

YXLON MG*i* X-ray systems

Versatile unipolar and
bipolar stationary X-ray modules

- From high resolution to strong penetration
- Completion of the image chain by YXLON Imaging Kit
- Global YXLON service network
- Solutions customized to your needs



About YXLON

As the world's leading manufacturer of industrial X-ray and CT technology, YXLON provides you with solutions for a wide variety of applications. In addition to our complete X-ray and CT inspection solutions, we have developed the MG_i X-ray modules to offer you a versatile solution for inspection tasks with high resolution to strong penetration – customized to your needs.

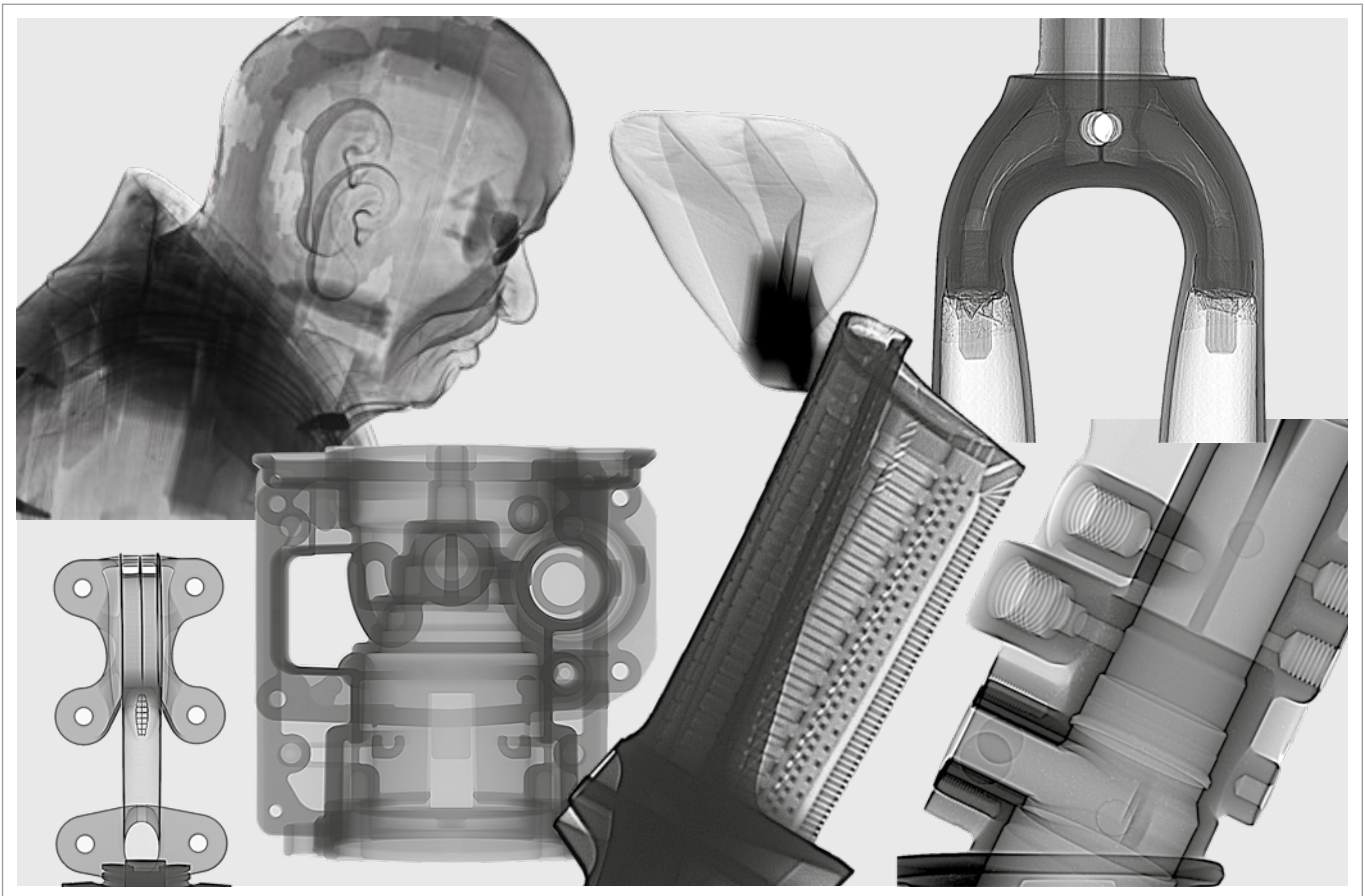
To complete the image chain, we offer the high-resolution YXLON Imaging Kit with flat-panel detectors and YXLON image processing software. Our individual training and service packages ensure fast implementation and the best results for your inspection tasks.

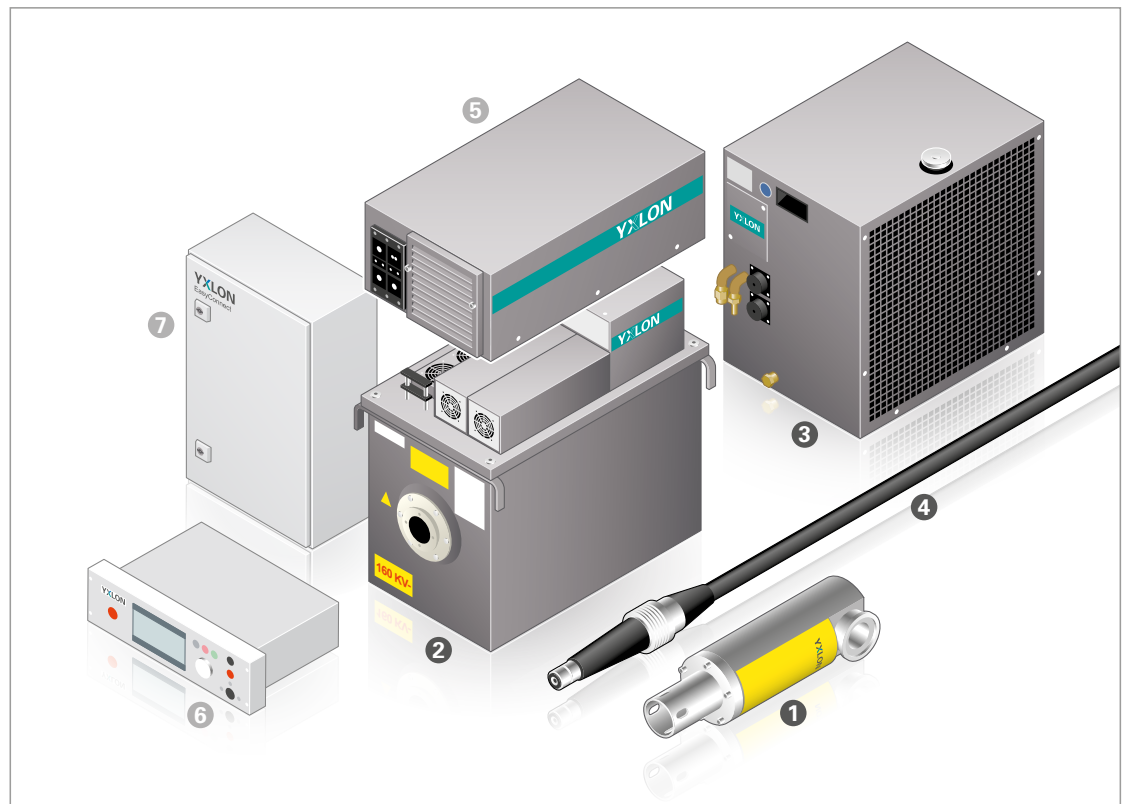
The heart of the MG_i X-ray system and therefore the basis for your inspection tasks is the state-of-the-art MG_i generator with its innovative design and intelligent software. The available output power of 2.25 kW or 4.5 kW combined with a voltage ranging from 160 kV to 450 kV allows you to X-ray both weakly absorbing materials, such as plastics, rubber or light castings, as well as highly absorbing materials, such as steel. The pattern of the generator programmed according to the type of tube ensures stable and reliable operation as well as an optimum service life of the tube.

Fields of application

DR and CT for industrial applications in

- Aviation and aerospace
- Automotive industry
- Electronics
- Pipe and vessel construction
- Research and development etc.





Components of the MGi X-ray system

1 X-ray tube:

The YXLON tube spectrum ranges from unipolar 160 kV and 225 kV metal-ceramic X-ray tubes to 320 kV and 450 kV variants (more information can be found in the separate tube datasheet).

2 High-voltage generator:

High-stability DC voltage modules with a working frequency of 70 kHz, comprising:

- Generator tank(s): 160 kV, 225 kV, 320 kV or 450 kV
- Power unit(s): 2.25 kW or 4.5 kW
- IFC terminal: Input/output terminal with central generator intelligence

3 Cooler:

Various water coolers for unipolar systems as well as oil coolers for bipolar systems – options available for environmental temperatures higher or lower than 35 °C

4 High-voltage cable:

Available in different lengths (depending on the kV class) and connection angles.

Cooling hose:

Available in various lengths.

MGi control software:

The MGi control software is used to control and operate the MGi generator and can run on a Microsoft Windows operating system. The intuitive design ensures that the

software is easy to use thanks to the clear display of the system parameters.

The software provides information about the set operating parameters, the status of the system as well as clear notifications for the system.

5 Protective cover (optional):

The cover raises the generator protection class from IP20 to IP54 and therefore reliably protects the generator from dust and spray.

6 Touchscreen controller (optional):

The easy-to-use panel has easy touch control and a large control knob, visualization of the isowatt curve of the tube and the system status.

As an alternative to the MGi control software, the controller can also be used as an operating unit.

7 YXLON EasyConnect (optional):

The EasyConnect Option allows for a simple and fast “plug-and-play” integration of the MGi generator considering all international safety-related aspects.

Warning lamps:

24 volts, available in red, yellow and blue.

Accessories:

You can expand the system to include specific accessories based on your requirements (e.g. a laser centering device, collimator and many more)

“i” makes the difference!

iNNOVATIVE

The MG*i* high-voltage generator combines well-designed hardware and the latest software technology to create a basis that will make the X-ray system even more reliable and flexible in future. The aim of meeting your individual inspection tasks to your full satisfaction is what drives us.

iNTEGRATED

A modular, compact and robust design allows for quick set-up and optimized reaction times. Plug-and-play allows components to be easily replaced or added – this not only maximizes the uptime, it also increases flexibility.

iNTELLIGENT

A coordinated integration level of tube and generator allows for intelligent controlling of the voltage ramp-up and ramp-down, which can efficiently absorb tube sparkover – with the lowest possible impairment of imaging and the greatest possible protection of the module.





MGi 160



MGi 225



MGi 320



MGi 450

Configuration Matrix

X-ray module	Metal-ceramic X-ray tube	Generator	Cooler	HV cable	Cooling hose	Options
MGi 160	160 kV	MGi 160/2.25 kW MGi 160/4.5 kW	WL30 WW30 WLK30	5 m	5 m	
				10 m	10 m	
				15 m	15 m	
				20 m	20 m	
				25 m	25 m	
MGi 225	225 kV	MGi 225/2.25 kW MGi 225/4.5 kW	WL30 WW30 WLK30	5 m	5 m	
				10 m	10 m	
				15 m	15 m	
				20 m*	20 m	
				25 m*	25 m	
MGi 320	320 kV	MGi 320/4.5 kW	OL45 OW45 OLK55 OLK56	5 m	5 m	Options/ accessories
				10 m	10 m	
				15 m	15 m	
				20 m*	20 m	
				25 m*	25 m	
MGi 450	450 kV	MGi 450/4.5 kW	OL45 OW45 OLK55 OLK56	5 m	5 m	
				10 m	10 m	
				15 m	15 m	
				20 m*	20 m	
				25 m*	25 m	

* For this kV class, the cable length 20 m and 25 m will reduce the max. recommended voltage.

The iCING on the cake: the YXLON Imaging Kit



The benefits:

- Complete your image chain with YXLON.
- Take the step with us from film to digital imaging
- Improve your inspection quality with the digital flat-panel detector and suitable YXLON IMAGEx500 image processing software

The components:

- Digital flat-panel detector
- YXLON IMAGEx500 digital imaging software
- High-speed image PC and monitor
- Detector holder and screen incl. all cables, plugs and adapters
- Options: ASTM reference images, offline station, video recording PC and many more.

Detectors:

Y.Panel 0822-14 HDR

- 14 bit, 8x8"
- 1024 x 1024 pixel @ 200 μm with up to 15 fps
- 512 x 512 pixels @ 400 μm with up to 30 fps
- Suitable for a wide variety of applications (e.g. inspecting metals and CFRP)
- Other detectors are available upon request.

Y.Panel 0822-16 HDR

- 16 bit, 8x8"
- 1024 x 1024 pixel @ 200 μm with up to 25 fps
- 512 x 512 pixels @ 400 μm with up to 50 fps
- Suitable for film replacement; complies with aviation standards

IMAGEx500 software:

- Automatic detector calibration and the intelligent correction of noisy or non-linear pixels improves image analysis
- Intuitive imaging tools: Film replacement tools, filters, grey scaling, notes and HDR live image filters
- Create, document and archive data according to ASTM E2737
- Complies with DICOM

HDR technology:

- High dynamic radiography (HDR) allows for live inspections thanks to the high depth resolution combined with a high dynamic image rate
- The process increases inspection safety and reduces cycle times, as errors can be detected and located in various material thicknesses without the X-ray parameters having to be constantly adjusted



Al cast part with 15% HDR



Al cast part with 55% HDR



Al cast part with 95% HDR



YXLON Life Cycle Service – more than the best image

YXLON Life Cycle Service

- **ServicePass** – the most important services tailored to your system and your needs
- **SmartPass** – for customers who need instantaneous spare parts availability
- **LifeCyclePass** – the all-inclusive package covering all costs throughout the entire system lifetime
- **WarrantyPass** – predictable costs by extending the warranty for one or two years
- **SmartSpares** – the best compatibility and added functionality using original YXLON spare parts
- **SmartExchange** – direct replacement of defective or worn-out components to minimize system downtimes
- **Upgrades** – up-to-date system technology and prolonged lifetime
- **YXLON Academy** – professional training teaches your operators how to get the most out of the system

What are your specific service requirements? We offer a wide range of service modules and packages tailored to your needs.

Our highly qualified global service team is committed to providing excellent service to our customers worldwide. With eight global service centers and specialized staff at over 50 service partners, we can ensure a rapid response time wherever and whenever you need it.

Your benefits include:

- High system availability
- Low operating costs
- Superior inspection results
- Guaranteed operational safety
- Prolonged system lifetime

We align our organization and all service activities to comply with your requirements. With our innovative, modular service solutions you can count on true added value throughout the entire life cycle of your system.

We support you in keeping your inspection costs to a minimum. At the same time, your systems operate safely at peak performance while providing optimum inspection results throughout their entire lifetime.



Would you like to find out more about us?
Are you interested in a test inspection?
Then get in touch with us –
either by phone or by email
We look forward to hearing from you.

YXLON

Technology with Passion

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