



Industrial X-Ray

MXC

Product Line

MXC – Product Line

Overview

Innovation in Power and Size!

The design goal of 50% reduction in size and weight is exceeded!

With the revolutionary design of the new MXC product line COMET provides metal ceramic tube assemblies with the smallest foot print worldwide.

MXC is COMET's answer to the general trend of miniaturization. With the novel design of isolator integrated anode cooling (**patent pending**) COMET is world wide the only supplier for 450 kV full shielded tube assemblies below 50 kg.

COMET sets a new milestone in the field of industrial X-Ray tubes: HP-Technology combined with the integrated anode cooling results in MXC line, the tube assembly with the smallest footprint, lowest weight and smallest focal spot with the highest power.

The MXC line is especially suited for CT application, where size, weight and resolution are key.

Integrated into COMET's X-Ray Source we add another key feature: improved high voltage stability based on arc-suppression!

Features and Customer Benefits

Smallest footprint:

- Floor space savings up to 50% possible
- Reduces the investment in secondary shielding

Lowest weight

- Reduces the investment in manipulator
- Improves the accuracy of the manipulator
- Simplifies handling and installation
- Room for reduced leakage radiation

Compatibility

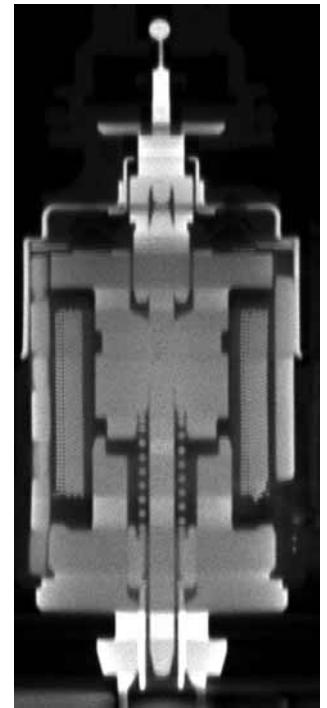
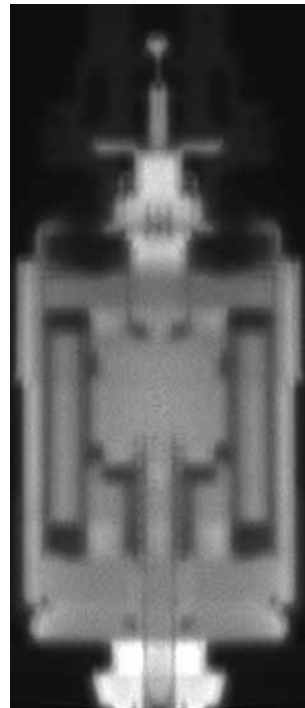
- Standard high voltage cable connections allow upgrades

Application: especially CT

- Higher throughput at high resolution
- Higher resolution at high throughput

Logistics

- Less shipping costs
- Less storage space



The images above illustrate the superior performance of the HP-Technology versus traditional X-Ray. Both images were made using the same power and exposure duration. Due to the smaller focal point of HP-Technology, the resolution of the image on the right is clearer and shows far more detail.

Configuration examples for MXC-Modules

XRS Module	Generator							Tube
	Type	Ordering No.	Voltage range (kV)	Current range (mA)	Max. power (W)	Output connector	Ordering No. flange	Tube type example
XRS-320C	XRP-320/4500/2	10006467	15–320	0–22.5	4500	R24	651136	MXC-320HP/11
XRS-450C	XRP-450/4500/2	10006468	20–450	0–15	4500	R28	10001710	MXC-450HP/11

Specifications subject to change without notice



MXC-320HP/11

Ordering No.	915701.51
Nominal tube voltage	320 kV
Continuous rating	800 W/ 1800 W
Focal spot acc. EN 12543	d=0.4 mm*/d=1.0 mm
Filament current, max.	4.1 A/4.6 A
Filament voltage, typical	2.3V/6.8V
Inherent filtration	3 mm Be
Target material	W
Target angle	11°
Radiation coverage	40° x 30°
Leakage radiation, max.	5 mSv/h
Cooling medium	Oil
Cooling medium flow, min.	7l/min
Temperature at inlet, max.	50 °C
Weight	25 kg
Terminal type	R24

90011301

* Threshold: 25 %

MXC-450HP/11

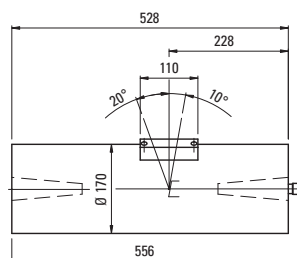
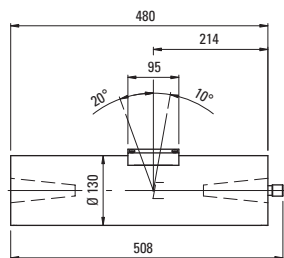
Ordering No.	915702.51
Nominal tube voltage	450 kV
Continuous rating	700 W/ 1500 W
Focal spot acc. EN 12543	d=0.4 mm*/d=1.0 mm
Filament current, max.	4.1 A/4.6 A
Filament voltage, typical	2.3V/6.8V
Inherent filtration	3 mm Be
Target material	W
Target angle	11°
Radiation coverage	40° x 30°
Leakage radiation, max.	5 mSv/h
Cooling medium	Oil
Cooling medium flow, min.	7l/min
Temperature at inlet, max.	50 °C
Weight	45 kg
Terminal type	R28

90010292

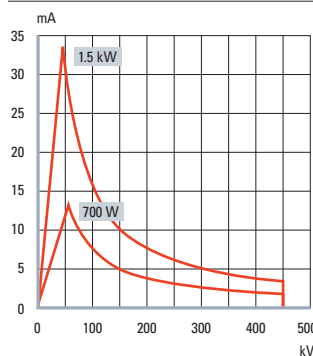
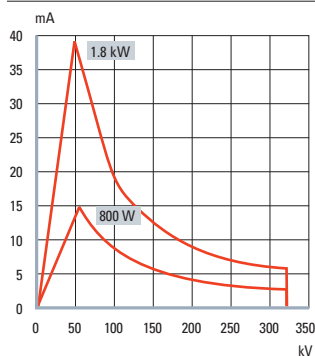
* Threshold: 25 %

Ordering No.	915701.51
Nominal tube voltage	320 kV
Continuous rating	800 W/ 1800 W
Focal spot acc. EN 12543	d=0.4 mm*/d=1.0 mm
Filament current, max.	4.1 A/4.6 A
Filament voltage, typical	2.3V/6.8V
Inherent filtration	3 mm Be
Target material	W
Target angle	11°
Radiation coverage	40° x 30°
Leakage radiation, max.	5 mSv/h
Cooling medium	Oil
Cooling medium flow, min.	7l/min
Temperature at inlet, max.	50 °C
Weight	25 kg
Terminal type	R24
Mounting flange	90011301

Outline Drawing



Tube Diagram



Ordering No.	Focal spots (EN 12543)	Terminal type	Ordering No. flange
915701.51	d = 0.4mm/d = 1.0mm	R24	90011301
915702.51	d = 0.4mm/d = 1.0mm	R28	90010292

Cable

Type	Ordering No.
N3/160-R24-R24-Xm	
P3/250-R28-R28-Xm	

Cooler

Type	Ordering No.
XRC-4501-OA	10008642
XRC-4501-OW	10008643

COMET is a successful international technology company in the growth markets of security, inspection, electronics and communication. As an expert in the field of applied physics, COMET provides a complete and highly flexible portfolio of components, modules, systems and services from a single source.

COMET Industrial X-Ray is an experienced supplier of components and modules for industrial X-Ray applications and is proud of its reputation as the preferred engineering partner in terms of innovation potential, know how, flexibility and speed.

COMET – The X-perts for security, inspection, electronics and communication



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