

KARL STORZ
INDUSTRIAL GROUP



**High Tech for Visual Inspection
and Documentation**

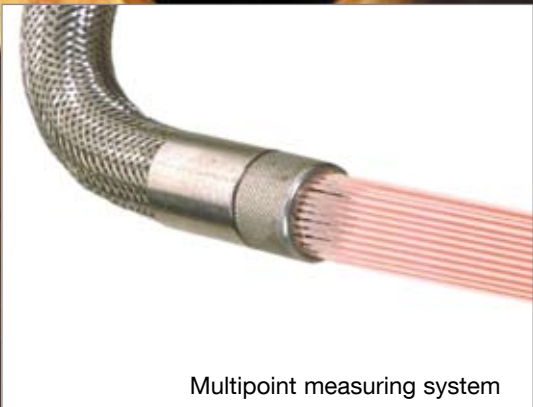
STORZ
KARL STORZ — ENDOSKOPE
INDUSTRIAL GROUP



VIDEOSCOPE



3-button operation



Multipoint measuring system



Accessory LCD monitor



Size comparison 3.8 mm VIDEOSCOPE



VIDEOSCOPE with working channel

VIDEOSCOPE

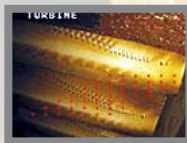
KARL STORZ VIDEOSCOPIES offer bright, brilliant and high-resolution images of unprecedented quality. The control keys on the ergonomic handle and the direct manual four-way deflection facilitate the rapid localization of damage and eliminate time-consuming inspections. A range of working lengths from 1 m to 7.5 m means these VIDEOSCOPIES are able to meet all requirements. Special lengths are available on request.

Unmatched image quality



The top quality and outstanding workmanship of the optical systems in all KARL STORZ endoscopes combined with state-of-the-art digital CCD image technology ensure crystal-clear, sharp and true-color image reproduction in a quality that was not previously thought possible: full-format images which faithfully reproduce even the smallest of details.

Multipoint measuring system



With measuring accuracy of 98 % in every starting position of the VIDEOSCOPE, the new multipoint measuring system is a real winner.

- 100 % screen size of measured image – no loss of image quality
- No lens change necessary – “See and Measure” function
- Simple operation – little training required
- Temperature display
- High measuring accuracy
- Time savings through optimized measurement

The 6 mm VIDEOSCOPE

In addition to the VIDEOSCOPE models with diameters of 3.8 mm, 4.2 mm, 5 mm, 6.3 mm and 8 mm, the unique 6 mm VIDEOSCOPE offers image quality that until now has only been available from videoscopes with much greater diameters: bright, high-contrast, clear and sharp images in full-size format for the inspection of even the smallest examination areas. Now with 30 % more light!



Use as a table-top version



Transport



TECHNO PACK® X



Cold Light Source integrated



Safe storage

TECHNO PACK®

Plug and play

The perfect multifunctional documentation unit.

Multi-purpose usage

Whether outside, in the office or at the assembly shop: thanks to the variable device management system, the new TECHNO PACK® X can be adapted to the local circumstances – any time, anywhere. This is made possible by working out of the system case or with the table-top version.

- **Video streaming** and audio storage for a recording time of over 1 hour
- **Saving of data** on a USB stick or DVD
- **Data processing** via software project management
- **Addition** of text marks, clip arts or similar
- **Pasting** of reports, remarks and notes
- **Powerful** 50 W solar light source with manual brightness control
- **12 volt battery** for 90 min operating time with condition query option
- **High-resolution** 12" TFT color monitor, which can be seen from any position
- **Compatible** with all KARL STORZ devices – VIDEOSCOPIES, borescopes and flexoscopes
- Can be used either as a **case or table-top version**
- **Universal power supply**
- Integrated **keyboard** with touch pad and shortcut keys
- **Split screen** function
- **Multiple zoom**
- **Reflection** and **rotation** of images

Lock and load

The system case not only transports and protects the TECHNO PACK® X, but also provides secure storage for your telescopes – whether rigid or flexible – as well as for additional equipment.

Full screen mode

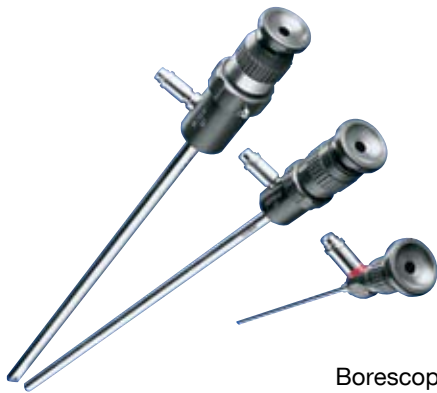
All images files are viewed in full screen display on the large 12" monitor. This renders measurement and inspection more accurate, rapid and easy.

Compatibility

In conjunction with the KARL STORZ TELECAM® the TECHNO PACK® X is compatible with all flexoscopes and borescopes from KARL STORZ as well as virtually all other established manufacturers.



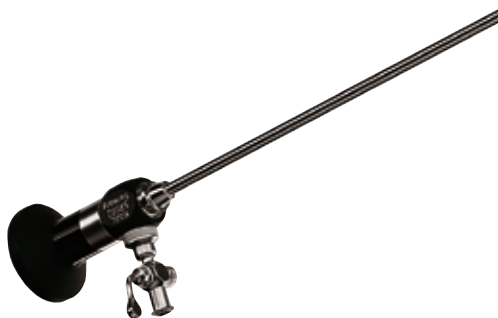
Borescope head with marker for degree of rotation



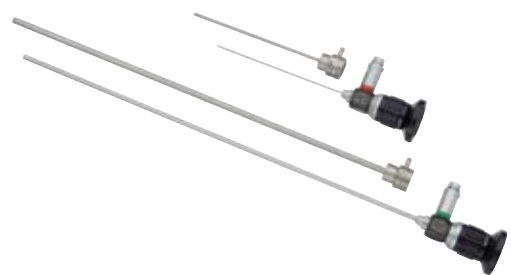
Borescopes



Swiveling V-block Borescope



Borescope with cooling connection



Borescopes with protection sheath



BORESCOPIES



*Outstanding image quality thanks to **HOPKINS**® I und II telescopes*

Borescopes (as rigid endoscopes are known) are manufactured by KARL STORZ with diameters ranging from 1.0 mm to 12 mm for many different applications.

For special applications we offer instruments with longer working lengths of up to 1.5 meters and over.

The swiveling V-block borescope is particularly special: a swiveling V-block in the tip of the borescope can be used for infinitely variable adjustment of the direction of view between -14° and 144° with the help of a control handle.

The use of **HOPKINS**® rod lens systems in KARL STORZ borescopes guarantees unparalleled light intensity and clear, sharp images.

KARL STORZ borescopes are designed to cope with the tough routine of industry. Double-wall shafts combined with a sapphire glass endpiece at the tip of the endoscope guarantee an image quality of unvarying brilliance for many years.

KARL STORZ is always able to offer the optimal solution – even for the monitoring under extreme conditions, such as internal combustion engines operating under full load or blast furnaces.

Production oriented to demand

Special lengths and versions are manufactured individually to the usual KARL STORZ high quality to meet the needs and specifications of the customer.



Flexoscope



Ocularfocussing



Four-fold deflection



Versions 0.3 - 1.3 mm



Flexoscope tip

FLEXOSCOPES

Analog imaging at the highest level

Flexoscopes, i.e. flexible endoscopes, are used for industrial endoscopy when the area for examination is only accessible via a convoluted route.

KARL STORZ flexoscopes are manufactured in a range of different versions. Variable diameters from 0.5 mm to 12 mm and different working lengths cater for all applications.

Our flexoscopes are available either with a robust easy-glide plastic coating or a tungsten sheath.

We guarantee a four-way deflection to max. 180°.

Special lengths and versions are manufactured individually to the usual KARL STORZ high quality to meet the needs and specifications of the customer.

Time and cost savings with state-of-the-art technology

For various applications such as the visual inspection of vehicles (Motospection) KARL STORZ offers special sets in system cases which guarantee an optimum configuration of your rigid and/or flexible endoscope equipment.

For various applications such as the visual inspection of all kinds of turbines, heat exchangers, pipework etc. KARL STORZ offers special sets in system cases which guarantee an optimum configuration for every type of inspection.

Visual control provides a direct insight into the internal components of turbines. Perfect error analysis avoids costs caused by unnecessary downtimes and disassembly.



Cold light projector



KARL STORZ
TELECAM® SL camera head



KARL STORZ Camera Control Unit



Portable halogen battery-powered light source



Light cable versions

LIGHT SOURCES & DOCUMENTATION

Light sources

At KARL STORZ only cold light projectors are used as the light source for VIDEOSCOPIES, borescopes und flexoscopes. These cold light sources from KARL STORZ are available with different lamp systems and power levels ensuring that a suitable light source is offered for every conceivable application.

Cold light technology results in a very bright light and shadow-free illumination of the area for examination. Thanks to the robust damage-resistant design even hollow spaces subject to high temperatures or humidity levels can be inspected without any problems.

LED technology

KARL STORZ offers a number of new LED cold light sources. This cost-efficient technology guarantees high luminosity, long lifetime and low power consumption. KARL STORZ customizes the LEDs to endoscopic requirements and thus optimizes light input into the endoscope.

Documentation

Today, the documentation of test results is indispensable in many areas of industrial endoscopy. Here KARL STORZ offers a range of possible options, for example:

- documentation using our TECHNO PACK™
- documentation using a video camera (e.g. TELECAM®)
- documentation using a digital camera

Videos, videos/still images, digital recordings or “Video over IP“ are possible on a PC or notebook with the TECHNO PACK® X desktop software. The user thus enjoys unlimited options via world-wide communication channels.



**Your partner for expert solutions and
experienced service in industrial endoscopy:**

STORZ
KARL STORZ—ENDOSKOPE
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