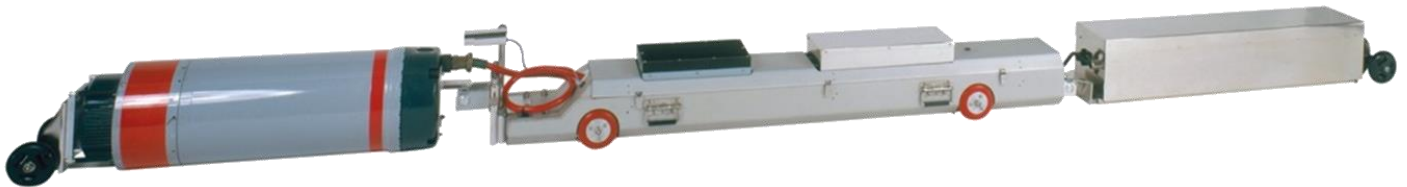


CRAWLER IRIS 10 RX

WITH ICM X-RAY GENERATOR SITE-X C3003



IRIS 10 Pipeline Crawler are designed to produce panoramic radiographs of circumferential butt welds in pipelines from 12 inches to 60 inches.

Dimensions	Crawler	X-Ray generator with accessories	X-Ray battery supply with accessories
Length	1.70 m	0.95 m	1.10 m
Breadth	0.24 m	0.24 m	0.20 m
Height	0.22 m	0.27 m	0.20 m
Weight	26 kg	35 kg	75 kg
Min. nominal pipe diameter	12"		
Max. nominal pipe diameter	60"		
Travelling speed	13 metres/minute		
Movement	Forward and reverse motion		
Allowable slope	40% - 22.2 °		
Sealed lead propulsion battery	24 V 44 Ah		
Autonomy (on flat ground)	4 000 metres		
Allowable temperature	- 40°C to + 80°C		
Exposure time	from 0 to 999 seconds		
Sealed lead X-Ray battery	120 V 22 Ah		
X-Ray battery Autonomy	2 hours		
Safety delay	12 s		
Propulsion Motor	2 Unit		
Pilot Command	20 mCi Cs 137		
Pilot Command	Magnetic System		
X-Ray Generator	SITE-X C3003		
Control Unit	CCU 186		
Gamma-ray projector (Gamma Version)	All Type of Ir192 or Se75		



The unit in operating order includes:

Propulsion Battery Pack

This assembly is composed of 4 lead elements, delivering in all 44Ah under 24V.

Propulsion Battery Charger

This set is used to provide a constant charge current to the lead battery via the 220 V.

Propulsion motors

Two interchangeable propulsion units drive the crawler, one at the front and the other at the rear.

Programmator

This programmator is located at the rear of the crawler and appears in the form of a stainless steel box, with a connecting panel equipped with:

- A socket receiving a 3-pin connector for connection with the detection head.
- A socket receiving a 7-pin connector for connection with the propulsion battery and motors.
- A socket receiving a 4-pin connector for connection with the ejection motor "Gamma version only".
- A socket that can receive a "Push/Pull" 7-pin connector for connection with the X-Ray power supply unit.

Pilot command "Isotope Cs137"

It consists of an AG3 cylinder equipped with a handle and two skids. It encloses a depleted uranium shield designed to house a 20 mCi of Caesium 137 source "under special form". This source transmits the crawler operating commands through the pipe.

Pilot Command "Non- Isotope"

Pilot command "No Isotope" is a magnetic control system designed to replace the conventional isotope control system.

RX 120 V 22 Ah battery

This set consists of 10 Pb elements, delivering a total of 22 Ah at 120 V, a 16 A fuse, a 0 V - 120 V switch, a connector for connection to the base of the crawler chassis.

RX 120 V battery charger

It consists of a box containing the 220V mains power cable, the charger/battery cable, a fuse protecting the primary circuit, a switch with mains indicator and a needle ammeter.

Track expanders and centralizers

Five types of shafts and spacer rings are supplied with the equipment and are used for positioning the crawler in pipes with a diameter of 12" to 60".

GENERATOR SITE-X C3003

Features	Units	C3003
Output voltage range	kV	160 to 300
Output voltage selection step	kV	1
Tube current range	mA	1 to 3
Tube current selection step	mA	0.1
Radiation geometry	-	Pan. Orthog.
Maximum useful angle of X-Ray beam	°	360 x 40
Dimension of optical focal spot	mm	5 x 0.5
Inherent filtration	mm alu	7.5
Working cycle at 40°C ambient temp.	%	100

Operating temperature range	°C	-25 to +70
Storage temperature range	°C	-40 to +80
SF6 insulation pressure at 20°C	kg/cm ²	4.5
Cooling fan supply voltage	VDC	28
Environmental protection standard	-	IP65
Penetration into steel at max. power (DFF=700mm/Film D7Pb/D=1.5/T=20 mn)	mm Fe	56
Position of interconnection socket	choice	Axial/Radial
Microcontroller HT measurement circuit (kV and mA)	-	yes
Overall dimensions (dia. x length)	mm	dia. 248 x 757
Total weight without accessories	kg	27

CCU186 CONTROL UNIT / CCU186R REMOTE CONTROL

Features	Units	CCU186
GENERAL		
Microcontroller processor	-	8 bits - 8 MHz
Type of electronic components	-	Industrial series (-25°C to +85°C)
POWER SUPPLY		
Type of power supply	-	Pb or Cd-Ni batteries
Unique supply voltage range	VDC	80 to 140
Max. mean current (300 kV/3 mA - SITE-X C3003)	A	8
MEASUREMENT AND CONTROL		
Direct kV and mA measurements - control accuracy	%	+ 0.5 / - 0.5
Display of programmed parameters (CCU 186R)	-	yes
kV, mA programming step(CCU186R)	kV/mA	1/0.1
Useful range of the internal preheating timer (CCU186R)	min.	2 to 60 (1 min step)
Battery voltage control accuracy	%	0.2
CONTROLS AND DISPLAY		
LED display with variable brightness	line x char	1 x 8 with anti-reflection screen
Sensory type polyester alphanumeric keypad (CCU186R)	keys	12
General switch on function	-	provided by the Crawler
START, STOP and exposure time	-	provided by the Crawler
Semi-automatic preheating at selected kVs	-	yes
WEIGHT, DIMENSIONS, ENVIRONMENT		
Total weight	kg	4
Overall dim. of CCU186(WxHxD)	mm	280 x 170 x 162
Overall dim. of CCU186R(WxHxD)	mm	100 x 211 x 26
Operating temperature range	°C	-25 to +85
Storage temperature range	°C	-40 to +85

EXPOSURE CHART for STEEL
 ABAQUE D'EXPOSITION POUR L'ACIER
SITE-X C3005 - C3205 - C3605

