

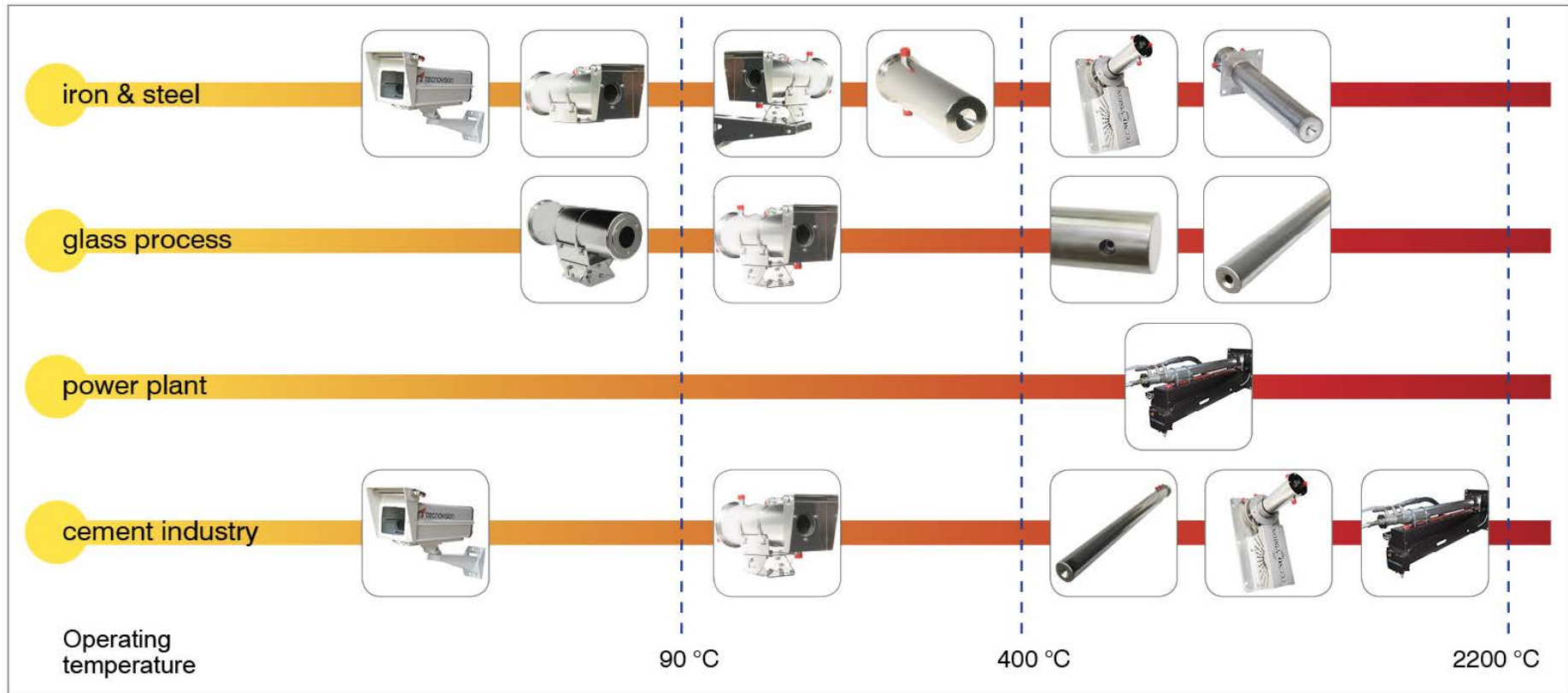
HIGH TEMPERATURE CAMERA SYSTEMS

TECHNOLOGIES & PRODUCTS

air^{tec} | acqua^{tec} | cam^{tec} | sonda^{tec} | in^{tec} | ou^{tec} | cab^{tec}

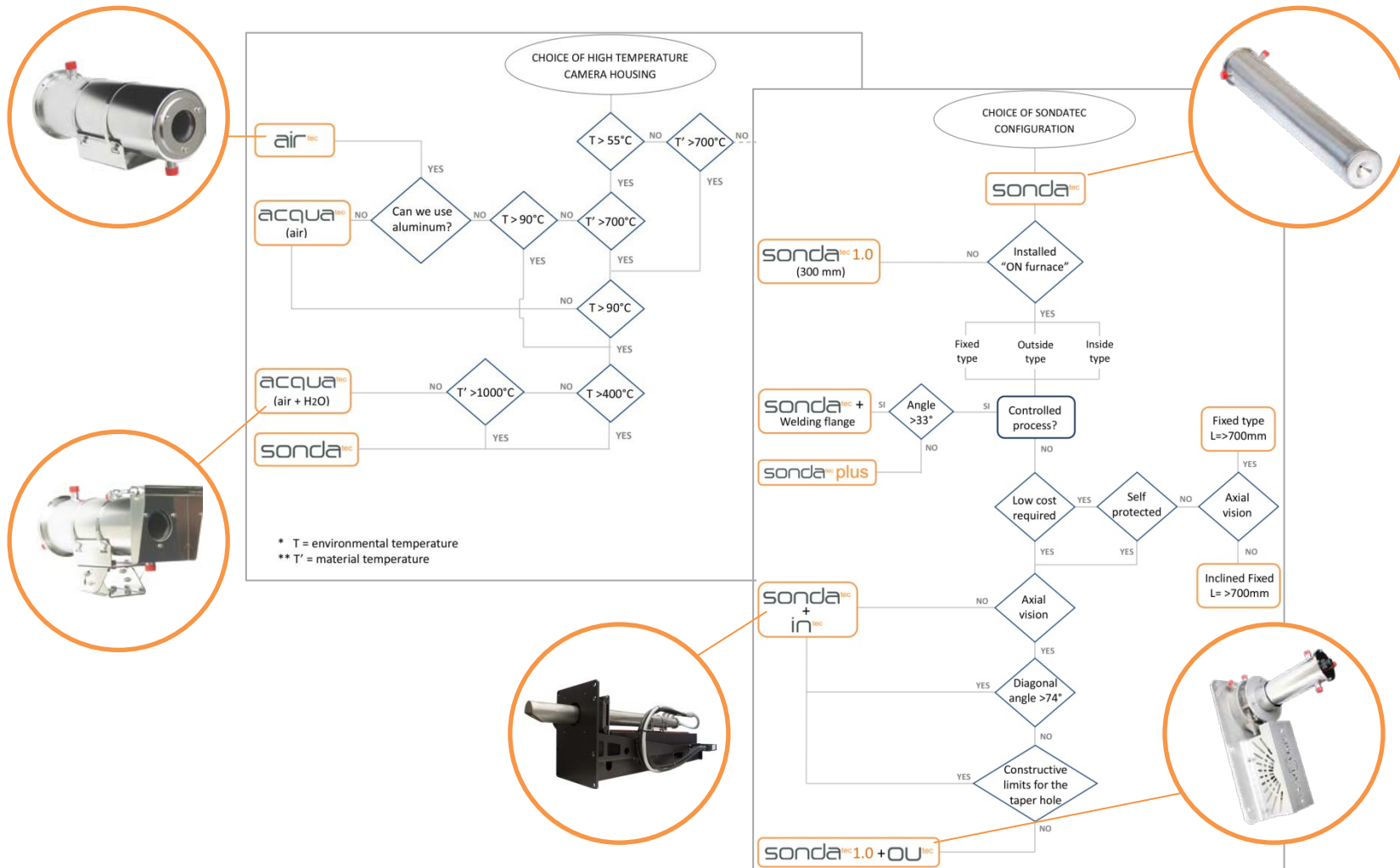


HIGH TEMPERATURE CAMERA SYSTEMS



To be used when environmental temperature is >55°C.

CHOICE OF CAMERA HOUSING



SONDATEC: BASIC SYSTEM COMPONENTS CONFIGURATION



CAMTEC: MAIN FEATURES

- Camera sensor with special feature for high contrasts and strong radiation

- MIL Std. multipolar connector

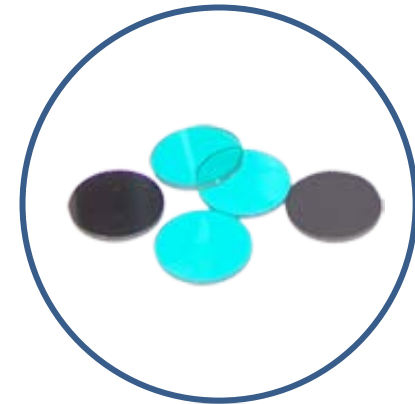
- Easy fit all in one device



- Optical lens with aperture <3mm diameter

CAMTEC: ACCESSORIES

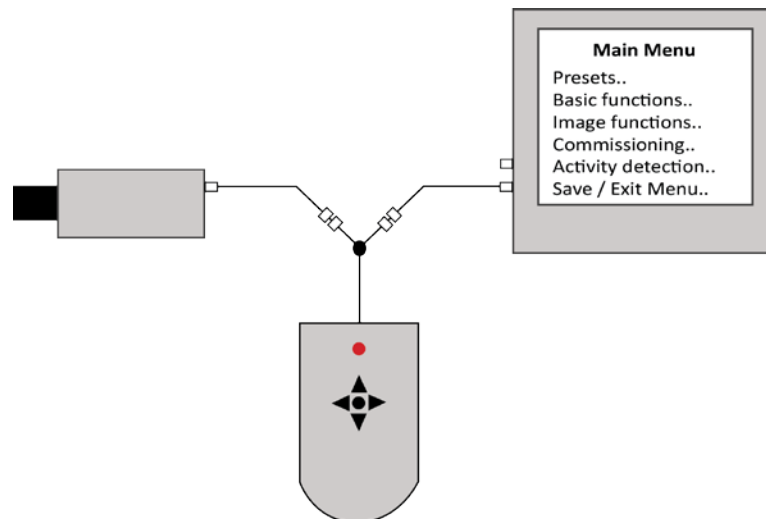
Optical infrared glass filters, NG9, BG12, BG18
For high light level application i.e
(glass furnace, VOD)



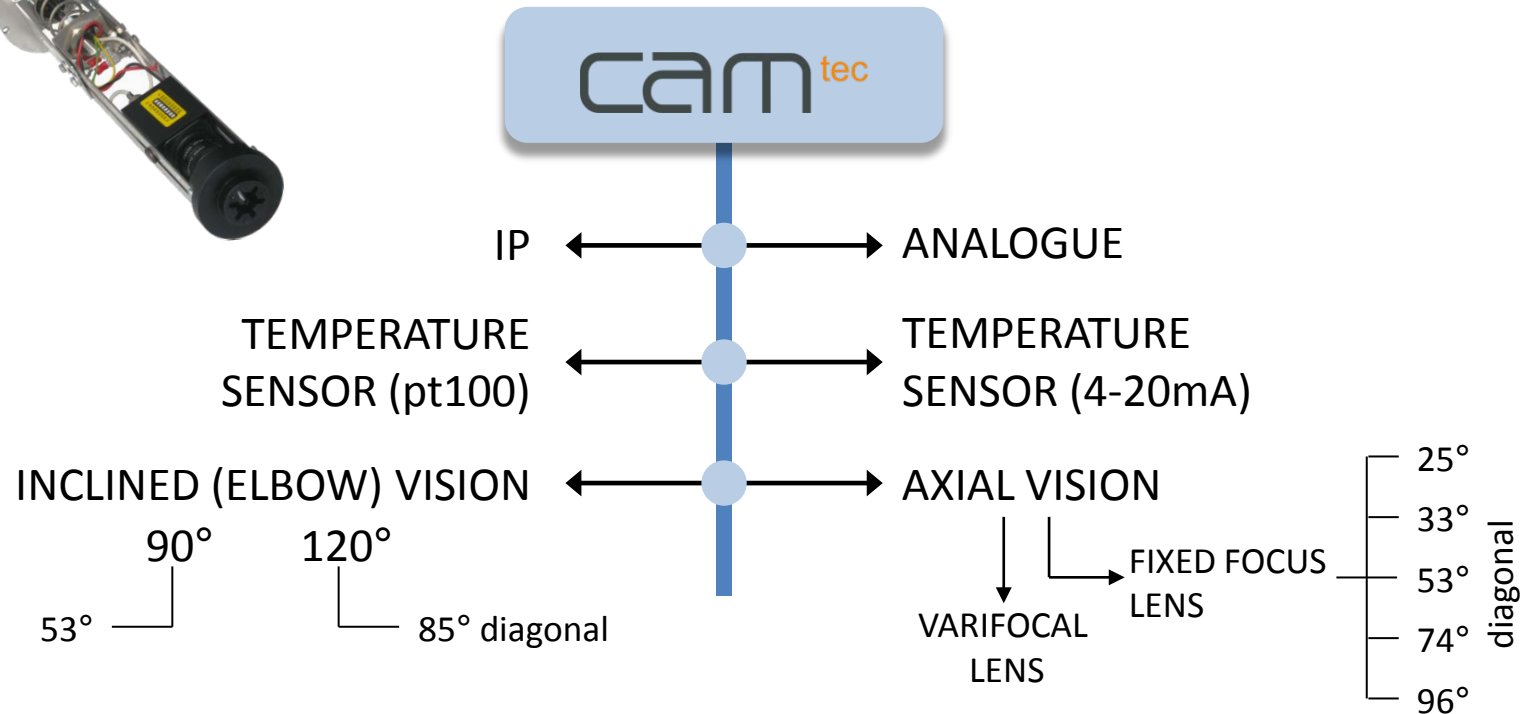
High temperature sapphire glass lens protection
For very dust environments
(melth shop)

CAMTEC: ACCESSORIES

Aware of the difficulties and of the critical urgencies that characterize industrial environments, the settings, operation and control of the cameras can be easily done from portable camera control unit (Up The Coax) using coaxial video cable, the same of video signal transmission.



CAMTEC: BASIC SYSTEM COMPONENTS CONFIGURATION



SONDATEC: MAIN FEATURES

- Water cooling circuit made with three jackets



sonda^{tec}

- Air pressurized for protection and lens cleaning

















- Housing made with different types of Stainless Steel



- Employment of industrial parts



STEELS CHARACTERISTICS

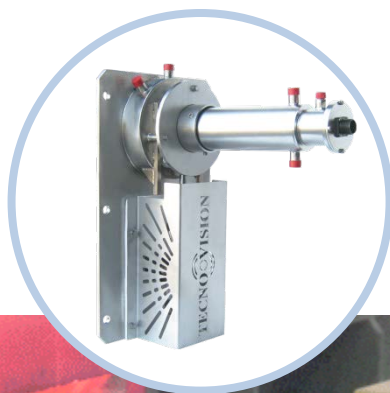
S/C	Costs	Oxygen corrosion	Acid corrosion	High temperature
AISI304				
AISI310				
AISI316				
HASTELLOY C276				

ON FURNACE /BOILER APPLICATION

FIXED INSIDE TYPE



EXTERNAL WALL MOUNTED

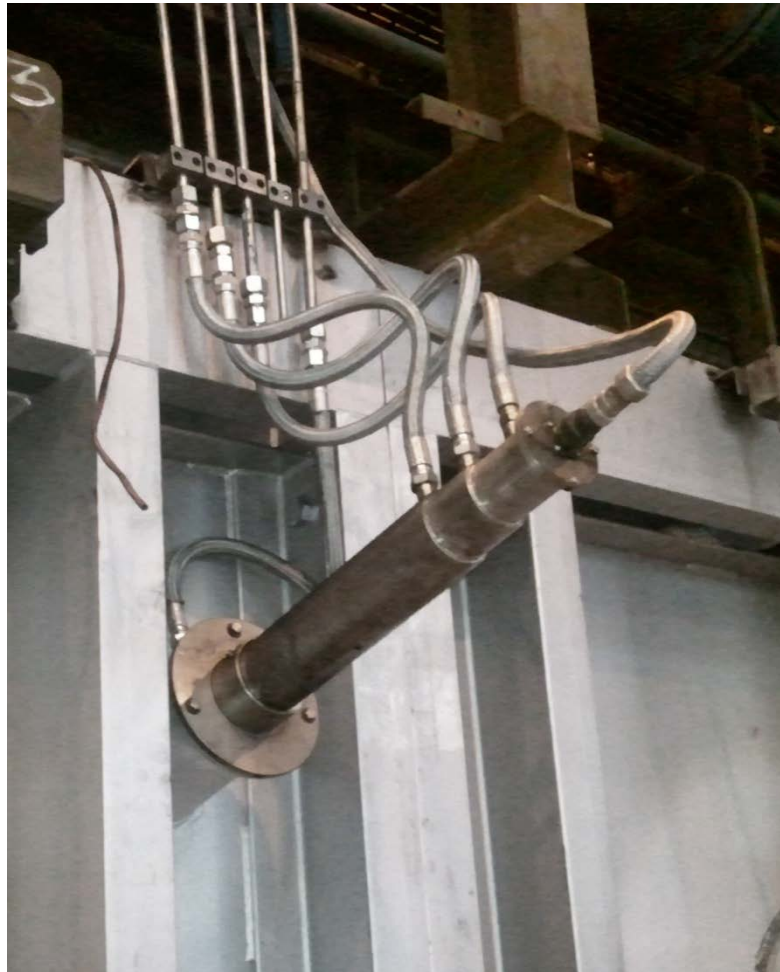


INSIDE TYPE WITH
RETRACTION DEVICE



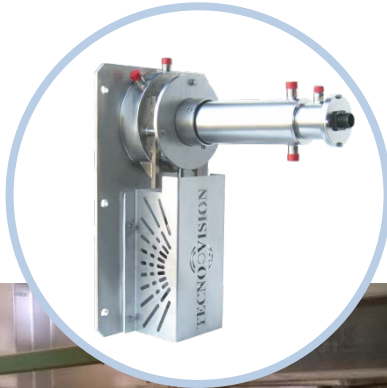
EXAMPLES OF INSTALLATION

FIXED INSIDE TYPE



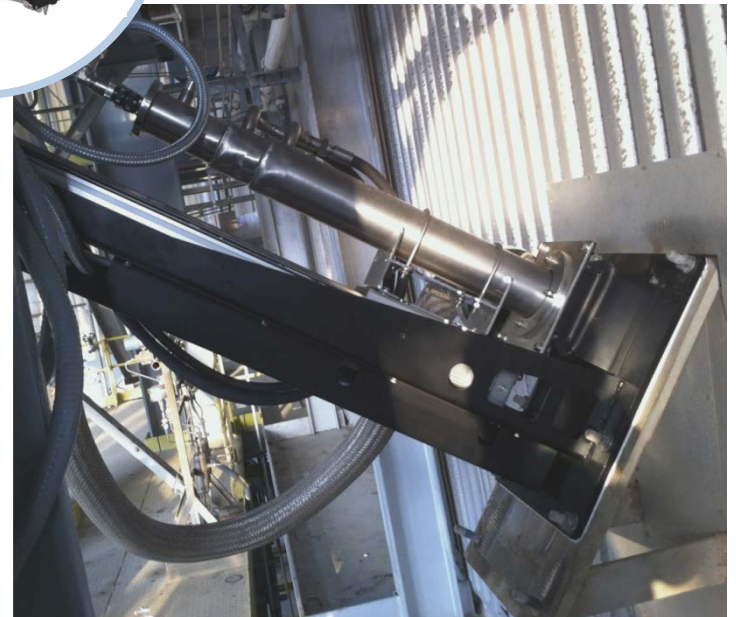
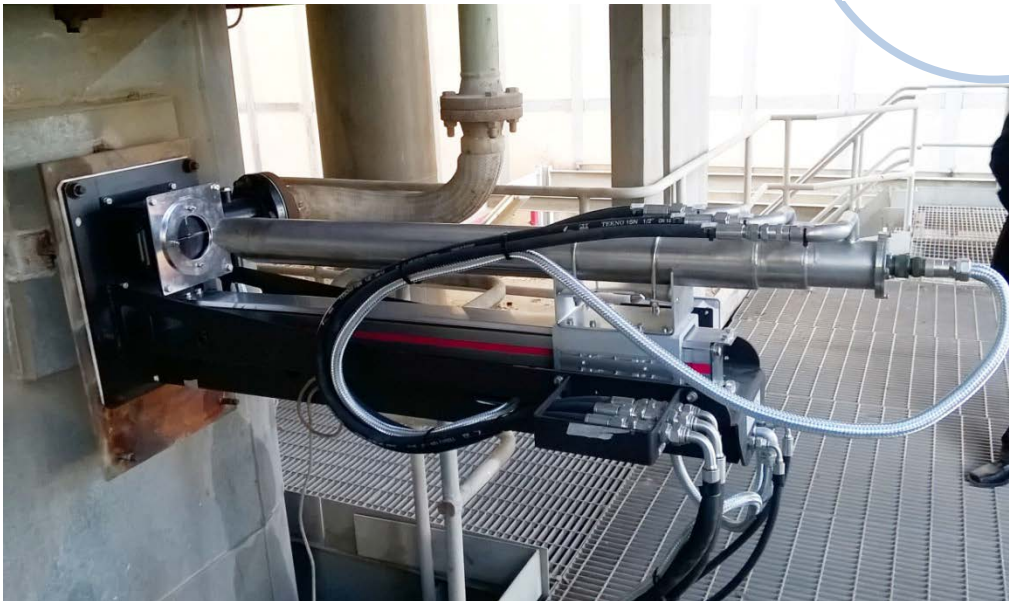
EXAMPLES OF INSTALLATION

EXTERNAL WALL MOUNTED

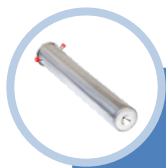



EXAMPLES OF INSTALLATION

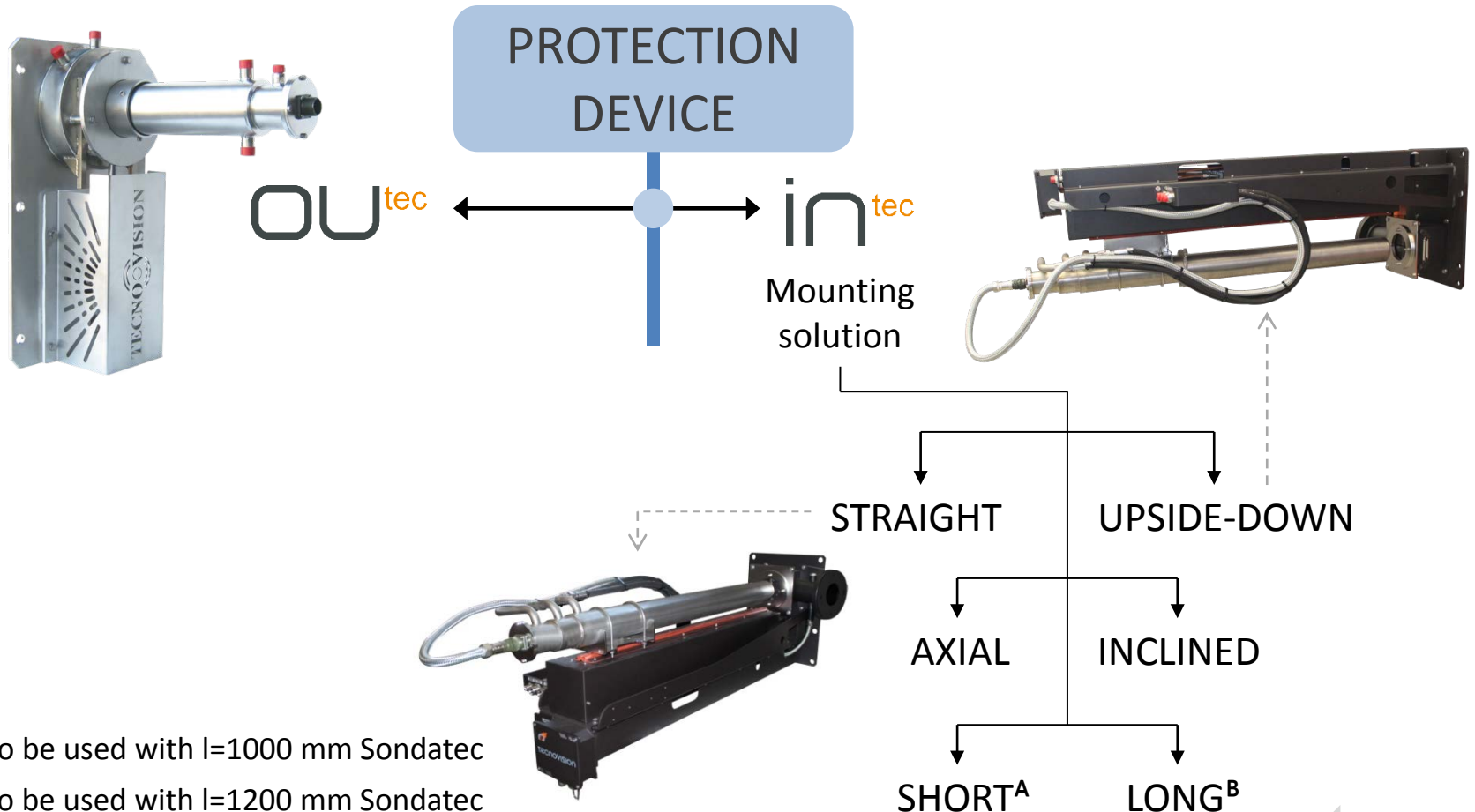
INSIDE TYPE WITH RETRACTION DEVICE



ADVANTAGES & DISADVANTAGES

	 FIXED INSIDE TYPE	 EXTERNAL WALL MOUNTED	 INSIDE TYPE WITH RETRACTION DEVICE
LOW COST	X		
SELF PROTECTED		X	X
AXIAL HOLE REQUIRED	X		X
WIDE ANGLE OF VIEW AVAILABLE	X		X
MORE EXPENSIVE			X
NOT PROTECTED	X		
CONICAL HOLE REQUIRED		X	

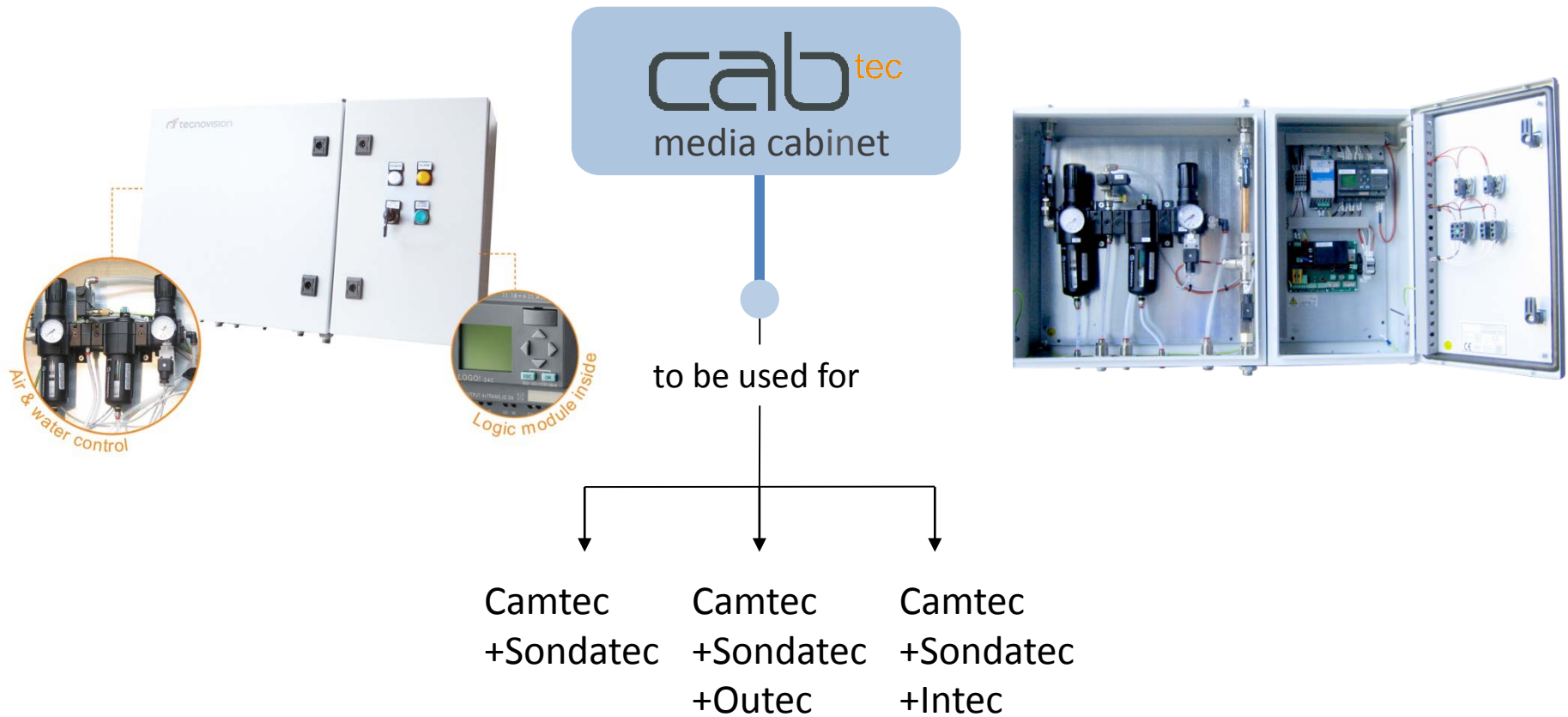
ADVANCED COMPONENTS



A: to be used with l=1000 mm Sondatec

B: to be used with l=1200 mm Sondatec

ADVANCED COMPONENTS



CODES TABLE OF CONTROL CABINETS

		cabtec																						
		PRESSURE REGULATOR WITH GAGE	DUAL PRESSURE REGULATOR WITH TWO GAGES	TWO STAGES AIR FILTER	AIR / N ₂ FLOW METER WITH FLOW REGULATOR	PRESSURE AIR SWITCH	2 WAY ELECTROVALVE	5 WAY ELECTROVALVE	H2O FLOW SWITCH (ON/OFF)	H2O FLOW SWITCH WITH VISIBLE LEVEL (ON/OFF)	H2O FLOW METER (WITHOUT DISPLAY)	H2O FLOW METER (WITH DISPLAY)	H2O THERMOSTAT	H2O TEMPERATURE SENSOR (PT100 / PT1000)	H2O TEMPERATURE SENSOR (4-20 mA)	CABINET HEATER	CAMERA TEMPERATURE SENSOR MANAGEMENT	INTEC OBLO [®] TEMPERATURE SENSOR MANAGEMENT	DIGITAL LOGIC MODULE WITH DISPLAY / ETHERNET	2 IN ANALOGUE EXPANSION MODULE	FURTHER 2 IN ANALOGUE EXPANSION MODULE	ADDITIONAL ALARM RELAY MODULE	OSD MODULE	
OUTEC	CAB11X100L		X	X		X	X		X				X						X					
	CAB11X100A		X	X		X	X		X					X			X		X	X				
	CAB11X100B		X	X		X	X		X					X			X		X	X		X	X	
	CAB11X101A		X	X		X	X				X			X			X		X	X				
	CAB11X101B		X	X		X	X				X			X			X		X	X		X	X	
	CAB11X101C		X	X		X	X					X		X			X		X	X		X	X	
	CAB11X101D		X	X		X	X				X			X			X		X	X		X		
	CAB11X102D		X	X		X	X		X					X			X		X	X		X		
	CAB11X102E		X	X		X	X		X					X					X	X				
	CAB11X103E		X	X		X	X		X						X									
CAB11X104E		X	X		X	X					2	2												
INTEC	CAB11X200L		X	X		X		X		X			X						X					
	CAB11X204A		X	X		X		X		X				X		X	X		X	X				
	CAB11X204D		X	X		X		X		X				X		X	X	X	X	X		X	X	
	CAB11X202A		X	X		X		X			X			X			X		X	X				
	CAB11X202B		X	X		X		X				X		X		X	X		X	X		X	X	
	CAB11X202C		X	X		X		X				X		X		X	X	X	X	X	X	X	X	
	CAB11X202D		X	X		X		X				X		X		X	X	X	X	X		X	X	
	CAB11X202E											X		X		X	X		X	X	X	X		
	CAB11X292G		X	X		X		X			X			X		X	X	X	X	X	X	X		
	CAB11X203A		X	X		X		X			X			X		X	X		X	X				
	CAB11X203D		X	X		X		X			X			X		X	X	X	X	X	X	X	X	
	CAB11X203L		X	X		X		X			X			X					X	X				
SONDATEC	CAB11X300B																X		X	X		X	X	
	CAB11X304A	X		X		X			X					X			X		X	X				
	CAB11X304B	X		X		X			X					X			X		X	X		X	X	
	CAB11X302B	X		X		X	X							X			X		X	X		X	X	
	CAB11X303E	X		X		X			X						X									
	CAB11X304B	X		X		X						X		X			X		X	X		X	X	
	CAB11X304E		X	X		2						X			X									
	CAB11X305F										2			2			X		2	X	X			
	CAB11X306A	X		X		X					X			X			X		X	X				
	CAB11X306B	X		X		X					X			X			X		X	X		X	X	
	CAB11X306E	X		X		X						X		X										
	CAB11X307A	X		X	X						X			X			X		X	X				
	CAB11X310E	X			X						X				X				X					
	CAB11X392G		X	X		2		X			2			2			X		X	X	X			

NEW PROJECTS UNDER DEVELOPMENT

sonda^{tec} S

- Lower diameter: 45mm only
- Water & Air cooled
- Suitable for mobile inspections
- Lightweight <8Kg

Q117

sonda^{tec} P

- Only Air cooled
- Lower diameter: 50mm only

Q217

sonda^{tec} G

- Only Air cooled
- Lower diameter: <30mm only
- Low cost solution for Glass market

Q317

"S" SERIES: BASIC SYSTEM COMPONENTS CONFIGURATION



"S" SERIES

- HD ready 1280x720p

cam^{tec} S



- 6mm air pressurized aperture

sonda^{tec} S



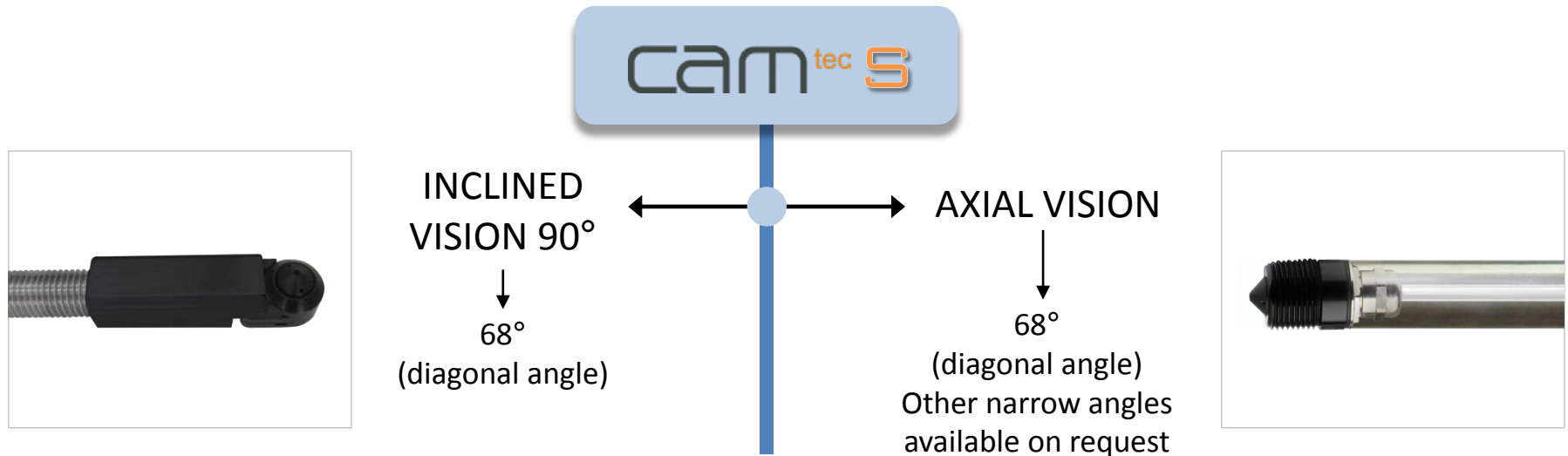
- Water cooling circuit made with three jackets

- Housing made of SS316L

- Easy fit all in one camera device



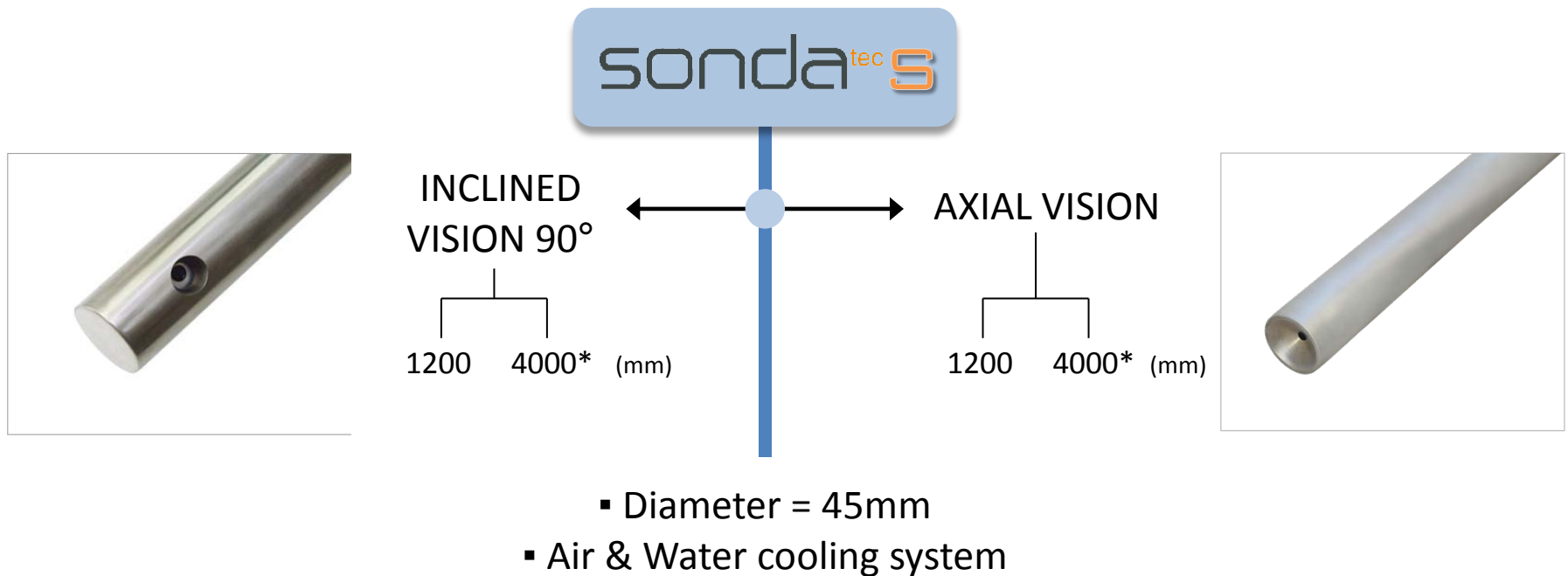
CAMTEC: "S" SERIES CONFIGURATION



- HD resolution IP camera
- Length = 1200mm (Other on request)
- Temperature Sensor (PT100)
- Requires main control unit supplied in separate JBX or Cabinet (CABTEC)



SONDATEC: "S" SERIES CONFIGURATION



"S" series has been developed for all applications that require a small entrance diameter. Thanks to this feature it is also ideal for mobile inspections.



AIRTEC: MAIN FEATURES



Air cooled pressurized housing

Usefull for Analogue camera, IP camera, Infrared camera

Up to 90°C

AIRTEC: BASIC SYSTEM COMPONENTS CONFIGURATION



- AIR COOLED + AIR BARRIER

- WINDOW:

Flat glass | Convex glass | Germanium | without window
 Ø30 mm | Ø55 mm

- POWER SUPPLY:

230Vac | 12Vdc/24Vac | PoE+ | Ø

L=300 mm ← → L=350 mm

AIRTEC: BASIC SYSTEM COMPONENTS CONFIGURATION

air^{tec}

0	8	X	A	B	C
			Length	Power Supply	Window
			3 = 300 mm	0 = 230Vac	0 = Flat Glass
			5 = 350 mm	2 = 12Vdc / 24Vac	1 = Convex Glass
				3 = PoE	3 = Germanium (30Ø usable)
				9 = Ø	5 = Germanium (55Ø usable)
					9 = without window

0 8 X A B C

ACQUATEC: MAIN FEATURES

acqua^{tec}



Air or Air&Water cooled pressurized housing

Usefull for Analogue or IP camera,
Infrared camera and various instrumentation

Up to 400°C



ACQUATEC: BASIC SYSTEM COMPONENTS CONFIGURATION



- OPERATING TEMPERATURE UP TO:

90° ┘ ┘ 400°

- COOLING:

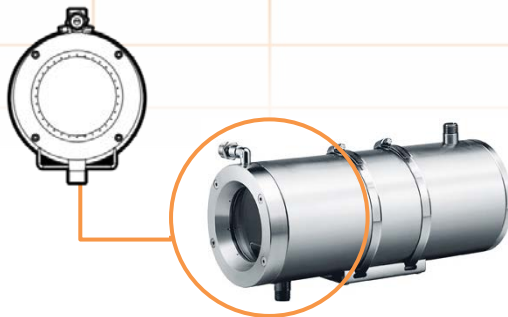
AIR + H2O | ONLY AIR | ONLY H2O | NO COOLING

MOVABLE GLASS ← ● → AIR BARRIER

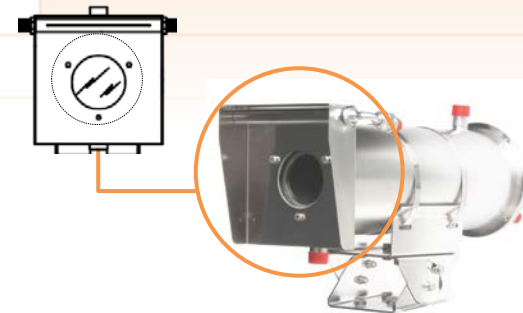
IP43 ← ● → IP66

ACQUATEC: BENCHMARK

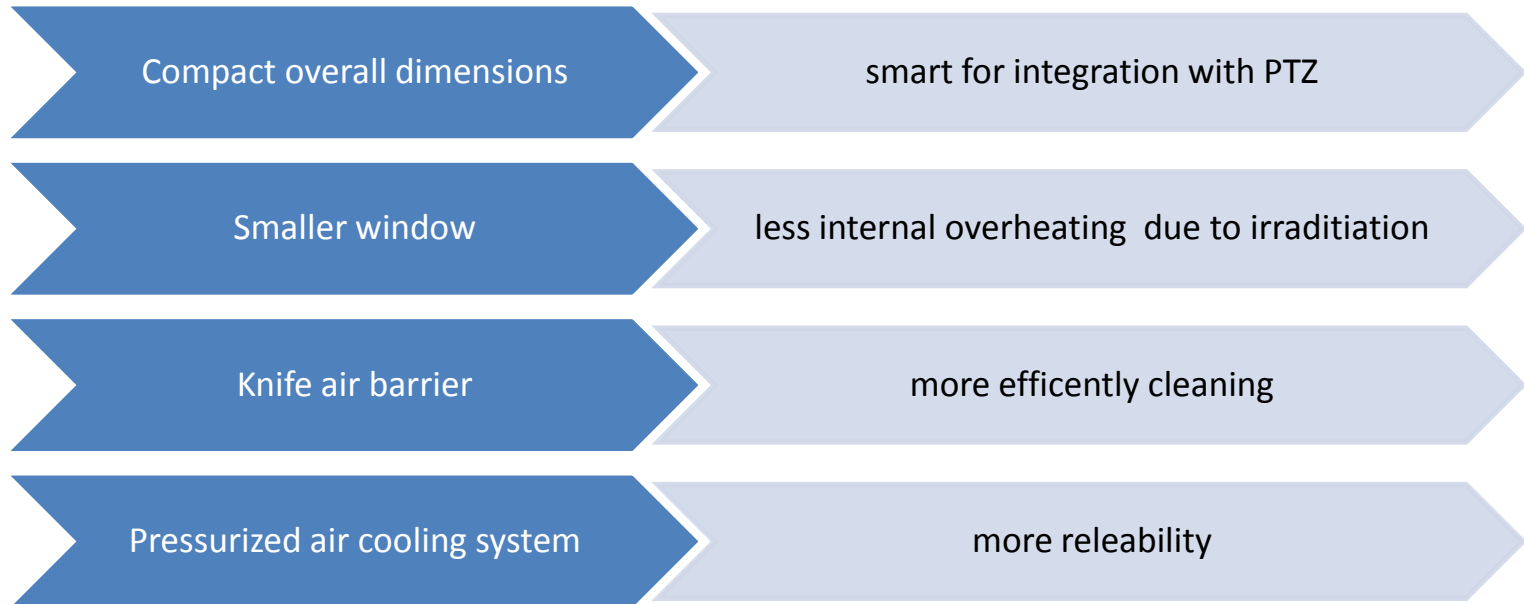
Compare products	Competitors			
	Videotec	Tecnosystem	Global proof	TELEA TECNOVISION
External Ø	164 mm	168 mm	168 mm	129 mm
Window Ø	95 mm	97 mm	97 mm	55 mm
Air pressurized	No	No	No	Yes
Window Cleaning	Holes	Holes	Holes	Knife Air



Example of similar product



ACQUATEC: ADVANTAGES



PRE-SALE ENGINEERING ASSISTANCE

- Support on wall & refractory preparing activity
- Sketch of mounting system
- Locating camera on furnace

