



PIPELINE CRAWLERS

PIPELINE WELDED JOINT INSPECTION



C1048



C0618

INTRODUCTION

Tecnitest system 'C' crawlers are X-ray or Gamma ray crawlers for the inspection of welded joint in pipes of internal diameter 6" to 48" (or 72" with suitable adapters).

The systems are battery operated and travel at about 12m per minute. The system uses an electronic locating device or a small gamma source for location and positioning purposes, giving an accuracy of movement of 5 mm, ideal for positioning the x-ray tube or gamma source to inspect a welded joint.

The wheel axles on the crawlers are variable and extendable to ensure centering of the unit within the pipe.

The sensor controller, either electronic or gamma (Cs 137), stops the crawler at a defined position and after a short period, commences the inspection.

Once the inspection has been completed the radiation ceases and the crawler automatically moves to the next predefined position.

The two types of crawlers are the C0618, for pipes 6" to 18" and the C1048 for pipes 10" to 48" or up to 72" with suitable adapters.

CLIENT BENEFITS

- Four wheel drive/brake.
- Modular design and interchangeability of components/ accessories.
- Reliable and robust in harsher operation conditions.
- Safe and easy to use.
- Admits re-programming of operation routines to adapt its performance to different working conditions/ requirements (programming performed by qualified Tecnitest personnel).



KEY BENEFITS

AXLE DRIVE

Each axle has an individual drive motor to move the crawler within the pipe. Therefore if one set of wheels does not touch the pipe then the other keeps the crawler moving.

QUALITY CONSTRUCTION

The materials used in the construction of the crawlers are of the highest quality to withstand even the harshest environments.

VERSATILITY OF USE

The modular design allows the drive unit to be easily converted to use either the gamma or the x-ray equipment. The systems work with different x-ray tubes and gamma projectors.

USER FRIENDLY

The designs of the systems have ensured a user friendly interface with safety circuits to ensure safe and reliable operation.



SPECIFICATION

Inspection autonomy:	C1048 1,5 Km/day (Propulsion Batteries 24V, 24Ah) (Optional: 2 Km/day (Propulsion Batteries 24V, 42Ah)) C0618: 1 Km/day (Propulsion Batteries 24V, 5Ah) (Optional 2 Km/day (Propulsion Batteries 24 V, 10 Ah))
Equipment positioning:	Electromagnetic control and/or Cs 137 (20mCi) emitter
Translation speed:	11 m/min (C-0618), 12,5 m/min (C-10478)
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:	C-0618: 40d (for pipes of d = 6") 10d (for pipes of d = 8"- 18") C-1048:40d (for pipes of d= 10"- 12") 10d (for pipes of d=14"- 48")
Minimum/maximum diameter (Standard Size):	6" (152,4 mm)/48" (457,2 mm)
Driving motor feed:	C-0618: Ni-Cd batteries 24V, 5 Ah Ni-Cd batteries 24V, 10 Ah (option) C-1048: Pb batteries 24V, 24 Ah Pb batteries 24V, 42 Ah (option)
Stopping precision:	+/- 5 mm.

For full Specification and details please visit www.tecnitestNDT.com

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