

MADE
IN
GERMANY

viZaar[®]
industrial imaging AG



PAN-TILT-ZOOM CAMERA

SNK

FOR REMOTE VISUAL INSPECTIONS OF TANKS, VESSELS
AND LARGE DIAMETER PIPES



SHORTEN YOUR PLANT REVISION TIME

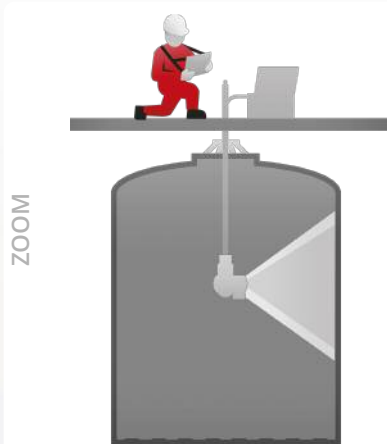
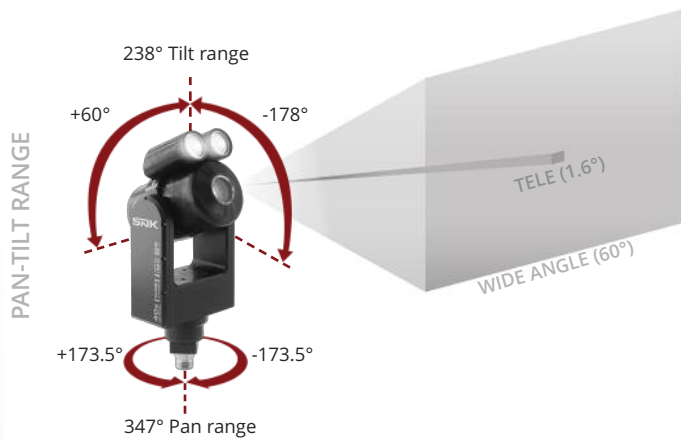
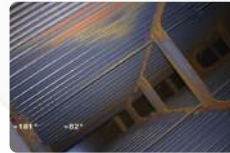
The use of SNK equipment will reduce the work load and time needed to return back to production.

REDUCE INSPECTION COSTS

Remotely positioned and maneuvered from the outside, this system reduces the need for inspectors to enter potential hostile, hazardous environment. This inspection method diminishes increasing costs for scaffolding; avoids potential contamination & damage on sensitive vessel surfaces.

INCREASE SAFETY OF YOUR INSPECTION PERSONAL & ASSET

Big vessels, huge volume tanks & other storage containments can be inspected by just entering the SNK through a small manhole. The Run & Scan function ensures systematic outright containment wall inspections, camera coordinates are displayed and registered to prove and document the process. Zoom in the smallest detail from the remotest area with the impressive 40x optical and additional digital zoom.



UTILIZE THE ADVANTAGES OF THE SNK TANK AND VESSEL INSPECTION SYSTEM






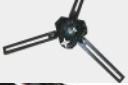




- The excellent pan and tilt capabilities offer all round inspection.
- With the wide viewing angle optic position you quickly achieve a good orientation and overview.
- No detail is missed. On the tip of your finger you zoom in the smallest detail from the remotest area with the impressive 40x optical and additional electronically zoom. The image will be presented and analysed in high resolution outside allowing ergonomic work and consultation of other experts.
- One robust Kevlar strengthened single system cable with the robust, compact stainless steel connector ensures long lifetime.
- Specific camera positions can be saved for later to easy recall positions of interest. The auto Run & Scan function ensuring for instance the systematic outright containment wall inspection. Camera coordinates are displayed and registered to prove and document the process.
- Two independent controllable and field replaceable head lights offer best possible independent illumination and failure detection.
- Up to 50 meter working length, the SNK camera head cable connects simply to the MATRIX multi functional control unit utilizing the SNK camera docking bay interface. With longer, optional cable lengths up to 200 m the system cable can be stored and operated while winding or unwinding cable reel system.
- Watertight up to 50 m.
- X/Y position information guarantees detailed orientation and documentation.
- Digital image manipulation provides image presentation in upright position, even when the camera is operated upside down.

BENEFIT WITH THE SNK FROM THE MATRIX INSPECTION & DOCUMENTATION PLATFORM

Simply connect the single camera head cable to the MATRIX SNK docking bay interface. The MATRIX software will recognize your SNK automatically and offer a fantastic portfolio of features and capabilities that are setting new standards in the industry. The camera image is shown in unique quality and high resolution and operation is controlled by the integrated joy stick and easy touch screen interface. The image and video documentation quality of the MATRIX system will elevate your work to the highest industry standard. Other or alternative remote visual equipment perhaps needed to complete the full inspection will also connect to the same system. The MATRIX platform is offering many additional usefull capabilities and time advantages while just using one remote visual inspection solution. Find more details on www.vizaar.de/en.

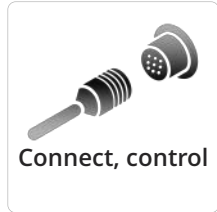
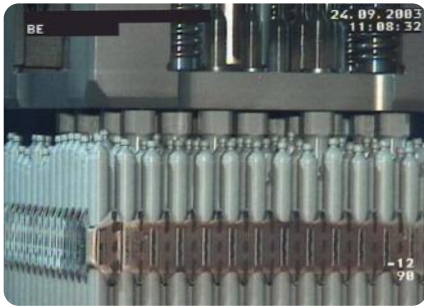
UTILIZE OUR CUSTOM-MADE SOLUTIONS

For years, viZaar® is working closely with their customers and replying to their desires and requirements. We provide our SNK technology for custom-made products and minor series production. Benefit from viZaar®'s year long experience and wide range of possibilities and qualities. Contact our experts today! Work with optional stainless steel camera housings, variations in construction dimensions and the pan-tilt range, alternative optical configurations and different illuminations with LED front rings, infrared and UV illumination or laser line measurement. Develop your own pan-tilt-OEM camera solution with us, fitting exactly for your application. Please find our contact details and examples in custom-made projects on our website, referring to the section "Custom made systems".

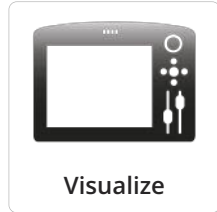
CAMERA HEAD		
Type	Sony® 1/4" Super HAD CCD.	
Resolution	670 horizontal TV lines PAL, 570.000 pixel.	
Zoom	40x optical / 12x digital FOV range optical: 1.6° to 60° in air, 1.2° to 45° in water	
Focal range	1.5 cm (0.59")- ∞, manual & automatic adjustment.	
Light sensitivity	0.6 lx min. at 1/50 sec. shutter < 0.04 lx min. at 1 sec. shutter (50IRE).	
Iris & shutter	Manual and automatic, 1/10.000 sec. to 1 sec.	
Overheat protection at 75°C / 165°F	Yes	
Display of camera temperature	Yes	
Working cable length	3 m / 9.8 ft. to 50 m / 164 ft. (optional up to 200 m / 640 ft. on viZaar®s patented slipping cable reel).	
Features*	Wide Dynamic Range, enhanced noise reduction, high resolution mode.	
ILLUMINATION		
Head lights (Halogen or LED)	Halogen: 2 x 35 Watt / 35 Watt each**, 32 steps 0 to 100% Compatible with all types of 12V GU4 Halogen lamps (approx. 650 lumen). 25° (77°F) less heat with original viZaar® lamp. / LED: 1 x LED 7 Watt, 8 steps to 100%	
OPERATING ENVIRONMENT		
Temperature	-15°C (5°F) to +55°C (131°F).	
Pressure	50 m / 160 ft. depth of water.	
Inner CO ₂ pressure	Max. 0.7 bar / 10.15 psi	
AXIS RANGE		
Pan range	347° (+/- 173.5°)	
Tilt range	-178° to +60°	
Speed	Aluminium: 0 to 14°/Sek.	
Torque (clutch protected)	Yes.	
DIMENSIONS		
Weight	Aluminum anodized: 2.9 kg / 6.4 lbs / stainless steel: 6.6 kg / 14.8 lbs	
Dimensions in mm / inch	Opening diameter: 162 mm (6.4") height / Standard: 280 mm (11.02") total height.	
Mounting	Four M6 mounting points.	
Position feedback	Resolution: 0.1° Accuracy: 1.0°.	
ACCESSORIES		
Option camera head case	Transport case for inspection cameras SNK / Revolver 80. Dimensions in mm / inch: (W) 415 / 16.34" x (H) 465 / 18.31" x (D) 190 / 7.48". Weight: 3.25 kg / 7.16 lbs.	
Option accessory soft pack	Accessory soft pack including standard main cable soft bag (up to 50 meter / 164 ft.).	
Option slipping cable reel	Allows to wind and unwind cable during operation up to 200 m (640 ft.) cable.	
Option camera lift	Allows camera transport into vessels from the bottom. Max. height: 5 m (16.4 ft.).	
Option pushing trolley	Pushing trolley as guidance in tubes for long distances (longer than 3 m / 9.84 ft.)	
Option manhole swivel tripod	Supporting the inspection of vessels / cavities with precisely guidance of the SNK, mounted to the push poles.	
Option push poles and push pole transportation and storage soft bag	For mounting and guiding of the camera head in the application. Push poles available in 1 m / 3.28 ft. and 2 m / 6.56 ft. length. The Soft bag allows easy transportation of over 10 push poles.	
Option SNK camera to push poles adapter	Connecting the push poles with the SNK camera head. Stainless steel.	
Option L-piece	Extends the inspection capabilities in complex geometry by positioning the camera head 90° horizontal.	
Option pressurization kit	Check camera before inspection to be waterproof. Increase your water depth inspection range by pre pressurisation. Incl. CO ₂ one-way cartridges.	
Spare parts	Spare parts available upon request. Camera modules and lamps can be replaced by the operator / user.	

* Only when operated with INVIZ® MATRIX control unit. ** Using 35 Watts may heat up the lamp housing at constant 100% operation. All specifications are subject to change without notice due to technical progress.

WARNING! Not for medical use. Never use close to electrical facilities, or in hazardous or explosive environments. US or EUROPEAN patents may apply to all INVIZ® products. Microsoft®, Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and / or other countries. © Copyright viZaar AG. Illustrations may differ from the original. Subject to technical modifications and errors. All rights reserved.



Connect, control



Visualize



Edit, record,
communicate



Archive

SNK

XPANDING YOUR VU®



viZaar industrial imaging AG

Hechinger Straße 152
72461 Albstadt / Germany
Tel.: +49 7432 98375-0
Fax: +49 7432 98375-50
Freecall 0800 3600371 (only within Germany)
www.vizaar.de
info@vizaar.com

viZaar industrial imaging AG

**Vertriebs-, Dienstleistungs- und
Schulungszentrum Rhein-Main**
Lupusstraße 17
35789 Weilmünster-Wolfenhausen / Germany
Tel.: +49 6475 91129-0
Fax: +49 6475 91129-29

viZaar industrial imaging AG

**Vertriebs- und Dienstleistungszentrum
West**
46348 Raesfeld / Germany
Tel.: +49 170 5703130



viZaar Industrial Imaging - North America

4533 Gibsonia Road
PA 15044 Gibsonia / USA
Tel.: +1 724 449-3270
Fax: +1 724 449-3273
www.vizaar-na.com
info@vizaar-na.com



viZaar Russia & CIS

197022, St. Petersburg,
Professora Popova 37B
Russia
Tel.: +7 9852220677
www.vizaar.ru
info@vizaar.ru



viZaar South-East Asia Sdn. Bhd.

2A Lrg Desa Utama Jln Masjid Kayu
Ara PJU 6
47400 Petaling Jaya Selangor, Malaysia
Tel.: +603 772 217-10
Fax: +603 772 217-10
www.vizaarsea.com.my
info@vizaarsea.com.my



FORT SA

3 rue Lambert
Parc Lavoisier
91410 Dourdan / France
Tel.: +33 1608 11818
Fax: +33 1645 99573
www.fort-fr.com
info@fort-fr.com

Authorised sales and service distributor of viZaar®:



FOR MORE
INFORMATION