Y.MG X-Ray Systems

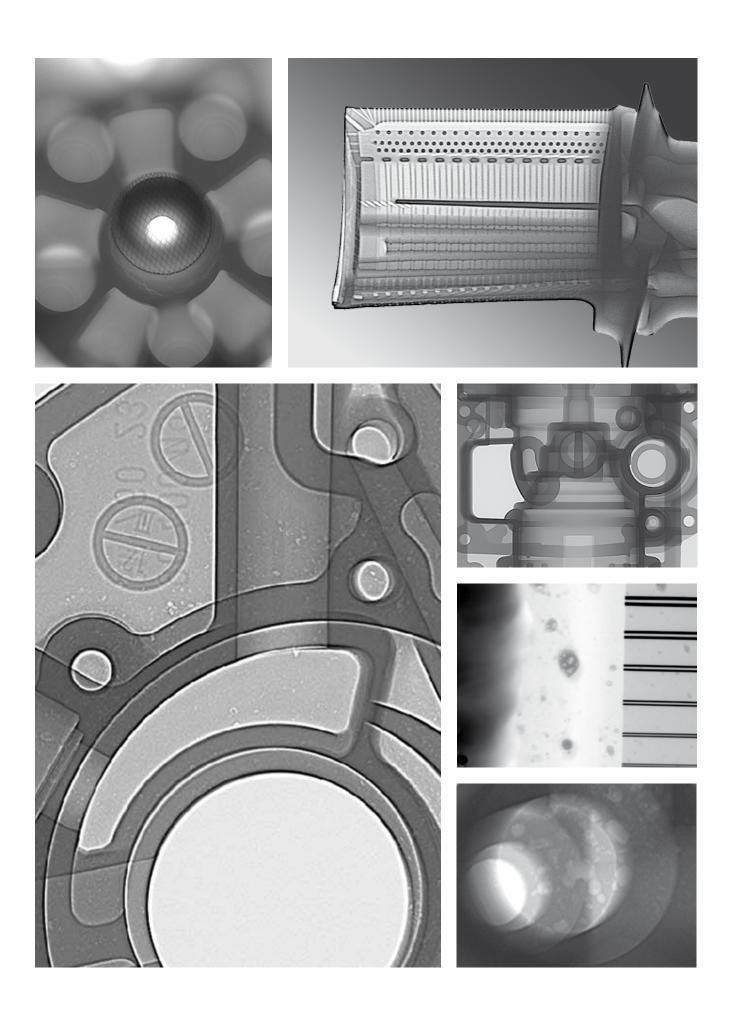
Put together packages and profit from them

- X-ray sources ranging from high resolution to intense penetration
- Digital detectors for wide variety of applications
- Y.Image analysis software for maximum benefit
- Conformity to standards, robust and reliable

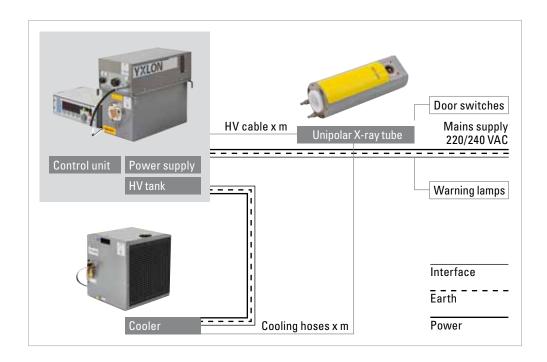








Configuration of a unipolar Y.MG system



YXLON Y.MG/XST Systems

The product line of unipolar and bipolar stationary X-ray systems from YXLON includes systems with a power output of 2.25 kW and 4.5 kW at a voltage spectrum from 100 kV to 600 kV.

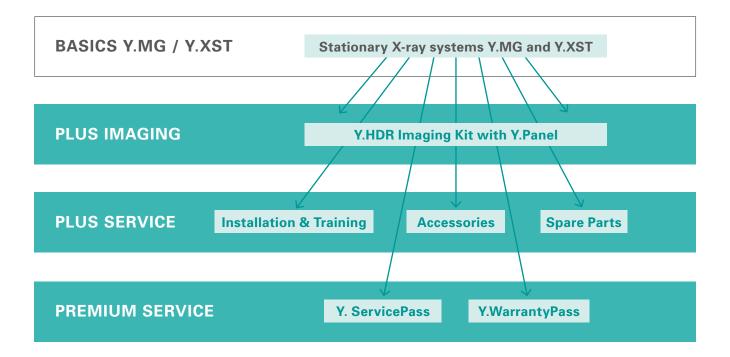
Depending on the system involved, the area for usage ranges from weakly absorbent materials, such as plastics or rubber (MG103), to lightweight metal parts and thin-walled materials with a low density (MG165 and MG226), all the way to thick-walled, high-density materials such as iron or nickel alloys (MG325, MG452 and MG605).

The constant-potential systems are equipped with 40 kHz technology, which ensures very high stability and setting precision for both the high voltage and tube current. In addition, as a result of this the systems respond very rapidly to target value modifications, enabling inspection times to be reduced substantially.

Continuously ongoing comparison of the actual vs. targeted values stabilizes variances within the mid and long-term range caused by any voltage fluctuations occurring. The same applies within the microsecond range.

The master data setting for the MGC41 control unit is menuguided, making the X-ray systems very easy to operate. Operating parameters and reports of defects are shown in cleartext on a large, well-structured display. What's more, it is equally possible to save frequently recurring data captured on images.

All of the systems' components are safeguarded against exposure to water. The generators and power units comply with the International Protection Code IP54.



Put together your customized packages and profit from our major discounts!

Y.MG BASIC

Every customer, every application places individual demands on an X-ray system. The range of the YXLON Y.MG line makes extensive combinations possible so that you achieve optimum results wherever the system is applied. Our consultants stand by you with all the helpful knowhow at their command.

High-voltage generator, metal-ceramic X-ray tube, power unit, control unit, high-voltage cable, water cooler – assembled according to your needs, complete with all connections – form the basic package at a bargain price.

Y.MG PLUS Imaging

Additionally select your choice of Y.Imaging package for a full-scale imaging chain consisting of high-quality flatpanel detectors in a variety of qualities and sizes, highspeed image processing software that even includes film replacement tools in compliance with ASTM 2737, a PC and display, including all cables and connections.

Y.MG PLUS Service

Give some thought to having your system installed professionally, and to receiving a basic training course conducted by our qualified Service staff. Then integrate the two right away in your order package. Put your accessory and spare parts packages together in one and save once again.

Y.MG PREMIUM Service

You obtain an optimum of assurance for your inspection tasks with the customized ServicePass and the extended warranty included in the WarrantyPass.



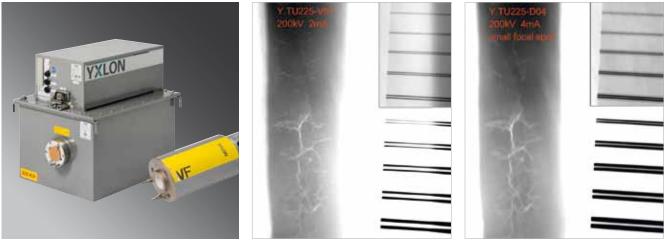
The basics – stationary unipolar constant-potential X-ray systems of the Y.MG family

	Y.MG103 / 2.25 100 kV / 2.25 kW	Y.MG165 / 2.25 160 kV / 2.25 kW	Y.MG165 / 4.5 160 kV / 4.5 kW	Y.MG226 / 2.25 225 kV / 2.25 kW	Y.MG226 / 4.5 225 kV / 4.5 kW
Control unit MGC41 with connection cable 10 m (optional 20 m, 30 m, 40 m)	•	•	•	•	•
Power unit					
MGP40 / 2.25 kW	•	•		•	
MGP41 / 4.5 kW			•		•
High-voltage generator					
MGG40 / 100 kV, minus	•				
MGG42 / 160 kV, minus		•	•		
MGG43 / 160 kV, plus					
MGG46 / 225 kV, minus				•	٠
Metal-ceramic X-ray tube					
Y.TU 100-D02 / 100 kV, double focus 1.0 / 3.0 mm	٠				
Y.TU160-D02 / 160 kV, 1.0 x 5.5 mm		0	•		
Y.TU160-D03 / 160 kV, 1.0 x 3.0 mm		0	0		
Y.TU160-D04 / 160 kV, 1.0 x 1.0 mm		0	0		
Y.TU160-D05 / 160 kV, 1.0 x 1.0 mm		0	0		
Y.TU160-D06 / 160 kV, 0.4 x 1.0 mm		•	0		
Y.TU160-F01 / 160 kV, fan beam, 1.0 mm		0	0		
Y.TU160-P01 / 160 kV, cone beam, 4.0 mm		0	0		
Y.TU225-D02 / 225 kV, 1.0 x 5.5 mm				0	•
Y.TU225-D03 / 225 kV, 1.0 x 3.0 mm				0	0
Y.TU225-D04 / 225 kV, 0.4 x 1.0 mm				•	0
Y.TU225-F02 / 225 kV, fan beam, 5.5 mm				0	0
High-voltage cable (optional 10 m, 15 m, 20 m)					
100 kV, standard / 5 m	•				
100 kV, special / 5 m	0				
160 kV, standard / 5 m		•	•		
160 kV, one side 90° / 5 m		0	0		
160 kV, both sides 90° / 5 m		0	0		
225 kV, standard / 5 m				٠	٠
225 kV, one side 90° / 5 m				0	0
Water cooler WL3002	•	•	•	•	•
WLK (water-to-air cooler)	0	0	0	0	0
Water hoses, set 5 m (optional 10 m, 15 m, 20 m)	•	•	•	•	•



The basics - stationary bipolar constant-potential X-ray systems of the Y.MG family

	Y.MG325 320 kV / 4.5 kW	Y.MG452 450 kV / 4.5 kW	Y.MG605 600 kV / 4.5 kW
Control unit MGC41 with connection cable 10 m (optional 20 m, 30 m, 40 m)	•	•	•
Power unit			
MGP40 / 2.25 kW			
MGP41 / 4.5 kW	•	٠	٠
High-voltage generator			
MGG40 / 100 kV, minus			
MGG42 / 160 kV, minus	•		
MGG43 / 160 kV, plus	•		
MGG46 / 225 kV, minus		•	
MGG47 / 225 kV, plus		•	
MGG60 / 300 kV, minus			•
MGG61 / 300 kV, plus			٠
Metal-ceramic X-ray tube			
Y.TU320-D01 / 320 kV, 1.9 x 3.6 mm	0		
Y.TU320-D03 / 320 kV, 3.0 x 5.5 mm	0		
Y.TU320-D05 / 320 kV, 0.4 x 1.0 mm	•		
Y.TU450-D10 / 450 kV, 2.5 x 5.5 mm		0	
Y.TU450-D11 / 450 kV, 0.4 x 1.0 mm		0	
Y.TU600-D02 / 600 kV, 0.7 x 2.0 mm			•
High-voltage cable (optional 10 m, 15 m, 20 m)			
160 kV, standard / 5 m	• •		
160 kV, one side 90° / 5 m	0		
160 kV, both sides 90° / 5 m	0		
225 kV, for 450 kV systems / 5 m		• •	
225 kV, for 450 kV systems, one side 90° / 5 m		0	
300 kV, High-voltage cable F3 / 5 m			• •
Oil cooler OL4502	•	٠	•
OLK (oil-to-air cooler)	0	0	0
Oil hoses, set 5 m (optional 10 m, 15 m, 20 m)	•	•	•



For very high resolution requirements the Variofocus tube (left X-ray image) is the ideal solution.

Y.XST Variofocus

- Variable focal spot in closed X-ray tube
- Focal-spot size adjustable from 250 μm to 800 μm
- Power output up to 1600 W
- Highest resolution and low-noise images
- Suitable for highly detailed and rapid CT

With the Y.XST225-VF Variofocus X-ray system and its variable focal spot, YXLON closes the gap between microfocus and conventional X-ray tubes in digital radiography and computed tomography.

The considerably smaller focal spot in comparison to conventional X-ray tubes leads to a higher spatial resolution and, as a result, to optimum detail detectability.

At the same time the system offers the power output of high-performance X-ray tubes, enabling a substantially higher output than all the microfocus tubes available on the market until now.

The focal spot of the Variofocus tubes can take on values between 250 μm at 290 W up to 800 μm at 1600 W.

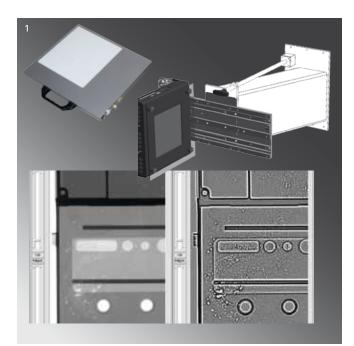
The variable focal spot means that the focal-spot size can be optimally adapted to the required magnification and to detector blur resulting from the materials, shape and nature of the object to be inspected.

Optimum detail detectability is achieved for each and every inspection item this way, the prerequisite toward fulfilling strict safety standards and the basis toward increasing efficiency and quality improvement during the production process.

While doing so, the new Variofocus tubes from YXLON cover the entire span from a large overview image at short inspection times straight through to a high-resolution, detailed close-up.

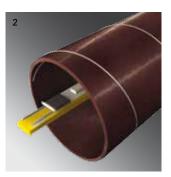
Scope of delivery

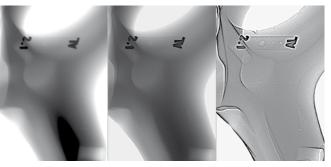
- X-ray tube Y.TU 225-V01 with variable focal spot from 250 μm / 290 W to 800 μm / 1600 W
- Electronics power unit XRP 225-VF
- High-voltage generator XRG 225-VF
- Activation via PC interface RS232 (no separate control unit necessary)
- 225 kV high-voltage cable, 5 m (optional 10 m, 15 m, 20 m)
- Water cooler WL3012 for Y.XST
- Cooling-water hose, 5 m (optional 10 m, 15 m, 20 m)
- Y.XST control-unit software for Variofocus tube



- 1. Y.HDR-Inspect
- 2. Pipe inspection with film replacement
- Digital X-ray images

 without HDR filter
 with medium HDR filter
 with strong HDR filter
 (from left to right)





High-Resolution Radioscopy and Flat-Panel Detector Packages

Y.HDR Imaging Kit with Y.Panel XRD0822, 14 bit (alternately 16 bit), consisting of:

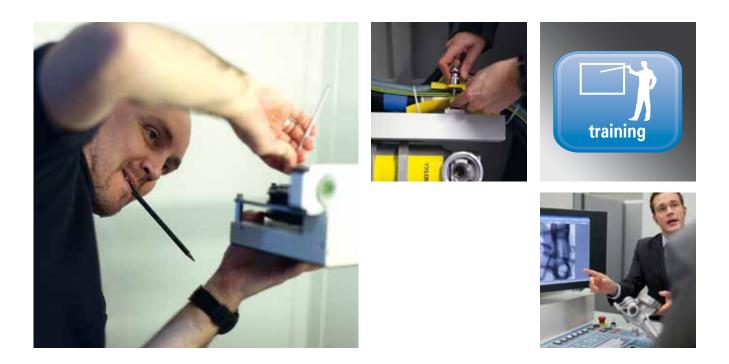
- Y.IMAGE3500 High-Speed Kit (incl. film replacement tools, duplex wire analysis, contrast analysis and long-term stability as per ASTM 2737)
- Tower PC for Y.IMAGEx500
- Y.Panel XRD0822, flat-panel detector 8"x8" (PerkinElmer), 14 bit / alternately 16 bit
- Detector mount and detector shield
- Y.Display T24-CD02 TFT monitor / 24" wide-screen 16:10
- Including all connections, adapters and cables

Optional:

- Y.IMAGE2500-D
- Offline station
- ASTM reference images
- Variety of detectors in different sizes and sensitivities

Several software features:

- DICONDE conformity
- Step-wedge detector calibration
- Wide variety of measurement possibilities
- Macro-programmings
- System qualification report



Installation and Training

The flawless operation of your X-ray system is ensured and the claim under warranty from YXLON goes into effect only when installation has been performed properly by our Service staff. An intensive training course for your application operators enables quick acclimatization and the best inspection results. We offer pro-
Test certificate fessional installation and a qualified training course as a package.

- Package Y.MG unipolar: Installation & basic training 1 day
- Package Y.MG bipolar: Installation & basic training 2 days
- Package Y.XST 225-VF: Installation & basic training 2 days

Options and Accessories

With the right adjustments, your X-ray system is customized to match your specific applications and needs. Notify us regarding your requirements and wishes. We support you in putting together your accessory package.

- Full lead shutter
- Laser centering device with collimators
- Serial interface with optical fiber cable 2 m / 15 m
- Range selector
- Temperature compensation kit
- Special EPROM
- Mobile tube stand
- Mounting clamp
- Adapter + adapter flange quick lock
- IQI image quality indicators
- Detector housing, incl. various shields



Spare Parts Packages

To avoid superfluous downtimes, our Service department recommends that the investment includes ordering appropriate parts of stationary X-ray systems subject to wear-and-tear at the same time.

We offer our customers the following spare parts in packages:

Y.Spare parts BASIC kit (230V) MGP40/41

Recommended MGP spare-parts package consisting of:

 Safety check LPL 230V, Printed circuit E1 heating, Oscillator XRP 4.5/2.25kW universal

Y.Spare parts BASIC kit MGC41

Recommended MGC41 spare-parts package consisting of:

 Rafix 16 switch element, push button with black cap, Rafix 16 switch element, push button with red cap, Bulb,24v (7000h), Rafix 16 lamp holder, Rafix 16 signal lamp, key switch mains, spare key for MGC41, BIT generator BG40-50-D-25-A-1, PCB CA12 for MGC41 controller, PCB CA13 interface MGC41, PCB CA14 power supply MGC41

Y.Spare parts BASIC kit (24V) MGP40/41

Recommended MGP basic spare-parts package consisting of:

 Safety check PL 24V, circuit board E1 heating, Oscillator XRP 4.5/2.25kW universal

Recommended spare parts Y.Imaging

- Y.Panel: Ethernet data cable in different lengths
- Y.Panel xx22: power unit 215 W
- Y.Panel XRD AC: connection cable in different lengths
- Y.Panel xx22 DC: connection cable in different lengths



PREMIUM Service

Y.ServicePass

The ServicePass tailored to meet your needs in Basic, Plus and Premium packages:

- Regular inspection and maintenance twice a year
- Service Hotline from 9 to 24 hours, 5 days a week
- Service response times guaranteed from 60 to maximum of 24 hours
- Spare parts availability in accordance with contract within 48 or 24 hours

Your advantages:

- High system availability
- Minimized operating costs
- Assured inspection quality
- Ensured operational safety

Y.WarrantyPass

for Y.MG systems:

- Basic12 Extension of standard 12-month warranty period for an additional 12 months for HV cables, generator, power unit, cooler, control unit
- Plus24 Extension of standard 12-month warranty period for an additional 24 months for HV cables, generator, power unit, cooler, control unit

for Y.XST 225-VF systems:

- Basic12 Extension of standard 12-month warranty period for an additional 12 months for HV cables, generator, power unit, cooler, control unit
- Plus24 Extension of standard 12-month warranty period for an additional 24 months for HV cables, generator, power unit, cooler, control unit





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