

CCTV Re-Envisioned - From the ground up!



SUPERVISION[®]

EMOTIONAL TECHNOLOGY



SUPERVISION® – Pipeline Inspection “Deluxe”

SUPERVISION® is valued around the world for its application in all fields of pipeline inspection. Dimension, speed and steerability make **SUPERVISION®** a powerful inspection tool, thereby being time-saving and moving around obstacles safely.

PipeBus® is a special technique developed for **SUPERVISION®** which allows longer operating hours and remote maintenance during service. Moreover, it provides recent information on all components, e.g. temperature, position and internal pressure.

SUPERVISION®'s modular design allows our crawlers to adapt to all diameters, with diverse material and condition. Due to short wheelbase and steerability our crawlers can easily move over obstacles, steps and pass through tight bends. There are three crawler sizes available that can inspect pipes ranging from 100 mm to 1500 mm (4" to 60") internal diameter. Our automatic cable reel enables crawlers to perform best over the full inspection distance and prevents cable tangles and jams during retrieval. Our **SUPERVISION®** system provides solutions for your explosion protection needs. It is **ATEX** certified for **Zone I** and **Zone II**.



Modular Design

SUPERVISION®'s modular design features a maximum of flexibility linked with a simple interchangeability of all components. Suiting wheels are available for pipe diameters up to 1000 mm (39") and any pipe condition. You can opt for solid rubber or corundum wheels. For clear sight in pipes camera heads can be changed in a single hand movement as and when required. An optional auxiliary light illuminates every nook and cranny.



Camera Head with LED Light Ring

Our **SUPERVISION®** colour camera with autofocus and shadowless LED-light provides for clear images. With our new light ring, dark corners look almost like in daylight. Due to a special metal strut design it offers best protection for our camera unit. 135° pan and endless rotation allow an exact and comprehensive view. The 40:1 zoom camera (10x optical, 4x digital) expands your view.

Agility

For your application dimension, speed and steerability of our **SUPERVISION®** system offer highest performance.

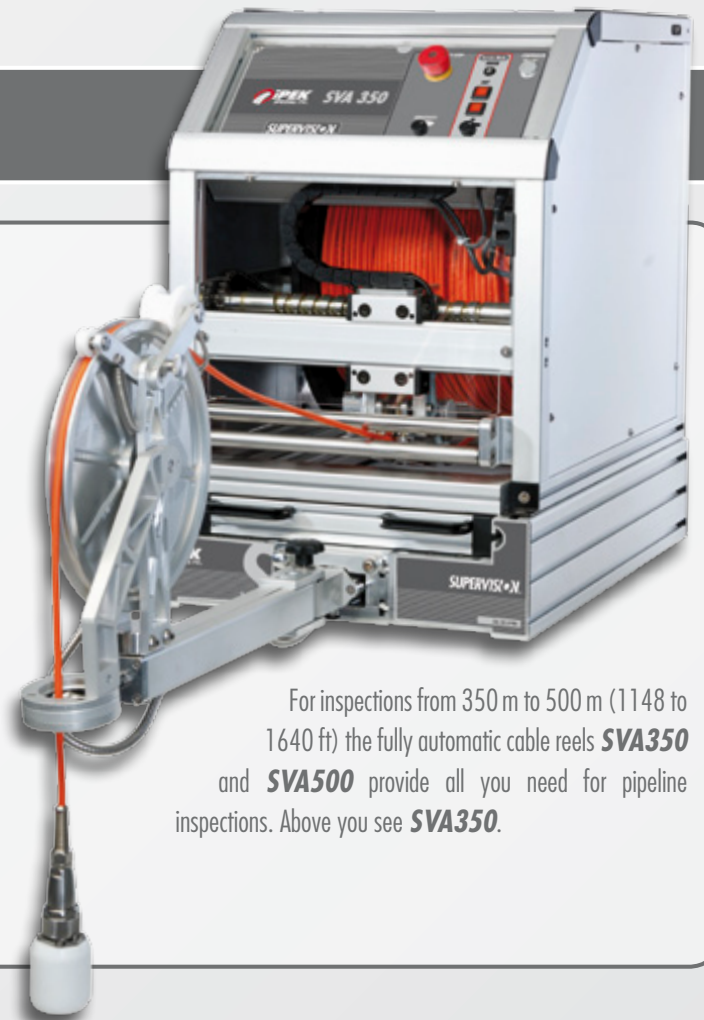
- Rear view camera and freewheel clutch facilitate retrieval and improve effectiveness.
- Adjustable height camera maintains centerline view in pipes up to 1000 mm (39").
- The steerable 6-wheel drive travels over nearly every obstacle up to a distance of 500 m (1640 ft).
- A lightweight 5 mm (0.2") kevlar-reinforced cable extends travel range.
- Pan & tilt camera heads display every detail.
- Cracks can be measured with laser diodes.

PERIPHERAL DEVICES

Productivity

Precise synchronization of all components and a stable control network grant an optimal productivity and safety. Time saving and high-quality ergonomics can be achieved through auto-functions and monitor routines.

- Simple location of crawlers with a 512 Hz or 33 kHz signal.
- Inclination, pitch and roll sensors come standard.
An acoustic signal warns before the crawler tips over.
- Automatic reel pays out and retracts cable and regulates itself.
Moreover, the travel distance is displayed permanently.
- The control unit controls the performance with an intuitive control panel.



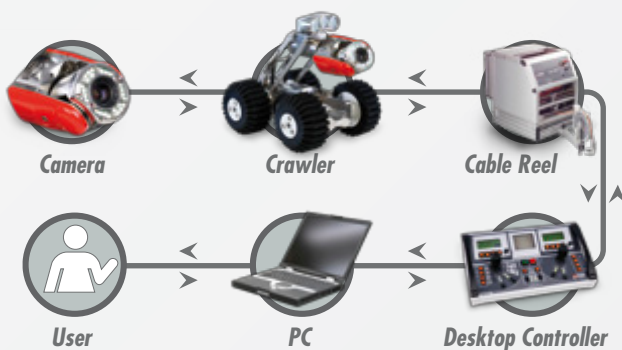
For inspections from 350 m to 500 m (1148 to 1640 ft) the fully automatic cable reels **SVA350** and **SVA500** provide all you need for pipeline inspections. Above you see **SVA350**.

Intelligent

A lightweight cable can be used due to the **PipeBus**® technology. This advanced technique enables **SUPERVISION**® to execute orders parallel.

Microprocessors in control panel, cable reel, crawler and camera communicate over the digital network enabling greater control. With a PC these data can be read.

The **PipeBus**® records transform **SUPERVISION**® into a completely future-proof system.



DigiSewer® – 190° Inspection System

The **DigiSewer**® is the perfect add-on to our **SUPERVISION**®, **ROVISION**® and **ROVVER**® inspection systems. Via its additional LED-lights, the wide angle "fish eye" lens captures a whole 190° view of the pipe.

The **WinCan ScanExplorer** generates out of the analog video recordings a 2-dimensional view of the pipes surface. This extracted 2D blank gives the operator a perfect overview of the pipe condition and provides an exact localisation and measurement of possible damages, laterals or joints.



SYSTEM-CONFIGURATION & INSPECTION VEHICLES

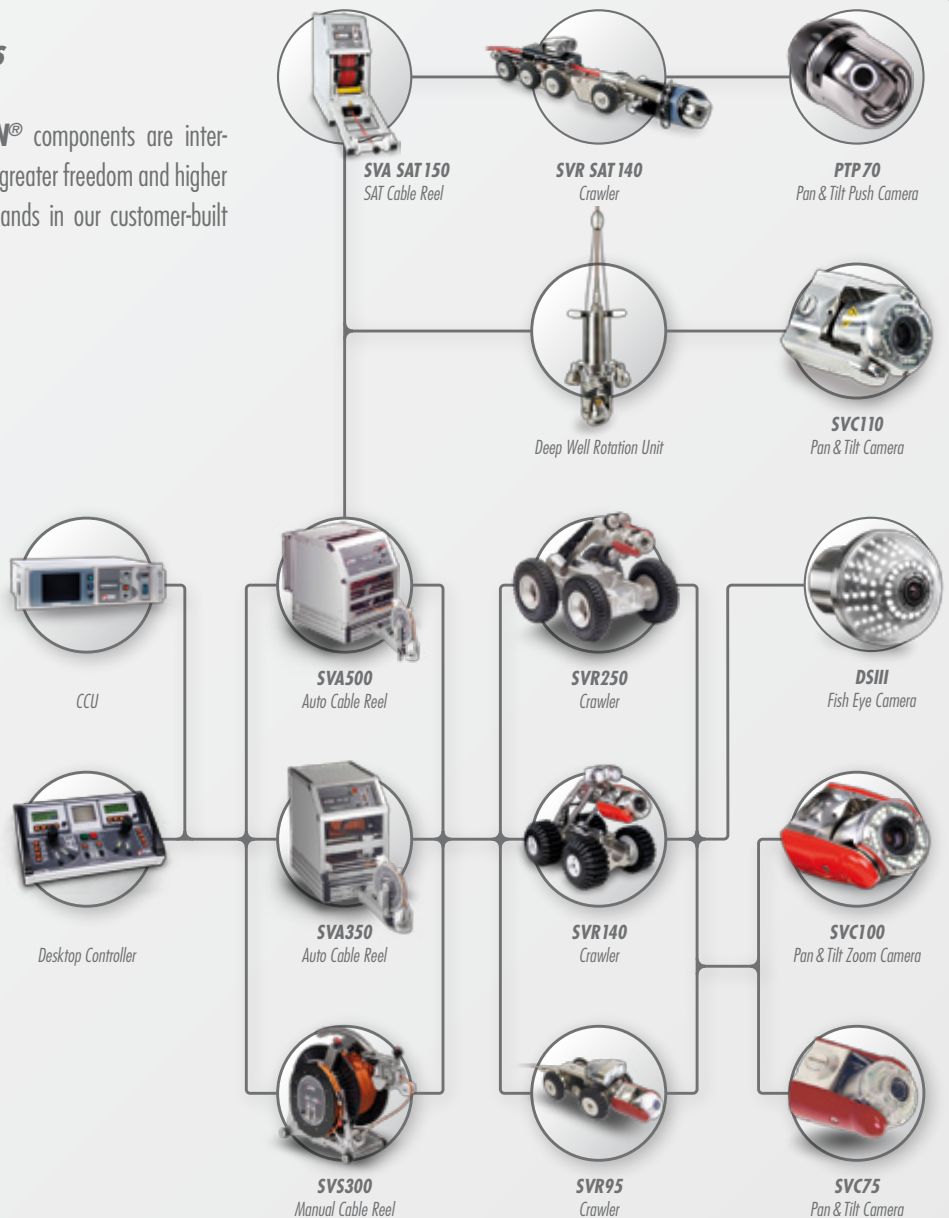
System Configurations / Effectiveness

To achieve a maximum effectiveness all **SUPERVISION®** components are interchangeable. The compatibility of all our components provides greater freedom and higher flexibility. We can assume your individual wishes and demands in our customer-built vehicles.

ATEX Zone I and Zone II

According to **ATEX Zone I** and **Zone II** regulations our **SUPERVISION®** system is equipped for operating in explosive surroundings.

For further information and questions concerning explosion protection please refer to **iPEK** or our sales partners.



Custom-Built Inspection Vehicles

We'd like you to be able to render every single inspection while enjoying our technology. Thus, we furnish our vehicles ergonomically and technically with the most important components.

Various configurations are possible with several car models. We adapt our technology to your requirements ranging from Mercedes Vito to trailers and truck build-ups.

You can choose between **SUPERVISION®**, **ROVION®**, **ROVVER®**, **AGILIOS™**, **DigiSewer®**, **QuickView®** and the respective accessories.



TECHNICAL DETAILS

SUPERVISION[®]

Crawler

| | | |
|---------------|---|--|
| SVR95 | Dimensions (L x W x H) ... 274 x 84 x 72 mm (10.8 x 3.3 x 2.8") | Pipe Diameter .. 100 - 300 mm (4" to 12") |
| | Weight 8 kg (18 lb) | Pressure-Tight ... 1 bar (14.5 psi) * |
| SVR140 | Dimensions (L x W x H) ... 367 x 120 x 100 mm (14.5 x 4.7 x 3.9") | Pipe Diameter .. 150 - 500 mm (6" to 20") |
| | Weight 14 kg (31 lb) | Pressure-Tight ... 1 bar (14.5 psi) * |
| SVR250 | Dimensions (L x W x H) ... 488 x 181 x 167 mm (19.2 x 7.2 x 6.6") | Pipe Diameter .. 250 - 1000 mm (9" to 60") |
| | Weight 25 kg (55 lb) | Pressure-Tight ... 1 bar (14.5 psi) |

Camera

| | | |
|---------------|--|---------------------------------------|
| SVC75 | Dimensions (L x W x H) ... 106 x 75 x 60 mm (4.2 x 3 x 3") | Standard NTSC & PAL |
| | Weight 1.5 kg (3.3 lb) | Pressure-Tight ... 1 bar (14.5 psi) * |
| SVC100 | Dimensions (L x W x H) ... 125 x 92 x 68 mm (5 x 3.6 x 3.6") | Standard NTSC & PAL |
| | Weight 2.4 kg (5.3 lb) | Pressure-Tight ... 1 bar (14.5 psi) * |
| SVC110 | Dimensions (L x W x H) ... 128 x 98 x 74 mm (5 x 3.6 x 3.6") | Standard NTSC & PAL |
| | Weight 2.6 kg (5.7 lb) | Pressure-Tight ... 50 bar (725 psi) |

Cable Reel

| | | |
|---------------|---|--|
| SVS300 | Dimensions (L x W x H) ... 610 x 289 x 520 mm (24 x 11.4 x 20.5") | Cable Length max. 300 m (984 ft) |
| | Weight (incl. cable ^{1*}) approx. 30 kg (66 lb) | Water Proof Splash Guard |
| SVA350 | Dimensions (L x W x H) ... 573 x 406 x 506 mm (22.6 x 16 x 19.9") | Cable Length max. 350 m (1148 ft) |
| | Weight (incl. cable ^{2*}) approx. 50 kg (110 lb) | Water Proof Splash Guard |
| SVA500 | Dimensions (L x W x H) ... 680 x 520 x 554 mm (26.8 x 20.5 x 21.8") | Cable Length max. 500 m (1640 ft) |
| | Weight (incl. cable ^{3*}) approx. 85 kg (187 lb) | Water Proof Splash Guard |

* optional 10 bar (145 psi)

^{1*} 200 m (656 ft) ^{2*} 350 m (1148 ft) ^{3*} 500 m (1640 ft)

EMOTIONAL TECHNOLOGY





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