is our mission to provide both.

BankSTAR secures quality by inspecting the surface and security elements beginning with the incoming material. As defective material can be identified at an early stage, no further value is added. The system works to your advantage and serves not only as an high-end inspection tool before shipping to your customer but also as means to optimize production efficiency and to reduce costs.

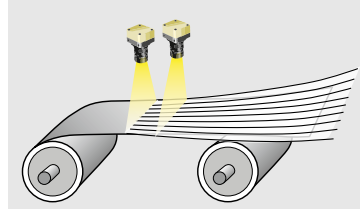
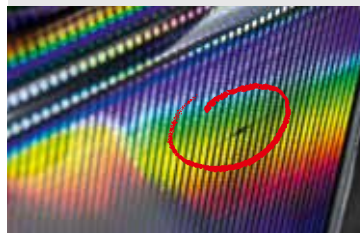
All defects are shown in full resolution and all deviations are marked and classified accordingly. This ensures the most accurate quality control and full process monitoring. All members of the **BankSTAR** family are linked, providing outstanding data management opportunities. Process information is documented and available at any time.

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Incoming

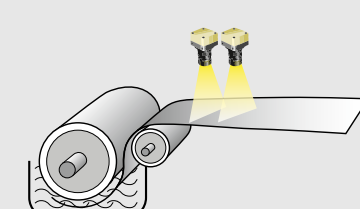
BankSTAR Holo



Hologram Inspection

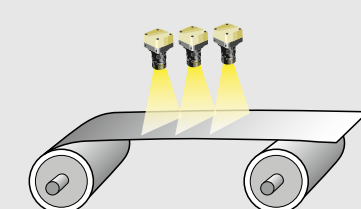
Paper Machine

BankSTAR WS



Security Thread
Inspection

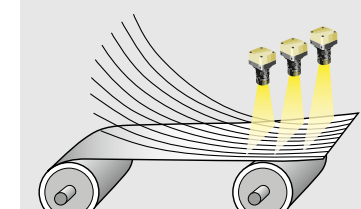
BankSTAR PM



Paper Inspection

Converting

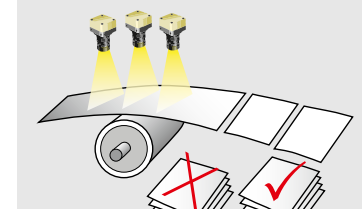
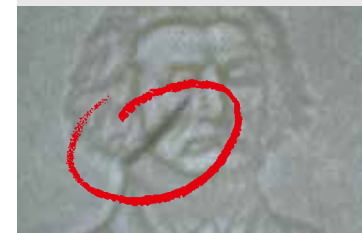
BankSTAR OV



Optical Variable
Elements Inspection

Cross Cutter

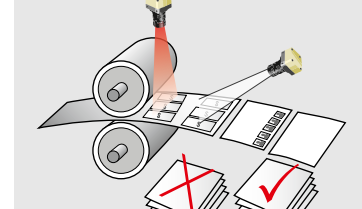
BankSTAR CC



Cross Cutting
Inspection

Print

BankSTAR PR



Print Inspection

Meet the members of the BankSTAR product family:

BankSTAR Holo

Inspection of embossing, printing and de-metallization of incoming security foils and threads

Benefits:

- No added value on waste material
- Early separation of defective material
- Improvement of production efficiency

BankSTAR WS

Inspection of security thread, watermark quality, and the additional thread elongation measurement at the wet section

Benefits:

- Early defect detection
- Shortest reaction time for operator to fix quality
- Documentation of thread and elongation, e.g. for the new Euro

BankSTAR PM

Inspection of all security elements in the paper, E-types and security threads at the dry end

Benefits:

- Exact data on paper geometry
- Precise information on paper quality and capacity of good production
- Avoid adding value to defective material
- Easy identification with ink marking unit

BankSTAR OV

Inspection of all elements that are finished through the OV process: all foil applications LEAD, iridescent printing, OVI printing and primer printing

Benefits:

- Recognition of defects during foil application
- 100% inspection of iriodin print
- Most precise inspection of OVI printing

BankSTAR CC

Inspection of all kinds of applied security elements at the cross cutter, before they are shipped to the print shop

Benefits:

- Deliver reams with 100% perfect quality
- No manual hand sorting necessary

BankSTAR PR

Inspection of print on banknotes, stamps or cards is based on visible and invisible printing processes such as intaglio, offset, infrared, rainbow, and screen print

Benefits:

- Best quality control to keep the highest security standards
- Highest production efficiency
- Easy adaptation to future printing structures for sheet-fed printing as well as roll-to-roll printing

Service Package: 24 / 7 real-remote support +++ Preventive Maintenance +++ Training +++ Updates of security features +++