

MITECH MVJ SERIES INDUSTRIAL ENDOSCOPE

- Professional manufacturer, best quality with competitive price
- Recommended by the world UT NDT inspection association for training and examination
- Core technology with independent intellectual property rights, certificate of CE, GOST and etc..



Overview

MITECH MVJ series of industrial endoscope, based on the CMOS image sensor principle, can realize image shooting in the pipe or narrow area which can not be directly observed. And the results can be displayed with high-definition ,so as to achieve non-destructive testing. MITECH MVJ series endoscope is a high-precision video electronics industry endoscope, the use of color LCD display and highly integrated CMOS image sensor to ensure that the video endoscopic image of the clear, realistic; its low power consumption, quick signal transmission speed , and easy to carry,operate. It can detect pipe or narrow spaces without tearing apart or damaging machine while not working.Cracks, welds, foreign body, wear and internal processing of parts and other circumstances can be detected with high quality images. It is widely used in aerospace, petrochemical, mechanical casting, national defense military, power production, automobile transportation and other fields, and is the important detection and monitoring equipment of industrial equipment testing and maintenance and other aspects.

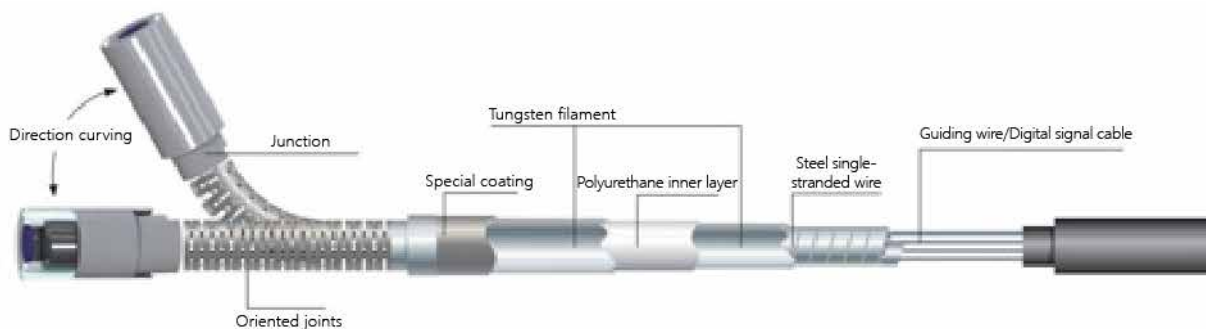
Technical Parameters

Technical specifications	Technical parameters
Probe diameter	φ4.5, φ6.4 (unit : mm)
Probe material	Stainless steel
Imaging sensor	CMOS
Field angle	> 90°
FNO	2.8 , 4.9
Depth of focus	8mm~80mm , 15~∞
Brightness	LED HIGH Lux
Brightness control	5 gears adjustable
Probe length	15 mm(φ4.5mm), 18mm (φ6.4mm)
Camera pixels	350,000
Video Output	NTSC/PAL
Storage	8 G (Micro SD Card)
Picture format	JPG , 800×600pixel
Video format	AVI 640×840pixel
Frame rate	15~30fps
Line length	1.5m , 3m
Line material	The stainless steel wire
Probe direction	360°
Screen size	3.5 inches
Screen resolution	320×240
USB port	Mini-USB B type
Battery	Li-On rechargeable, 3.7V/2600mAh
Working time	>2h
Charging time	4h
AC Adapter	AC 100-240V~50/60HZ
Weight	590g (main unit)
Protection level	IP65 , IP67 (Optional)

Features

- High brightness LCD, the enlarged video signal is clearly showed on a 3.5-inch screen. High reliability, good stability, with excellent real-time field detection;
- Portable and handful , making it more convenient to operate;
- Micro CMOS sensor designed with high sensitivity and integration but low power consumption, available for low brightness detection;
- High resolution camera module, to provide a smooth, clear, stable dynamic (static) detection screen;
- Photo and video storage, 8GB SD Card, can save and record tons of image data;
- Probe detection distance up to 3m;
- 360-degree all-round adjustment, flexible control, improve work efficiency;
- Independent battery design makes it more convenient to use;
- Inspection line outside the stainless steel wire material, anti-corrosion wear, durable;
- Cold light source adopted in probe, 5 gears adjustable;
- Continuous working time >2h.

Working Principle



Based on the CMOS image sensor principle, MITECH MVJ industrial endoscope can collect picture information in narrow spaces. The digital signal can be transferred to the host through video signal cable plugged in pipe, thus to achieve picture display and storage. The oriented joints connect the probe with insert tube and the guide wire inside the joints can turn around freely in all directions controlled by mechanical device. As a result, the CMOS sensor can shoot excellent photos as required in time.

Applications

- Turbine overhaul: Turbine cleaning, paddle and nozzle / nozzle block check, find off parts, corrosion inside and outside the pipe;
- Aerospace: Aircraft parts, large diesel engines, various engines and pipelines for routine maintenance and inspection;
- Petrochemical Industry: Used for detection of oil refineries in the storage tank, heat exchangers, ball tankers, chemical industry pipeline facilities, special inspection and pressure vessel production units of containers, cylinders, pipelines;
- Military: Used to check the mechanical gear parts wear, loose, oil spills, barrel internal situation;
- Motor traffic: Car engine cleaning and maintenance;
- Machine casting: Automotive parts casting, hydraulic casting, pump body casting, mechanical parts casting, pipe fittings casting; Used to check the situation of sand casting, burr and staggered hole quality control;
- Power industry: Power generation, equipment defect detection and condition monitoring.

Working condition

- Probe working temperature : -10°C~50°C
- Host working temperature : -10°C~50°C
- Storage temperature : -10°C~50°C
- Water proof level : IP65(IP67 custom)
- Oil proof level : IP 67

MVJ serial products comparison

Name	Probe diameter (mm)	Focus Depth (mm)	Camera pixels	Angle	Length of line(m)	Application
MVJ6150	6.4	15-∞	410,000	> 90°	1.5	Suitable for narrow space detection, or small space, piping, engines, parts, hydraulic, pneumatic parts, castings to detect the internal.
MVJ6300	6.4	15-∞	410,000	> 90°	3	
MVJ4150	4.5	8-80	1,000,000	> 120°	1.5	Suitable for narrow space detection, or small space, piping, engines, parts, hydraulic, pneumatic parts, castings to detect the internal.
MVJ4300	4.5	8-80	1,000,000	> 120°	3	

Instrument configuration

	Num	Name	QTY	备注
	1	Main unit	1	
	2	Detection line	1	Connect to host
	3	Probe	1	Connect to host
	4	8G SD Card	1	Insert in the host
Standard	5	Camera case	1	
config	6	Card reader	1	
	7	Cloth	1	
	8	Li battery	1	In the host
	9	AC adapter	1	
	10	Seat charger	1	
	11	ABS case	1	
	12	Attached files	1	



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