

Re Use-MAE: X-Ray(Y Cheetah)

MAE-Manufacturer

Machine type : Yxlon
Serial No : 10003426
Year of manufacture : 11/2017

E.O.P : 10.2025

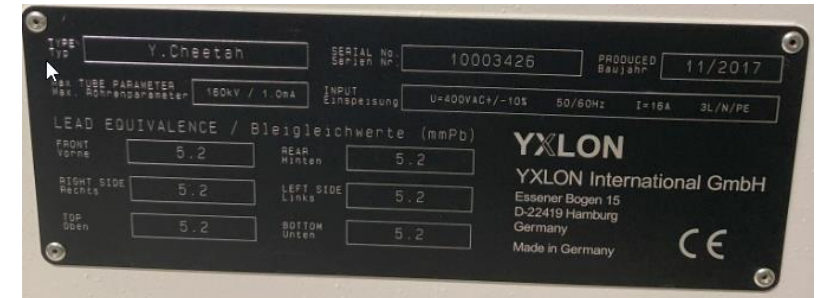
Technical data

MAE-dimensions L x W x H : 1620 x 1370 x 1840 mm
MAE weight : 2200 kg
Control System : Windows 10/ FGUI3.10
3D software : Volume Graphics Studio 3.5 (basic)
Special features : CT-scan upgraded



Asset no. 102534
Plant TbP

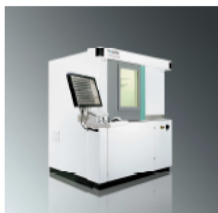
Re Use-MAE: X-Ray(Y Cheetah) Details



Re Use-MAE: X-Ray(Y Cheetah)

Technical data

Y.Cheetah - Technical Data (Standard)



General Product Features	
Detail detectability	< 500 nm
Time to first image	~ 10 s
Reconfiguration time	< 60 s
µCT scan time	> 7 s
µCT reconstruction time	~ 90 s
Access for sample loading (mm)	Large autom. door (690 x 650 mm ²)
Visual interface	Large window (520 x 370 mm ²) Large 24" monitor (adjustable)
Zoom*	yes
PowerDrive	yes
Power boost factor	33x
Image stabilization	Air suspension

X-Ray Tube	
Tube type	Open microfocus tube
Target	Transmissive
Target material	Tungsten
Voltage range	25-160 kV
Current range	0.01-1.0 mA
Max. tube power	64 W
Max. target power	15 W
Detail detectability	< 1 µm
X-Ray intensity control	TXI

X-Ray Tube Option	
Tube type	Open multifocus tube (MFT)

Image Chain	
Detector type	Panel 1308 High Speed
Number of pixel	1,004 x 620 pixel
Pixel size	127 µm
Field of view (max.)	127 mm x 78 mm
Geometric magnification (max.)	2,000x
Total magnification (max.)	17,500x
Frame rate (max.)	30 fps
Image chain	16 bit

Image Chain Option	
Detector type	Panel 1313 High Speed / Panel 1313 Ultra High Speed*
Number of pixel	1,004 x 1,004 pixel
Pixel size	127 µm
Max. inspection area per image	127 mm x 127 mm
Geometric magnification (max.)	2,000x
Total magnification (max.)	17,500x
Frame rate (max.)	30 fps / 60 fps*
Image chain	16 bit

Electrical Data	
Power supply	400V/3N/PE/AC±10%, 50/60Hz
Fuse protection	3 x 16 A
Power consumption	P = 2.5 kVA max.

Physical Dimensions	
Width / depth / height [mm]	~ 1,650 / 1,400 / 1,850
Weight	~2,200 kg

Image Processing	
Operating system	Windows 7
Y.FGUI Basic	Click & Center, Frame & Zoom, AIM, Grid Inspection, Integrator, Contrast, Gamma, etc.

Image Processing Option	
Y.FGUI Extended	BGA, Void Calculation, AVI rec.
Y.FGUI Map and Report	
Y.FGUI Traceability	

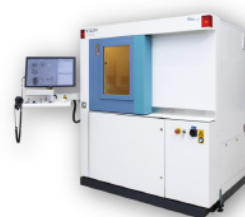
Manipulation	
Manipulation control via	Mouse & joystick
Inspection area (max.)	480 mm x 410 mm (18" x 16")
Sample size (max.)	800 mm x 500 mm (31" x 19")
Sample tray axes	X, Y
Tube axis	ZL 200 mm
Detector axis	Zd 300 mm
Oblique viewing	±70° (140°)
CNC	yes

Further Options	
Modules	Y.µCT module Y.QuickScan
Rotational sample table	360° (diameter 435 mm / 17")
Additional rotate & tilt axis	360° / 60° (no CNC)
Hardware and software	High-power target, bar code scanner, power interruptor

Environmental Conditions	
Radiation protection	< 1µSv/h
Ambient conditions	15° to 25° C
Relative humidity	max. 80%, non condensing

Technical data

Radiation protection cabin



Maximum local dosage rate	< 1µSv/h at a distance of 100 mm
Dimensions (width x depth x height)	1,620 x 1,370 x 1,840 mm
Cabin weight without movable module	900 kg



Movable module weight	1,300 kg
Total weight	2,200 kg

Power module

Nominal voltage	400 V ± 10% AC, 50/60 Hz, 3 phases, neutral and earth conductor
Max. power consumption	2.5 kVA
Pre-fuse	3 x 16 A
Connection	Terminal block (3/N/PE), static Cable diameter: 5 x 2.5 mm ²

Specimen mount



Max. specimen size	800 x 500 mm (31" x 149")
Max. size of X-ray examination area	460 x 410 mm (18" x 16")
Max. specimen weight	Up to 5 kg with standard specimen mount
Max. specimen weight for turning or tilting	Up to 2 kg with optional specimen mount (centric centre of gravity)

X-ray tube

	FXT-160.50 Micro-focus	FXT-160.51 Multi-focus
Head type	Transmission radiator	Transmission radiator
High-voltage range	10 - 160 kV	10 - 160 kV
Beam current range	0.01 - 1.0 mA	0.001 - 0.1 mA
Tube output	Max. 64 W	Max. 64 W
Target output	Max. 15 W	Max. 15 W
Target output permanently monitored	Max.13.5 W	Max.13.5 W
Target material	Wolfram	Wolfram
Detail resolution	< 0.5 µm	< 0.2 µm

Re Use-MAE: X-Ray(Y Cheetah)

Technical data

Detector



	Y.Panel 1308 HS	Y.Panel 1308 UHS	Y.Panel 1313 HS	Y.Panel 1313 UHS
Detector modes	3	5	3	5
Max. resolution Pixels	1004 x 620	1004 x 620	1004 x 1004	1004 x 1004
Pixel size	127 µm²			
A/D converter	16-bit			
Max. geometric enlargement	Up to 2000x Optionally with µHD 3000x			

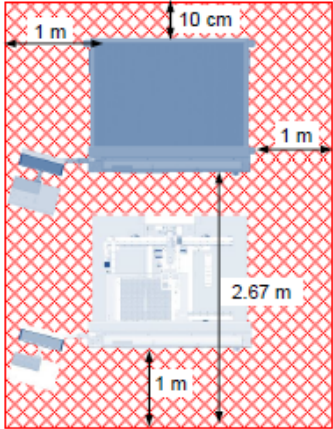
High-voltage generator



Dimensions (width x depth x height)	420 x 179 x 397 mm
Weight	32 kg
Mains supply	85 - 265 V AC, 50/60 Hz, single phase, 5 A
Plug connections	
Mains	5-pole Phoenix connector
Control system	25-pin 'D' type (male)
High voltage	160 kV
Flange	Standard
Earthing	8 mm threaded bolt on the tank
Ranges	
High voltage	20 - 165 kV
Emission current	0.0 - 1.0 mA
Filament current (at 0.5 Ohm load)	2.5 - 7 A
Exciting voltage	0 - 600 V
Output power	160 W
Stability	
High voltage	± 0.1 %
Emission current	± 0.1 %

Re Use-MAE: X-Ray(Y Cheetah)

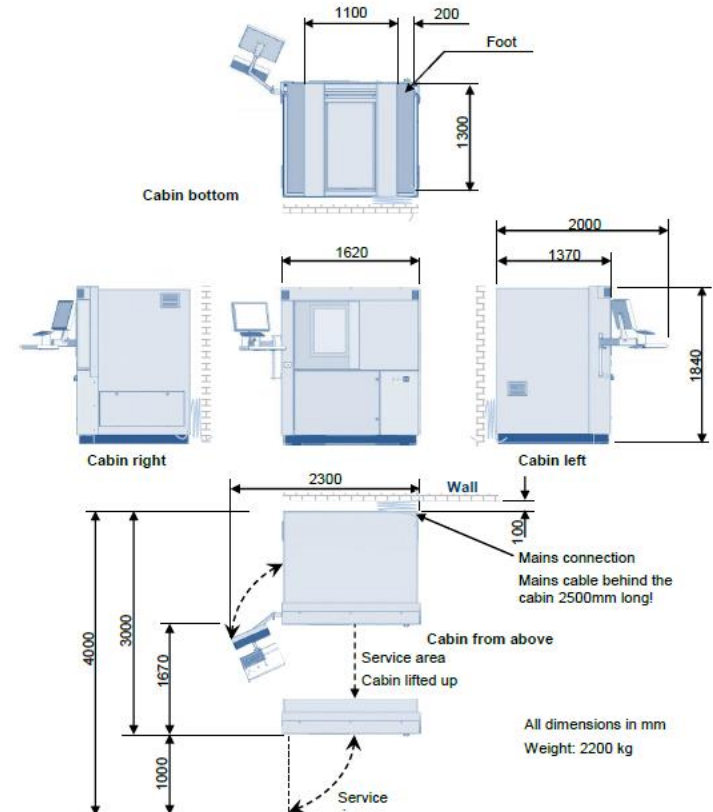
Layout and site conditions

Site conditions	
Installation location	Dry, enclosed rooms
Foundation requirement	2,500 kg/sq.m load-bearing capacity
Space requirement	
Radiation protection cabin floor load	2,500 kg/m ² (with no specimens)
Concrete strength class	C30/37 as per DIN 1045
Maximum permissible deviation from the surface level	6 mm per 2 m in both directions as per DIN 18202, table 3, row 3



Note: The electron beam in the X-ray tube can be affected by magnetic fields. This can lower the image quality.

- Wherever possible, avoid any magnetic fields near the X-ray tube.



Note: Ensure there is sufficient space in the worker and loading area!
Make sure that there are no fixed counter bearings near the sliding door!

Re Use-MAE: X-Ray(Y Cheetah) CE-certificate

KONFORMITÄTSERKLÄRUNG

im Sinne der Maschinenrichtlinie 2006/42/EG, Anhang II, Teil A

CONFORMITEITSVERKLARING

in de zin van de Machinerichtlijn 2006/42/EG, bijlage II, onderdeel A

Hiermit erklären wir, dass die nachfolgend bezeichnete Maschine aufgrund ihrer Konzipierung und Bauart, sowie in der von uns in Verkehr gebrachten Ausführung, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der Maschinenrichtlinie 2006/42/EG entspricht.
Bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

*Hiermee verklaren wij, dat de hierna omschreven machine als gevolg van het ontwerp en de constructie, alsmede in de door ons op de markt gebrachte uitvoering, voldoet aan de relevante fundamentele veiligheids- en gezondheidsvoorschriften van de Machinerichtlijn 2006/42/EG.
Bij een niet met ons afgestemde verandering aan de machine verliest deze verklaring zijn geldigheid.*

Maschine Typ	Machine Type	Röntgenprüfsystem / Röntgenteststelsel
Materialnummer	Materiaalnummer	Y.Cheetah
Fertigungsnummer	Productienummer	20072416
		10003426

Folgende harmonisierte Normen wurden angewandt:

EN ISO 12100	2010
EN 60204-1	2006
EN ISO 13850	2015

Sicherheit von Maschinen - Allgemeine Gestaltungsgrundsätze - Risikoanalyse und Risikominimierung
Sicherheit von Maschinen - Elektrische Ausrüstung von Maschinen - Teil 1: Allgemeine Anforderungen
Sicherheit von Maschinen - Not-Halt-Gestaltungsgrundsätze

Veiligheid van machines - algemeen ontwerpprincipes - Risicoanalyse en risicoreductie
Veiligheid van machines - Elektrische uitrusting van machines - Deel 1: Algemene voorschriften
Veiligheid van machines - Noodstop - ontwerpprincipes

Das Prüfsystem entspricht weiterhin den folgenden Gesetzen und Normen:

RGV	Röntgenverordnung
2014/35/EU*	Niederspannungsrichtlinie
2014/30/EU	Richtlinie für elektromagnetische Verträglichkeit (EMV)
DIN 54113** 1, 2, 3	2005 Strahlenschutzregeln für die technische Anwendung von Röntgeneinrichtungen bis 1MV Teil 1, Teil 2, Teil 3

Duitse röntgenvoorschriften
Laagspanningsrichtlijn
Richtlijn voor elektromagnetische compatibiliteit (EMV)
Stralingsbeschermingsregels voor de technische toepassing van röntgeninstallaties tot 1 MV - Deel 1, Deel 2, Deel 3

*voldoet met betrekking tot de veiligheidsdoelstellingen

Ort, Datum / Hersteller-Unterschrift:
Plaats, datum / handtekening van de fabrikant:

Hamburg, 20.11.2017

Funktionsbereich des Unterzeichnenden:
Puntke van de ondertekenaar:

Dr. Ingo Grottkopp
Leiter Entwicklung / Customized Solutions
Vicepresident R & D / Customized Solutions

Jens Schwarz
Vice President Operations
Vice President Operations

Sebastian Hilgendorf
CE-Dokumentationsbeauftragter
Gevoegdverantwoordelijke voor CE documentatie

Diese Konformitätserklärung ist in deutscher Sprache verfasst. Die niederländische Übersetzung gilt nur dem besseren Verständnis. In sämtlichen Fällen geht die deutsche Fassung vor.
Deze conformiteitsverklaring is in de Duitse taal opgesteld. De Nederlandse vertaling is slechts ter verduidelijking bedoeld. In alle gevallen prevaleert de Duitse versie.

YXLON
Technology with Passion

YXLON International GmbH
a company of the COMET Group
Essener Bogen 15, D-22419 Hamburg
Tel. +49 40 52729-0, Fax +49 40 52729-170

Geschäftsführer / General Manager: Dr. Detlef Steck
UStID: DE 121641491, Registergericht Hamburg, HRB 104499, WEEE-Reg.-Nr. DE 73642541
yxlon@yxlon.com, www.yxlon.com

v02r04 - 08/18