



PIPELINE CRAWLER IRIS 6

WITH ICM X-RAY GENERATOR CP160CR



The IRIS 6 Crawler has been designed to operate in pipes measuring minimum 6" diameter. It is intended for the X-Ray radiographic inspection in pipelines measuring 6" to 18" diameter, which can be increased upon request.

FEATURES

Dimensions	Crawler	X-Ray generator with accessories	X-Ray battery supply with accessories
Length	0.74 m	0.76 m	0.85 m
Weight	13.5 kg	11 kg	12 kg
Min. nominal pipe diameter	6"		
Max. nominal pipe diameter	18"		
Travelling speed	13 metres/minute		
Movement	Forward and reverse motion		
Battery	2 Unit		
Allowable slope	30% - 16.6 °		
Propulsion battery	Lithium 24 V 7.5 Ah		
Autonomy (on flat ground)	4 000 metres		
Allowable temperature	- 40°C to + 80°C		
Exposure time	from 0 to 999 seconds		
X-Ray battery	Lithium 48 V 12.5 Ah		
X-Ray battery Autonomy	120 mn		
Safety delay	12 s		
Propulsion Motor	2 Unit		
X-Ray Generator	SITE-X CP160CR		
Remote Control Unit	RCU		
Pilot Command "Isotope"	20 mCi Cs 137		
Pilot Command "Non Isotope"	Magnetic System		



The unit in operating order includes:

Battery Pack at centre of crawler

This assembly is composed of Lithium Ion elements 24 V 7.5 Ah mounted in a stainless-steel housing.

Propulsion motors

The crawler is driven by two interchangeable propulsion units, one at the front and the second one at the rear.

Detection head

It contains the electronic counter and amplifier assembly as well as the Geiger Müller tube.

Programmator

It is located at the rear of the crawler and appears as an aluminium cylinder with a control panel.

Propulsion Battery charger

Propulsion Battery charger 24V 240W

X-Ray Battery 48 V 12.5 Ah

Equipped with: One socket for connection to X-ray generator, one switch 2 positions 0V - 48V and one connector for connection with socket on motor frame.

X-Ray Battery charger

X-Ray Battery charger 48V 240W

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.

SITE-X CP160CR - PANORAMIC ORTHOGONAL GENERATOR

The SITE-X model CP160CR is a portable x-ray generator which has been specially designed for automatic intra-tube testing. The overall sizes have been reduced as much as possible to allow it to be used in small diameter tubes and through mall radius bends

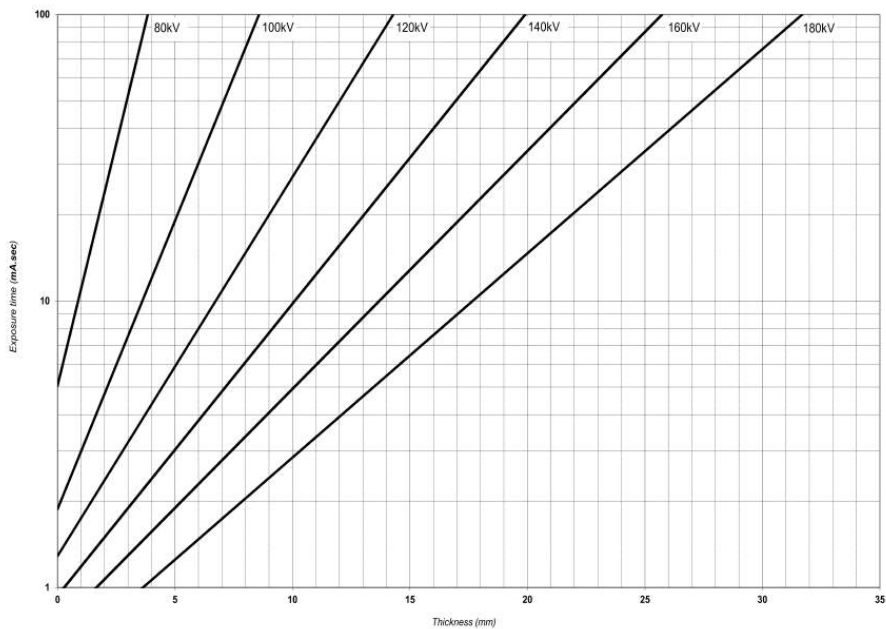
GENERATOR SITE-X CP160CR

Features	Units	CP160CR
Output voltage range	kV	40 to 160
Output voltage selection step	kV	1
Tube current range	mA	0.5 to 2.0
Tube current selection step	mA	0.1
Radiation geometry	-	Pan. Orthog.
Maximum use ful angle of X-Ray beam	°	360 x 40 (2x20)
Dimension of optical focal spot	mm	Ø 4 x 0.5
Inherent filtration	mm alu	3.5
Working cycle at 40°C ambient temp	%	100
Operating temperature range	°C	-30 to +70
Storage temperature range	°C	-40 to +80
SF6 insulation pressure at 20°C	kg/cm ²	5.5



Cooling fan supply voltage	VDC	40 to 60
Environmental protection standard	-	IP65
Penetration into steel at max. power (DFF=700mm/Film D7Pb/D=1.5/T=20 min.)	mm Fe	30
Microcontroller HT measurement circuit (kV and mA)	-	yes
Overall dimensions (dia. x length)	mm	Ø 120 x 688
Total weight without accessories	kg	9.9

Exposure chart for CP160CR/CP180CR
(Steel - D=2.0 - FFD=84.15mm (6" pipe) - KODAK AA400)



Exposure chart for CP160CR