



# 3E CRAWLER SYSTEM SMART 6

## AUTOMATIC SYSTEM FOR RADIOGRAPHIC INSPECTION OF PIPELINE WELDS

3E Crawler system Smart 6 is a crawler system for X-ray inspection of 6" to 18" pipeline welded joints.

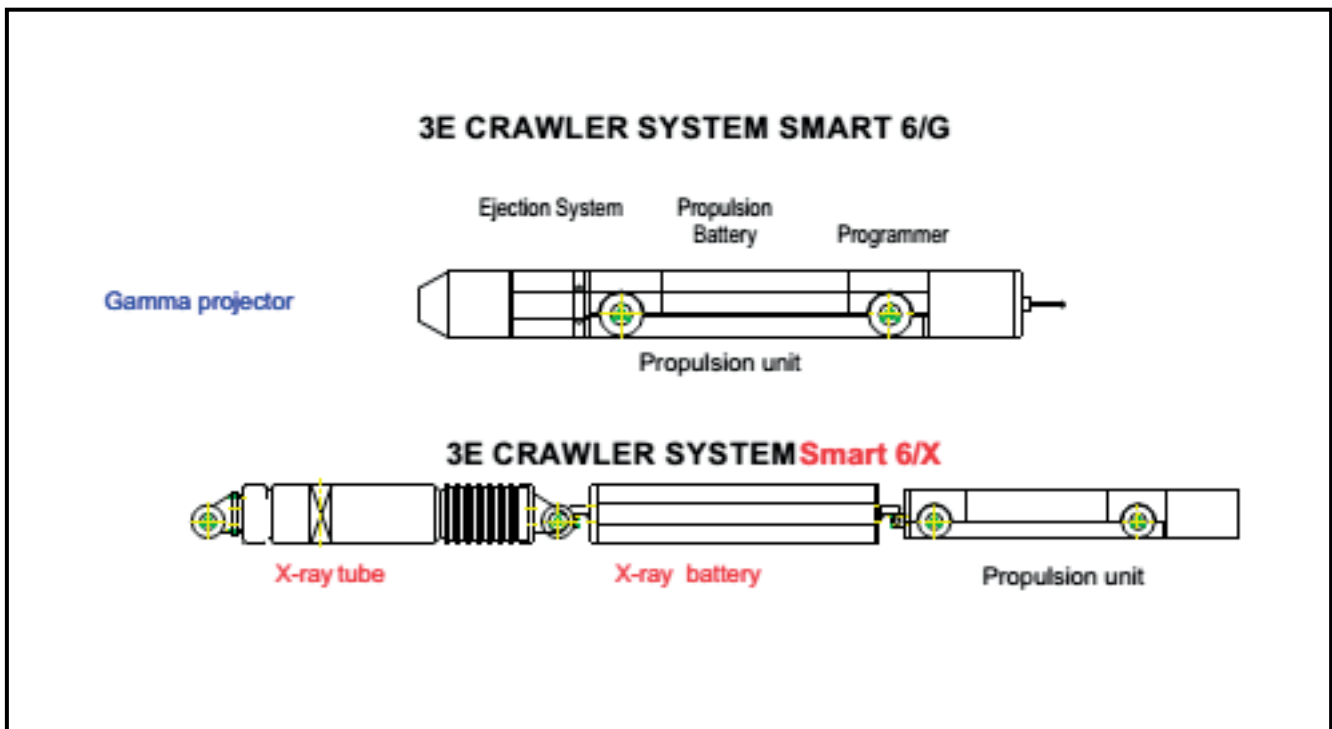


-3E Crawler system Smart 6-X

Significant characteristics of 3E Crawler system Smart 6 based on technical improvements, both in mechanics and electronics, are:

- Four wheels drive/brake
- Modular design and Interchangeability
- Robustness and reliability
- Simplicity and safety of handling
- Re-programmability of crawler performance to adapt to different work requirements (\*)

(\*) Re-program to be made by qualified staff of 3E





## 3E Crawler System Smart 6

### TECHNICAL DATA

#### Dimensions and weights:

Dimension/Element	X-ray tube	Gamma projector	Propulsion unit	X-ray battery unit
Length (mm)		IR100	730	775
Width (mm)	(Note 1)	(Note 2)	124	72
Height (mm)			124	103
Weight (Kg)			10 + 3,5 (batteries) (*) + 4 (programmer) (*) High capacity batteries: 7 Kg.	14

Note 1. - Compatible with different X Ray models in the market.

Note 2. - Crawler can be adjusted for most common gamma projectors in the market.

#### Inspection autonomy:

- 1 Km/day (Propulsion Batteries 24V, 5Ah)
- 2 Km/day (Propulsion Batteries 24V, 10Ah) (Optional)

Equipment positioning: Emitter Cs<sup>137</sup> (20 mCi) or Electromagnetic device

Translation speed: 11 m/min

Exposure time: 1-999 sec. (1 sec. stepped)

Admissible slope: 35%.

Acceptable temperature: -40 ° C up to 70 ° C

Exposition delay: 12 sec. (Programmable)

#### Maximum pipeline curvature:

- 40d (for pipes of d = 6")
- 10d (for pipes of d = 8"- 18")

#### Minimum/maximum diameter:

6" (152,4 mm)/18" (457,2 mm)

#### Driving motor feed:

- Ni-Cd batteries 24V, 5 Ah.
- Ni-Cd batteries 24V, 10 Ah (option)

Stopping precision: +/- 5 mm

### STANDARD SYSTEM:

#### BASIC SYSTEM

- Propulsion chassis, Detector and Programmer (Control unit)
- Two propulsion batteries and Charger
- Operating and maintenance manual
- Tool box
- Transit/storage case
- Training

#### X-RAY INSPECTION KIT (C-0618/X):

- One set of shafts for X-ray elements
- X-ray battery unit and Charger
- Assembling set

#### GAMMA-RAY INSPECTION KIT (C-0618/G):

- Ejector system
- Assembling set

#### Accessories:

- Shafts (6" to 18") for propulsion chasis
- Shafts (6" to 18") for X-Ray tube assembly and X-Ray battery unit.
- Pair of wheels (propulsion chassis)
- Rescue unit (propulsion chassis, battery and 500 m cable)
- High capacity battery pack (for pipe OD from 12")

#### X-ray tube:

Compatible with different X Ray models in the market

#### Gamma projector (Source projector and container):

Adjustable to most common gamma projectors in the market

#### Crawler control unit:

Magnetic control unit or Emitter Cs<sup>137</sup> (20 mCi)

#### Sources:

Iridium-192 or Selenium-75

