

C-TEC PIPELINE CRAWLER TYP C400



1.1 C-TEC Pipeline Crawler TYP C400

DRIVE UNIT

The drive unit consists of a robust stainless steel construction with a mounted support arm to center the X-Ray source. The support arm can be adjusted continuously about the whole diameter range.

The movement is given by a four-wheel drive, which transmit the torque from the DC-motor over a low-maintenance chain to both axes. The contact pressure takes place by its own weight and the vertical load from the tube chassis and from the car battery.

ELECTRONIC CONTROL

Wherein the electronic control system is a microprocessor controlled PLC circuit with a current consumption of about 100 mA. The crawler can be operated from the outside with the help of an isotope or Magnetic control device. There are two externally selectable exposure times.

All control components are easily replaceable, since they are socketed into Jacks. In case of repairs no loosening or soldering of cables will be required. Motor and electronics are constantly monitored for overcurrent. With a modular connector system a change between a X-Ray Tube or an Isotope-camera is easily done. An automatic reversing time can be programmed before entering the pipe, this is also done via touch in 2 minutes Steps. An extension or modification of the software is possible (if necessary) at any time (Update Service).



1.2 Crawler in use



- » no Radiation
- » hand operation
- » wallthickness up to 30 mm
- » LED-display

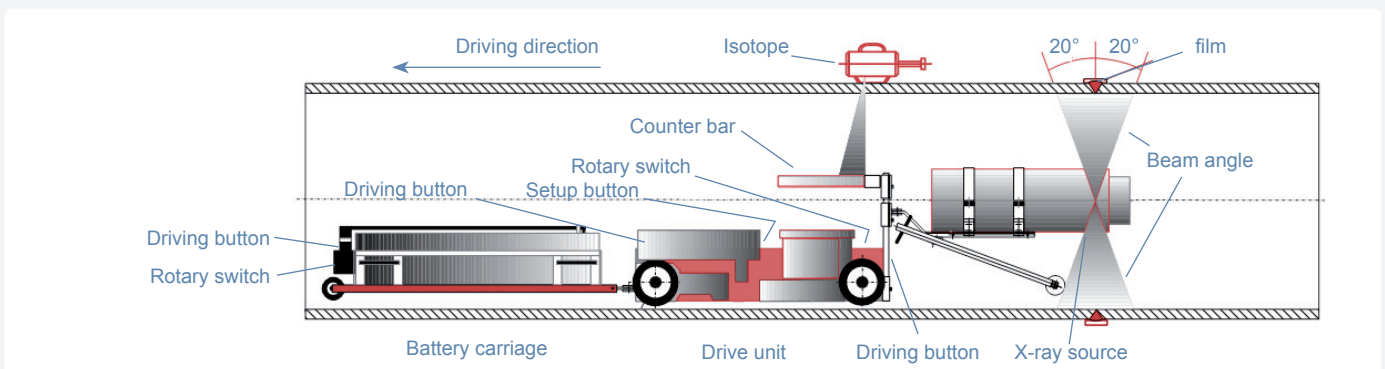
1.3 Magnetic control device

TECHNICAL SPECIFICATION

X-RAY TUBE	ICM SITE-X C3003, 90 – 300 kV, 1 – 3 mA or ICM SITE-X C2254, 70 – 225 kV, 1 – 4 mA, each adjustable
BATTERY PACK	10 maintenance-free gel batteries with an output power together 120V/18Ah
DRIVE BATTERY	2 maintenance-free gel batteries with an output power together 24V/18Ah, enable the drive out of the crawler from the pipeline with a possible failure of the battery carriage
DRIVE MOTOR	DC-motor 24V/350 W, with a max. power of 875 W, High temperature resistant up to 165 °C, special gear system-i = 125:1
ISOTOPE CAMERA	Iridium 192 or Selen 75 (optional)
LENGTH OF CRAWLER	3000 mm (Battery carrier, drive unit, X-ray tube)
WORK RANGE	Pipediameter from 16–64 Inch, or ca. 400– 1600 mm

GEWICHT DER EINZELKOMPONENTEN

BATTERY CARRIER	86 kg
DRIVE UNIT	65 kg
X-RAY TUBE	27 kg SITE-X C3003 / 25 kg SITE-X C2254
TOTAL WEIGHT	178 kg with C3003 176 kg with C2254
PITCH ANGLE MAX.	30°



1.3 Diagram C400 X-ray pipeline crawler