



# CESYCO

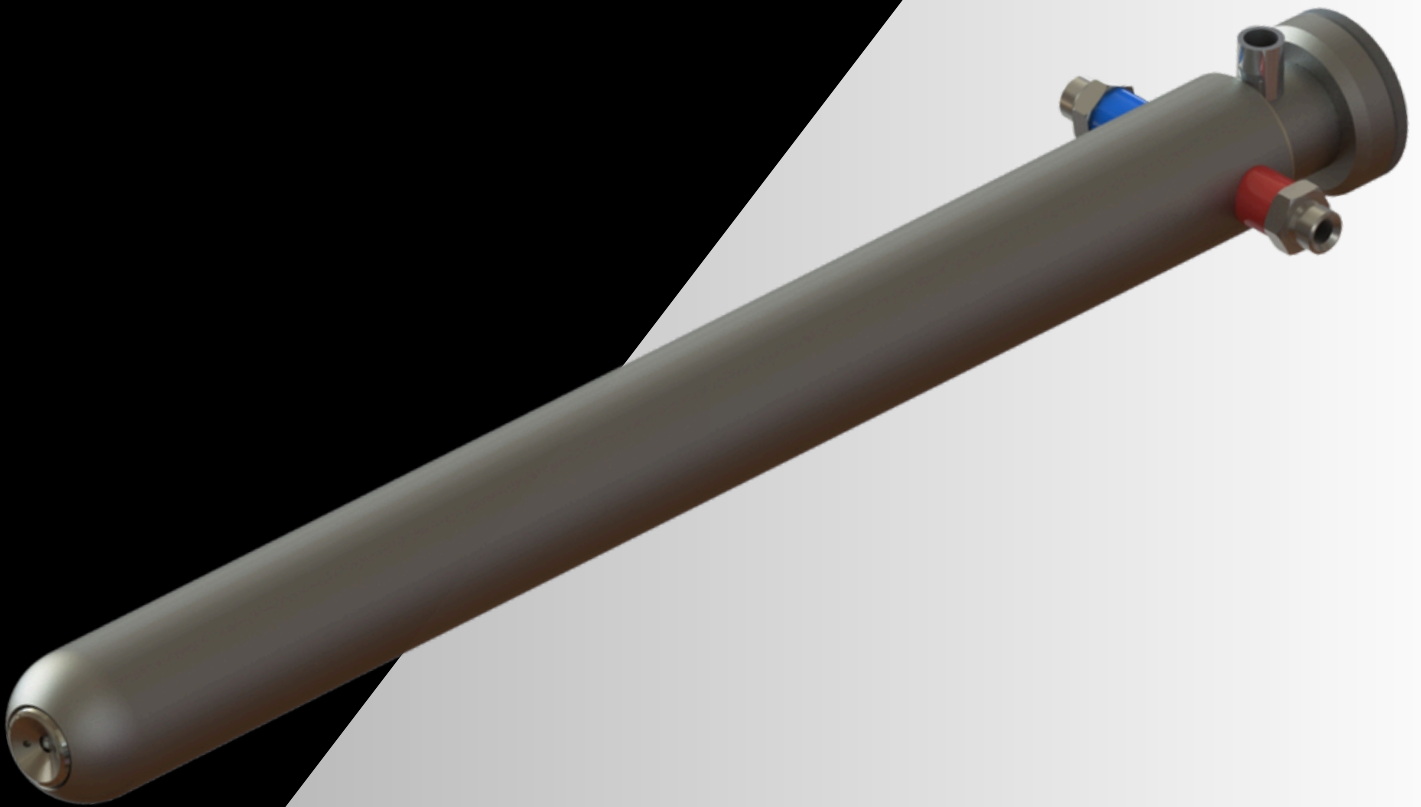


## HTN70

### DIGITAL FIXED ENDOSCOPE

70 mm

2 000 °C



**1080p**  
**FULL HD**



## ESYCO Highlights

- 24/7 continuous monitoring: ideal for critical industrial processes requiring permanent control.
- High definition: exceptional image quality for detailed analysis.
- Designed in refractory steel to withstand corrosive environments.



## ADVANCED COOLING SYSTEM

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- Water cooling (Vortex effect): Protects the video module and dissipates heat evenly.
- Air cooling (Venturi effect): Continuously protects and cleans the front lens, even at high temperatures.



## STRUCTURE AND THERMAL RESISTANCE

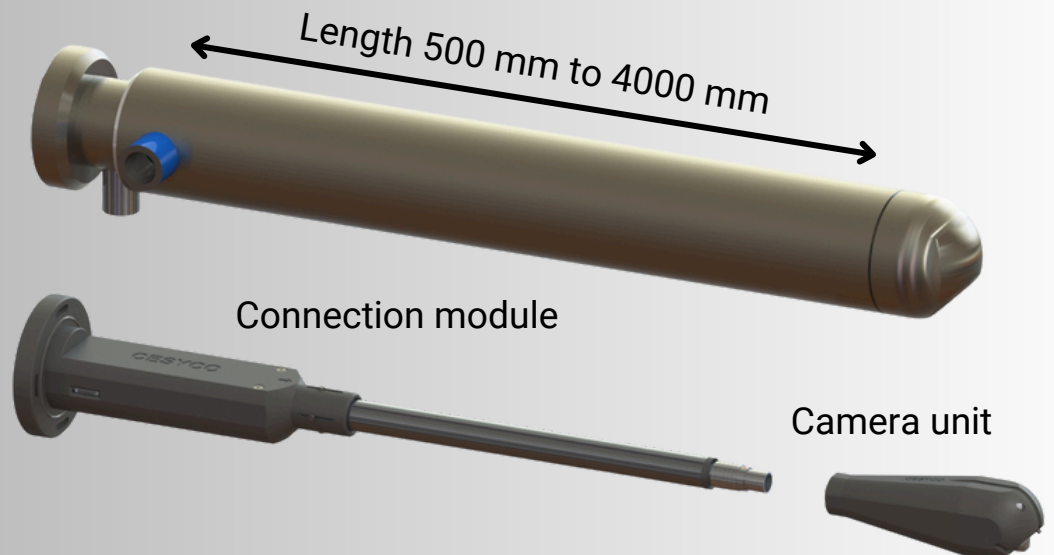
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- Materials: Triple-jacketed sheath for excellent corrosion and heat resistance.
- Capsule tip: The rounded shape of the endoscope tip optimizes cooling by facilitating the uniform circulation of water and air around the head.



## COMPOSITION

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# Vision:

## 3D SIMULATION FOR OPTIMAL INTEGRATION

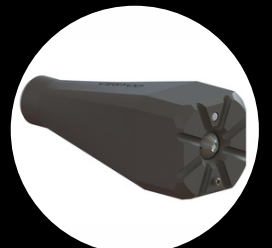
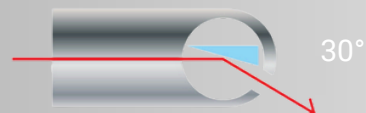
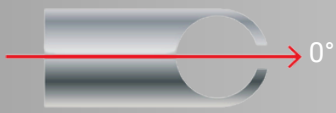
To ensure an optimal selection of the endoscope head (direction and field of vision), our design team conducts a 3D simulation of the relevant industrial environment.



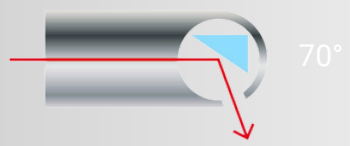
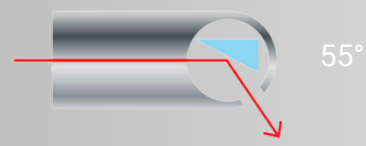
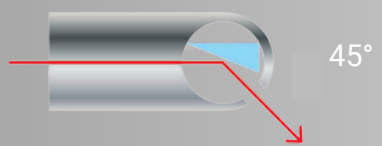
Fields of vision:  
60° or 90°

Our endoscopes provide two fields of vision tailored to inspection needs:

- 60° allows for a more distant and detailed observation,
- 90° provides broader coverage of the inspected environment. The selection of the field is contingent upon the area to be analyzed and the requirements of the inspection.



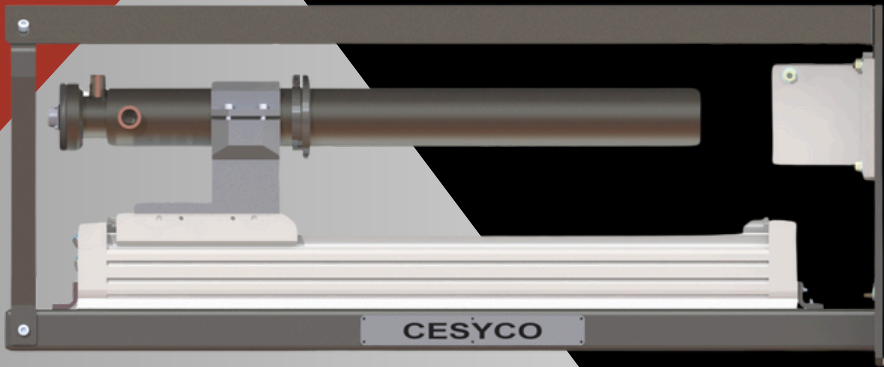
Camera units



This simulation enables us to identify the best possible shots according to specific site constraints and inspection requirements. Analysis of different viewing angles facilitates selection of the most suitable equipment, ensuring optimum visual coverage and efficient integration of the fixed endoscope with the right options.

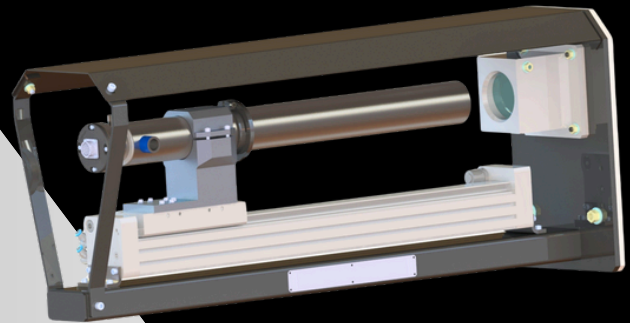
# Equipment:

## EXTRACTOR BENCH



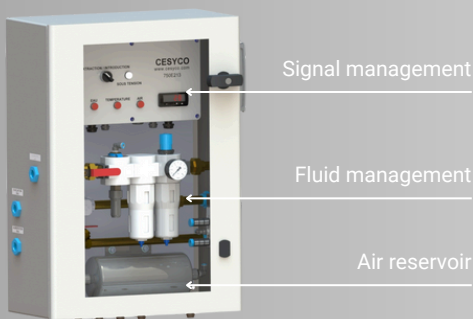
Safety device that automatically removes the endoscope in the event of malfunctioning cooling systems.

- Pneumatic cylinder for endoscope insertion and extraction
- Watertight hinged-door opener to isolate from oven heat (air barrier option)
- Emergency air tank in case of pressure drop
- Connection to control panel
- Water and air supply hoses to cool the endoscope.



## ELECTRICAL CABINET

*With bench*



Fluid and video signal management. Activates an alarm in the event of a cooling system failure.

## ELECTRICAL BOX

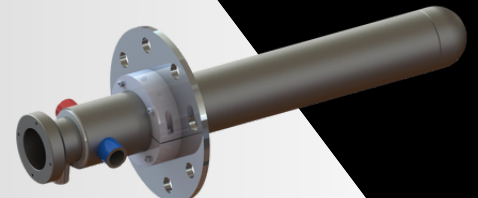
*Indispensable*



Efficient signal transmission through RJ45 (or HDMI) cables facilitates high-quality real-time inspections.

## MOUNTING FLANGE

*Optional*



Clamping flange designed to secure the endoscope. This can be tailored to meet your specific requirements.

Technologies	Image transmission	IP digital video
	Cooling system	Triple-envelope sheath
Operating temperature	Up to 2,000 degrees Celsius	
Dimensions	Diameter	70 mm
	Length	500 to 4,000 millimeters
	Weight	from 6 kilograms
Cooling system	Water	Vortex (closed loop)
	Air	Venturi (lost)
Internal IP camera	Efficient pixels	1920x1080
	Resolution	1080p
Vision*	Angle	0°, 30°, 45°, 55°, 70°
	FOV	60° or 90°
Focus	Adjustment tool	From 100 millimeters
Connections	Inlet/Outlet	Water: BSP 1/2"
		Air: BSP 3/8"
	Electrical enclosure	100 to 250 VAC 50/60Hz
		RJ45/HDMI video output
Accessories	Control and security	Electrical box or cabinet
		Extractor bench
		Flange and thermal shield

\*Decision to be made during ordering, fixed option