



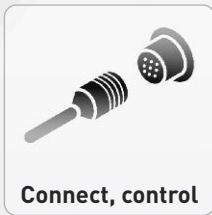
FOR MORE INFORMATION



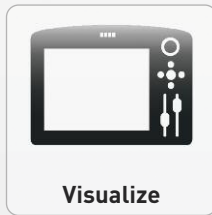
# inVIZ<sup>®</sup> REVOLVER 80

**The efficient dual view panoramic scan camera head for fast remote visual inspections of pipe and tube wall and orbital welding**

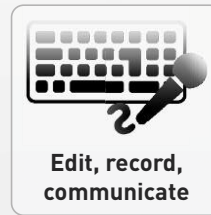
Reduce costs of ownership and inspection time with better inspection results by using the INVIZ<sup>®</sup> Revolver 80 dual view and revolving camera head.



Connect, control



Visualize



Edit, record, communicate



Archive

PW03-005\_1-2





### :: FAST INSPECTION RESULTS

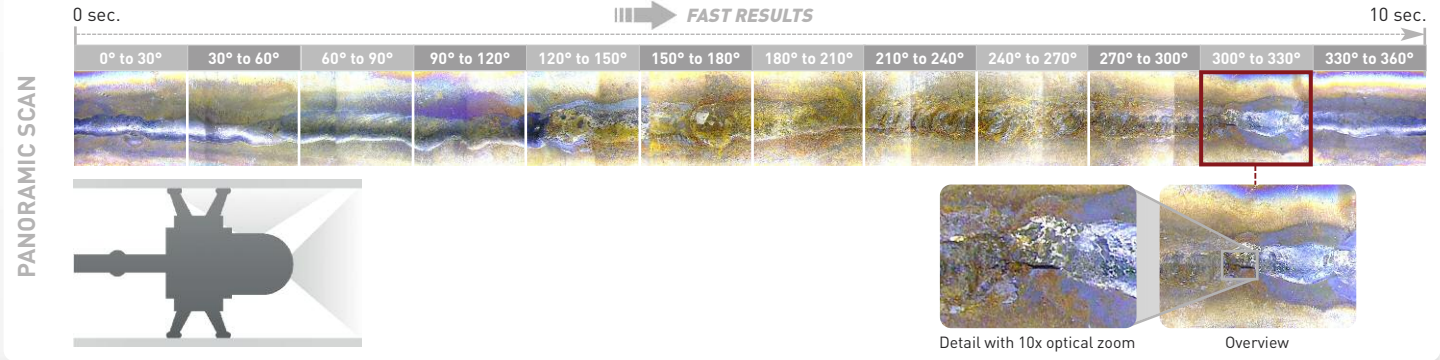
Benefit from information of 360° panorama panning shots with endless rotation.

### :: EXCELLENT REPRODUCIBLE IMAGING

Search and focus always from the tube centre. Survey quickly your whole orbital weld with a wide angle view. Find rapid and secure relevant deviations. Get maximal detail even from greater distance with the 10x optical zoom function.

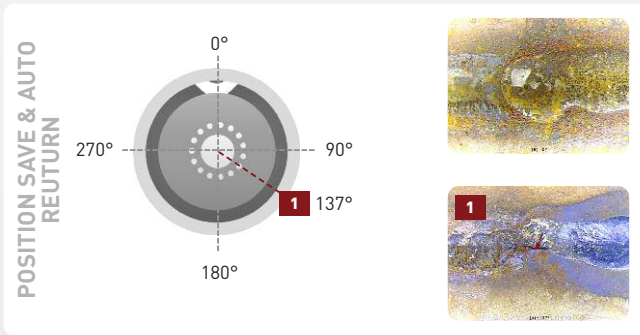
### :: REDUCE INSPECTION TIME & COSTS

Using the forward viewing camera, the inspection target is easy to locate and reach. The centring device with connected push rod is keeping the camera in the tube centre. Image settings are in the right setting and focus at any time during a panoramic scan. No typical force, wear and tear or image offset known from other technologies. Instead you gain precise camera control with the motorised scan and stop functionality. Save search and inspection time, reduce equipment maintenance costs while improving inspection results.



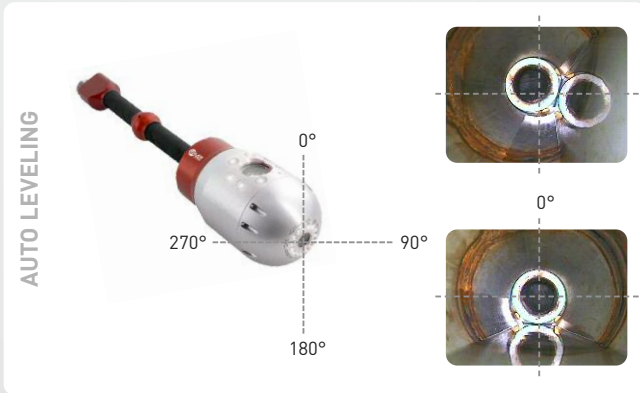
### FAST OVERVIEW WITH PANORAMIC SCAN OF ENDLESS 360° ROTATION

- :: Controlled by the joystick or following a predefined software scan mode, the side view camera is revolving 360° endlessly, ensuring 100% orbital weld or tube wall panorama inspections.
- :: No detail is missed. On the tip of your finger you zoom onto the smallest detail from the remotest areas with the impressive 10x optical and additional electronically zoom.
- :: A high resolution forward view camera is offering excellent sight and orientation within your application.
- :: The powerful dual illumination technology is delivering homogenous automatic or manual illumination, even in big dark cavities. A user defined left/right level functionality maximizes the potential failure contrast also on shiny and reflective surfaces such as coated or electro polished food grade tubes.



### POSITION SAVE SCAN & AUTO RETURN

- :: Specific camera positions can be saved and recalled. If used, the camera automatically returns precisely to positions of interest. The auto Run & Scan function is ensuring the systematic outright containment wall inspection. Camera positions can be displayed and recorded.



### AUTO LEVELING FUNCTION









- :: Orientation and image interpretation are easy now. Orientation during remote visual inspection after a view twists and turns is difficult. If there is no specific geometry or water level, up/down left or right orientation will be lost. Manoeuvring the instrument, interpretation of the image and securing full inspection can become a nightmare. The INVIZ® Revolver 80 auto level function solves all. It keeps your camera in an upright 0° position. That resets the orientation and ensures a precise inspection starting point. Equipment handling and image interpretation is easy. It reduces inspection time, user and equipment fatigue and therewith cost. Longitudinal weld seam inspections are seamless.

### BENEFIT WITH THE INVIZ® REVOLVER 80 FROM THE INVIZ® MATRIX INSPECTION & DOCUMENTATION PLATFORM

Simply connect the single camera head cable to the INVIZ® MATRIX SNK / INVIZ® Revolver 80 docking bay interface. The MATRIX software will recognize your Revolver 80 automatically and offer a fantastic portfolio of features and capabilities setting new standards in the industry. The camera image is shown in unique quality and high resolution. System operation is controlled by the integrated joystick and easy touch screen interface. The image and video documentation quality of the INVIZ® MATRIX system will elevate your work to the highest standard. Other alternative remote visual equipment perhaps needed to complete the full inspection will connect to the same system. The INVIZ® MATRIX platform is offering many additional useful capabilities and time advantages while just using one remote visual inspection solution. Find more details and all about those additional benefits by visiting our webpage or contact simply our representative for a product presentation.



INVIZ® Revolver 80

Camera head						
Dimensions in mm (inch)	(W) 409 / 16.10" x Ø 79 / 3.11"					
Weight	1.2 kg (2.6 lbs)					
Material	Anodized aluminium					
Resolution	Side view camera: 530 lines   Front view camera: (H) 752 x (V) 582 pixel, light sensitive, FOV: 70°   Camera moduls toggle					
Zoom	Side view camera: 10x optical / 12x digital zoom (FOV range: 4.6° to 46°)					
Iris & shutter	Manual and automatic					
Illumination	2 x 4 ultra-bright LED illumination for side module (manual / auto)   15 x ultra-bright LED illumination for front module (auto)					
Panoramic scan	Endless 360° rotation   Digital control   Rotation speed: 0.1° to 90° / sec.   Self-levelling automatic keeps the camera head in upright position (positioning dependent to earth-gravitation)					
Working cable length	3 m / 9.8 ft. to 50 m / 164 ft. (optional up to 200 m / 640 ft.)					
Operating Environment						
Temperature	-10°C (15°F) to 50°C (120°F), recommended range					
Watertight	Up to 1.5 m [5 ft.] depth of water					
Accessories						
Option camera head case	The robust, mobile storage and transportation case fitting one INVIZ® Revolver 80 and one INVIZ® SNK camera head. 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, transport case for inspection cameras INVIZ® SNK / INVIZ® Revolver 80.					
Option accessory soft pack	The soft bag has a defined interior to hold loose camera cable up to 50 m (164 ft.). There is space for accessories such as centring device and tools needed. The practical shoulder strap makes it easy to transport freeing up hands. Accessory soft pack including: Standard main cable soft bag (up to 50 m / 164 ft.).					
Option slip ring cable reel	The practical reel is to be used if the camera cable length exceeds 50 m. Just unwind as much cable as needed while operating. The cable on the reel helps cable handling and the workspace clear of tripping hazards. The drum integrated electronics amplify and drive camera and power up to 200 m (640 ft.) cable length.					
Centring ring small (standard delivered with the camera)	The centring ring material and shape are creating minimal friction when pushing the camera inside a pipe. It holds the camera head in central position allowing fast orbital inspection without the hassle to reset image settings and focus options. The recommended min. pipe dimensions are 100 mm (3.94") to max. 200 mm (7.87"). Material POM.					
Option centring trolley medium	This centring tool is used inside medium size pipes. The adjustment range of the tool is 140 mm (5.51") to 210 mm (8.27"). It keeps the camera off the ground and eases inspection when centred. Six plastic wheels ensure low operation friction when pushing the system inside the pipe. Construction: aluminium. The recommended min. pipe dimensions are 145 mm (5.70"), to max. 400 mm (15.74").					
Option centring trolley large	This tool is to be used with the INVIZ® Revolver 80 camera head inside big size pipes. The adjustment range of the tool is 225 mm (8.86") to 540 mm (21.25"). It positions the revolving camera in the centre of the pipe. Six strong plastic wheels ease the operation and friction. The recommended min. pipe dimensions are 230 mm (9.05"), to max. 1.000 mm (39.37"). Construction: aluminium.					
Option connectable push rods	These push rods are available in different length and flexibility. Standard length is 1.5 m (4.92 ft.). They simply connect with 10 mm fast connectors. Soft, medium and stiff flexibility grade rods help pushing the camera over great working distances and around tight radiuses. Up to twenty-five rods find space in the practical quivers style soft bag. With that, transportation hands free is easy.					
Option endless pushing fibre on a reel	The fibre rod connects with the fast mount end to the camera head or alternatively to the centring trolley. Different sets of working length and stiffness are available. Following dimensions are available:					
	Type	Fibre size	Length	Weight	Other	
	PE coated	6 mm / 0.23"	30 m / 98 ft.	6.8 kg / 14.99 lbs	Reel in steel	
	PE coated	6 mm / 0.23"	50 m / 164 ft.	7.8 kg / 17.19 lbs	Reel in steel	
	PE coated	9 mm / 0.35"	50 m / 164 ft.	12 kg / 26.45 lbs	Reel in steel	
	PE coated	9 mm / 0.35"	70 m / 230 ft.	14 kg / 30.86 lbs	Reel in steel	
PE coated	11 mm / 0.43"	100 m / 328 ft.	35 kg / 77.16 lbs	On wheels / Reel in steel		
PE coated	15 mm / 0.59"	150 m / 492 ft.	77 kg / 169.75 lbs	On wheels / Reel in steel		

All specifications are subject to change without notice due to technical progress.



**viZaar industrial imaging AG**  
Hechinger Straße 152  
72461 Albstadt / Germany  
Fon: +49 (0) 74 32 / 98 37 5-0  
Fax: +49 (0) 74 32 / 98 37 5-50

Freecall 0 800 / 360 03 71  
info@vizaar.de  
www.vizaar.de

**viZaar industrial imaging AG**  
**Vertriebs- und Dienstleistungs-**  
**zentrum Rhein-Main**  
Fürfurter Straße 105  
65606 Villmar-Aumenau / Germany  
Fon: +49 (0) 64 74 / 88 37-70  
Fax: +49 (0) 64 74 / 88 37-90

**viZaar industrial imaging AG**  
**Vertriebs- und Dienstleistungs-**  
**zentrum Nord**  
Am Neuendeich 52  
25348 Glückstadt / Germany  
Fon: +49 (0) 41 24 / 608 19 40  
Fax: +49 (0) 41 24 / 608 19 49

**viZaar industrial imaging AG**  
**Vertriebs- und Dienstleistungs-**  
**zentrum West**  
Burgstraße 27  
46348 Raesfeld / Germany  
Fon: +49 (0) 170 / 570 31 30



**viZaar Industrial Imaging - North America**  
National Operations Center  
Pittsburgh, PA  
USA  
Fon: (724) 449-3270  
Fax: (724) 449-3273

www.vizaar-na.com  
info@vizaar-na.com



**viZaar South-East Asia Sdn. Bhd.**  
2A Lrg Desa Utama Jln Masjid Kayu  
Ara PJU 6  
47400 Petaling Jaya Selangor, Malaysia  
Fon: +603 - 772 217 10  
Fax: +603 - 772 217 10

www.vizaarsea.com.my  
info@vizaarsea.com.my



**FORT SA**  
3 rue Lambert  
Zl de la Gaudrée  
91410 Dourdan / France  
Fon: +33 1 608 118 18  
Fax: +33 1 645 995 73

www.fort-fr.com  
info@fort-fr.com

*viZaar® authorised sales and service agent:*