



Manufacturer's of World's Most Advanced Digital Computed Radiography Imaging Technology

PRODUCT SHEET

High Energy X-ray Source - 2.5 MeV Betatron

Part Code: CIT/2.5Betatron

Metallic products such as those with 50-120 mm material thickness can now be digitally radiographed and inspected with the high energy x-ray betatron source. Significant reduction [up to 70%] in exposure times is realised when compared against conventional radiographic methods. This is a unique benefit which can replace gamma radiography inspection method.

Due to the small focal spot, the total unsharpness of radiographic image is reduced, resulting in a lower internal scatter, which in turn improves the radiographic image to a class B radiographic quality. 2.5 MeV Betatron is a compact, light-weight circular electron accelerator generating directional x-ray beam. It contains no moving parts except small air flow fans, and no circulating liquids. It is easy to assemble, operate and maintain. Due to its small size, it's an ideal portable digital radiography solution.

Features

- Battery or mains operation
- Compact, powerful, mobile and versatile
- Excellent sensitivity and resolution



Applications

Pressure vessels, thick welds such as in ship-building, etc.

Key Benefit

Considerable reduction in exposure times

Component inspected	Material thickness	Inspection Times	
		Conventional method	Computed radiography
Pressure vessel	50 mm	15 minutes	30 seconds
Pressure vessel	119 mm	4 hours	15 minutes

Technical Specifications

Peak x-ray output energy	2.5 MeV
Dose rate @ 1m in air	6R/hr
Focal spot size	0.2x1.0 mm
Duty cycle @ 20°C/hr	75%
Operating time from battery pack (approx.)	45 minutes
Rechargeable battery pack	48V 12Ah
AC power input	110/220V 50/60Hz
Dimensions / Weight (mm/kgs)	
Accelerator	430x160x330 / 27
PSU	450x270x180 / 14
Control Panel	130x200x30 / 0.5
Battery pack	520x220x400 / 25

*CIT is authorised system OEM distributors

Computerised Information Technology Limited

20, Potters Lane, Kiln Farm, Milton Keynes, Buckinghamshire, United Kingdom MK113 HF
 Tel: +44(0)1908260082, Fax: +44(0)1908260084, Email: info@cituk.com
 Website: www.cituk.com | Regd. Office England: 2149641