The Viper Crawler System is an advanced, lightweight, and modular crawler that carries ultrasonic transducers or Low Frequency Electromagnetic Technique (LFET) scanners to inspect horizontal and vertical magnetic surfaces.

The Viper Crawler System has strong permanent magnetic wheels that hold system to the surface even through several layers of paint, and a long-lasting, high-torque planetary gear mechanism.

It is controlled with a handheld joystick and operates at variable speeds. For Ultrasonic Thickness Inspections, a water pump is used to deliver water underneath the transducer to act as a medium.

The Viper Crawler System is available in several designs for the inspection of tanks, stacks, and pipes, and is compatible with any flaw detector.

**Special Design Features**

- Strong permanent magnets hold system to surface even through several layers of paint.
- Offset wheel design for maximum surface contact at all times.
- Long-lasting, high-torque planetary gear motors.
- Variable speed and steering via joystick.
- Flexible design to travel over obstructions such as weld joints or patched areas.
- Distance data processed through optional quadrature Encoder*.
- Carries an Ultrasonic Transducer or an electromagnetic scanner.
- Compatible with any flaw detector.
- Contour design option for curved surfaces

*Encoder compatible with Panametrics Epoch III and IV flawDetectors.

**System Components**

- Motorized crawler, Control Electronics, Joystick.
- 100 ft. umbilical cable (30.5m) with reel
- Fluid delivery control unit and collapsible 5 gal. Fluid tank.
- Travel case with transport wheels.
- Single element 5.0 Mhz .500” diameter transducer.

**Optional accessories and features**

- Encoder
- Transducers
- BNC/LEMO adaptors
- Control stick (3 speed, left/right adjustment, forward/reverse)
- Low Frequency Electromagnetic Technique (LFET) electronics package with mux box and preamplifier
- Low Frequency Electromagnetic Technique (LFET) 8 channel 2” (5.1cm) or 4” (10.2cm) scanner with attachment
TT-V CRAWLER SYSTEM

Technical Specifications

Weight:  
  Crawler- under 12 lbs. (5.5 kg)
  Cable- 8 lbs. (3.6 kg)

Size:  
  Crawler- 10"W (25.4 cm), 11"L (27.9 cm), 4"H (10.2 cm)

Power:  
  110/220 VAC 50/60 Hz

Wheels:  
  (4) rare earth permanent magnets

Motors:  
  (2) 24v planetary gear motors

Pump:  
  110 or 220 VAC 100 psi

Picture shows optional encoder