

# **ORIATRON LINAC**

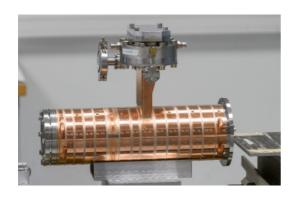
# High-Energy NDT X-ray & CT Systems

« Revealing the inner details of your product with a system entirely designed to optimize your needs «







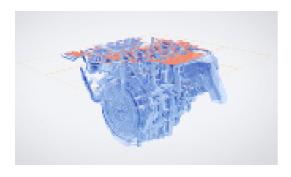




## **PMB**

We are a human-sized company, specialized in the design and manufacture of turn-key high-energy linear accelerators, with energies from 3 to 7 MeV. A high degree of vertical integration of beamline components allows us to control the entire production line.

Moreover, we work with various partners to provide full integrated CT systems, operating in the aerospace, defense & security, medical and manufacturing industries





#### **FEATURES**

- High-energy electron linear accelerators / X-ray generator
- Flat-panel, shielding and fixture bracket
- Linac, object and flat-panel manipulators
- Software suite (monitoring, 3D-reconstruction and volume visualization)

#### **APPLICATIONS**

- Aerospace (space shuttle component, aircraft structure, solid rocket fuel tank)
- Defense (missile, turbine blade, casting inspection)
- Research
- Industry (casting inspection, highvalue metal detection)

### **SPECIFICATIONS**

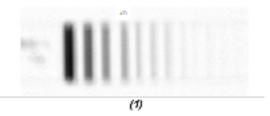
Nominal Beam Energy	Energy Range (MeV)	Normal Focal Spot Size (mm)	Max Dose Rate at Nominal Energy and Normal Focal Spot Size (Gy/min at 1m)	Min Focal Spot Size (mm)	Max Dose Rate at Nominal Energy and Minimal Focal Spot Size (Gy/min at 1m)
3 MeV	1.5 - 3	1.8	3	0.7	1.5
4 MeV	2 - 4	1.8	4	0.7	2
6 MeV	3 - 6	1.8	8	0.7	4
7 MeV	4 - 7	1.8	12	0.7	6

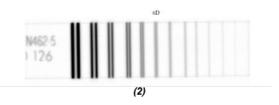
Flat-panel suppliers	PerkinElmer / Varex Imaging		
Manipulators	Custom-Designed		
Software Suite	CyXplus / Thermo Fisher (FEI) / Adaptive Energy		
Services	Preventive & Curative Maintenance		

### REDUCED FOCAL SPOT SIZE

At PMB, we are able to manufacture Linacs with a reduced focal spot, down from 0.6 mm to 0.7 mm, depending on the measurement method.

This unique feature allows the imaging system to produce greater image resolution, making it easier for the operator to detect even the smallest defects. Additionally, the reduced focal spot allows the object to be closer to the source, a higher dose rate can be obtained.





Nominal (1) and downsized (2) focal spot measurements with IQI Duplex (EN 462-5) and a magnification factor 3





PMB

Route des Michels - CD56 13790 Peynier - France Tel. +33 (0)4 42 53 13 13 sales@pmb-alcen.com www.pmb-alcen.com 6 rue Paul Baudry 75008 Paris - France Tel. +33 (0)1 40 72 55 00 alcen@alcen.com www.alcen.com