



Visual Inspection Kits for Power Generation Turbines



In power generation plants and facilities, turbines are essential pieces of machinery. Steam and gas turbines are operated under extremely high temperatures and pressures, so maintaining the stability and safety of these machines under these harsh conditions is critical to ensuring the plant's maximum output.

Remote visual inspection is a cost-effective and efficient method to detect potential defects before they cause damage that results in prolonged downtime and financial losses.

Olympus offers IPLEX™ videoscope kits that provide the optimal tools and accessories for steam and gas turbine maintenance.





High-Quality Imaging

Exceptional image quality helps you quickly locate indications for faster decision-making and enhanced efficiency.

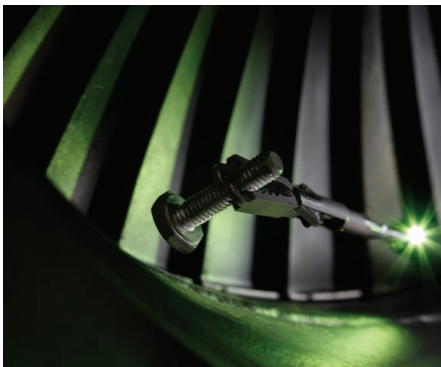
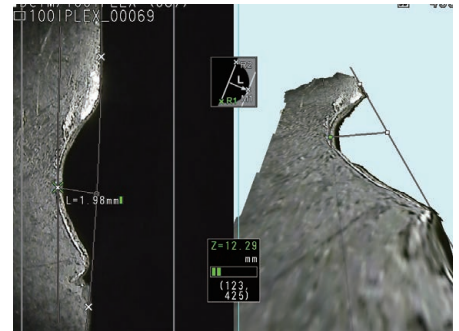
Our PulsarPic™ processor dynamically adjusts the brightness level of the IPLEX videoscope, enabling you to clearly observe shiny turbine blades. To prevent halation, WiDER™ image processing technology supports a wide dynamic range, maintaining visibility in dark areas even when the brightness level is decreased.

Get a clear view of all the internal components of the turbine, from the large space inside a combustion chamber to a close-up on a compressor or steam turbine blade.

Powerful Measurement Features

For continued stable and safe turbine operation, remote visual inspectors are required to accurately diagnose defects. The IPLEX videoscope's fine-tuned measurement capability gives you confidence in the results.

3D modeling on the IPLEX NX videoscope helps you better visualize the shape of damaged components. With its rotation and color-coded imaging functions, you can recognize protrusions and depressions at a glance and precisely assess the degree of damage. 3D modeling also makes it easy to choose the right measurement point by providing views of your target from multiple angles.



Scopes for Multiple Jobs

Interchangeable scopes in various diameters and lengths are available to perform different types of engine inspections with one IPLEX system. Spare scopes can also help reduce downtime if a scope repair is needed.

Our working channel scope enables you to detect and remove foreign objects dropped in a turbine during new installations and regular overhaul maintenance. This ability can help you avoid unnecessary and costly engine removals or teardowns. With similar capabilities to a standard insertion tube, it also functions as a backup scope when required.

Access Hard-to-Reach Spaces

Various guide tubes facilitate access to spaces that are difficult to reach with only a scope. Our guide tubes are designed to help you inspect every part of steam and gas turbines.

Simply insert the scope using a guide tube to reach the target area and perform the inspection quickly and efficiently.



Recommended Kits

3D Visual Measurement Kit



IPLEX NX Videoscope

IPLEX NX videoscope, ϕ 6 mm (0.23 in.), 3.5 m (11.5 ft)	IPLEX NX videoscope, ϕ 4 mm (0.16 in.), 3.5 m (11.5 ft)
AT120D/NF-IV96N 6 mm viewing tip adaptor	AT120D/NF-IV94N 4 mm viewing tip adaptor
AT120S/FF-IV96N 6 mm viewing tip adaptor	AT100S/FF-IV94N 4 mm viewing tip adaptor
AT80D/FF-IV96N 6 mm viewing tip adaptor	AT80D/FF-IV94N 4 mm viewing tip adaptor
AT90D/90D-IV96N stereo tip adaptor	AT70D/70D-IV94N stereo tip adaptor
AT70S/70S-IV96N stereo tip adaptor	AT50S/50S-IV94N stereo tip adaptor
MAJ-1253 Rigid sleeve for ϕ 6 mm scope	MAJ-1737 rigid sleeve for ϕ 4 mm scope
J-shaped guide tube for ϕ 6 mm scope*	J-shaped guide tube for ϕ 4 mm scope*
Flex and stay tube 10 mm OD (0.4 in. OD)*	

*Third-party product.

Versatile Kit



IPLEX GX Videoscope

IPLEX GX videoscope, ϕ 6 mm (0.23 in.), 2 m (6.56 ft)	IPLEX GX videoscope, ϕ 4 mm (0.16 in.), 2 m (6.56 ft)
AT120D/NF-IV96G 6 mm viewing tip adaptor	AT120D/NF-IV94G 4 mm viewing tip adaptor
AT120D/FF-IV96G 6 mm viewing tip adaptor	AT120D/FF-IV94G 4 mm viewing tip adaptor
AT120S/FF-IV96G 6 mm viewing tip adaptor	AT100S/FF-IV94G 4 mm viewing tip adaptor
AT80D/FF-IV96G 6 mm viewing tip adaptor	AT80D/FF-IV94G 4 mm viewing tip adaptor
AT60D/60D-IV96 stereo tip adaptor	AT50D/50D-IV94 stereo tip adaptor
AT60S/60S-IV96 stereo tip adaptor	AT50S/50S-IV94 stereo tip adaptor
MAJ-1253 rigid sleeve for ϕ 6 mm scope	MAJ-1737 rigid sleeve for ϕ 4 mm scope*
J-shaped guide tube for ϕ 6 mm scope*	J-shaped guide tube for ϕ 4 mm scope*
Flex and stay tube 10 mm OD (0.4 in. OD)*	

*Third-party product.

Handheld Kit



IPLEX G Lite Videoscope

IPLEX G Lite videoscope Φ 6 mm (0.23 in.), 2 m (6.56 ft)	IPLEX G Lite videoscope Φ 4 mm (0.16 in.), 2 m (6.56 ft)
AT120D/NF-IV96G 6 mm viewing tip adaptor	AT120D/NF-IV94G 4 mm viewing tip adaptor
AT120D/FF-IV96G 6 mm viewing tip adaptor	AT120D/FF-IV94G 4 mm viewing tip adaptor
AT120S/FF-IV96G 6 mm viewing tip adaptor	AT100S/NF-IV94G 4 mm viewing tip adaptor
AT80D/FF-IV96G 6 mm viewing tip adaptor	AT80D/FF-IV94G 4 mm viewing tip adaptor
AT60D/60D-IV96 stereo tip adaptor	AT50S/50S-IV94 stereo tip adaptor
AT60S/60S-IV96 stereo tip adaptor	AT50S/50S-IV94 stereo tip adaptor
MAJ-1253 Rigid sleeve	MAJ 1737 Rigid sleeve
J-shaped guide tube for Φ 6 mm scope*	J-shaped guide tube for Φ 4 mm scope*
Flex and stay tube, 10 mm OD (0.4 in. OD)*	

*Third-party product.

Note: the kit comes with recommended items, but you can also select items to customize your kit.

Accessories



Flex and Stay Tube

Pliable yet rigid tube that can be freely shaped. Easily bend the tube in any shape to reach an object for remote visual inspection.

Outer diameter is 10 mm (0.39 in.)



J-Shaped Tube

A useful guide tube if you want the scope to reach a location that is against the direction of gravity or to move in a certain direction. The J-shape is optimized for general combustion chamber inspections.

Outer diameter is 8 mm (0.31 in.) and 10 mm (0.39 in.)



Rigid Sleeve

MAJ1737 (Rigid sleeve for 4 mm (0.16 in.) insertion tube)

MAJ 1253 (Rigid sleeve for 6 mm (0.24 in.) insertion tube)

Each set comes with three rigid sleeves, measuring 250 mm (9.84 in.), 340 mm (13.38 in.), and 450 mm (17.71 in.) in length. The rigid sleeve can be fixed on the flexible insertion tube to straighten it for insertion into aviation gas turbines.

EvidentScientific.com



EVIDENT CORPORATION is ISO9001 and ISO14001 certified.

All specifications are subject to change without notice.

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