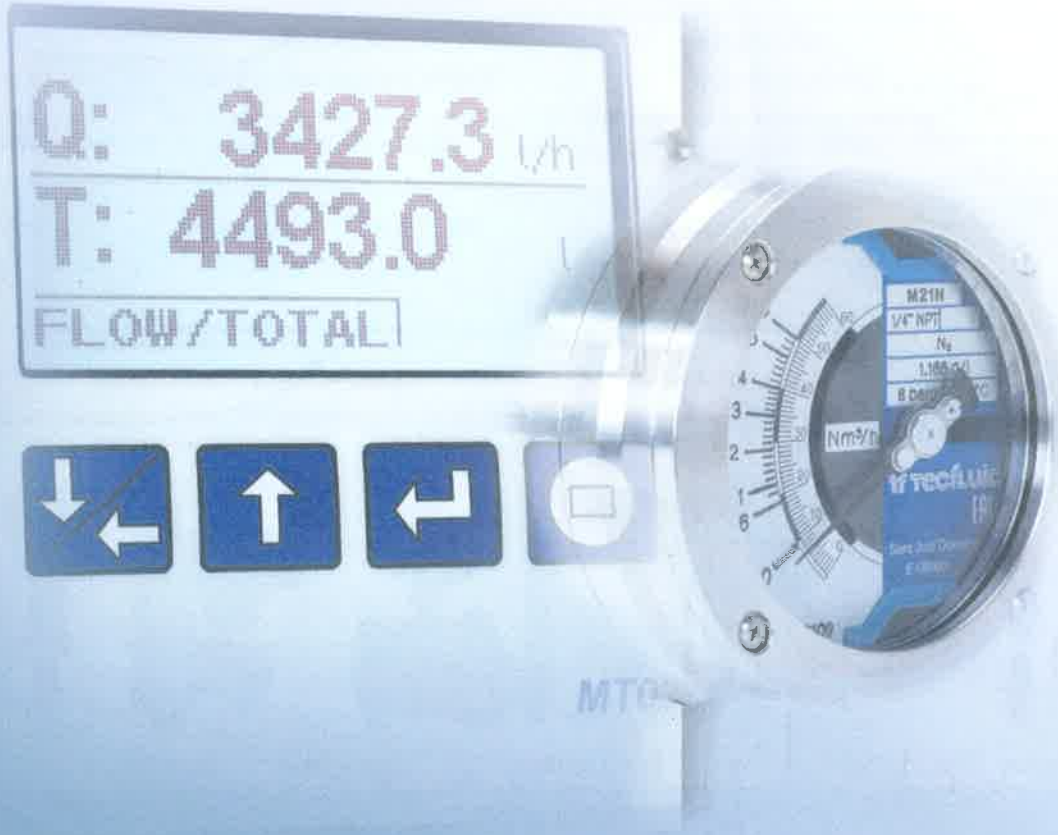
TECFLUID

the art of measuring



flow&levelindustrial**instrumentation**

IEC IECEx Ex LRQA CERTIFIED ISO 9001 HART COMMUNICATION PROTOCOL Modbus Lloyd's Register EAC

FOR UNDERSTANDING THE WORLD WE NEED INSTRUMENTS TO MEASURE

MANUFACTURING CHRONOLOGY

1974	Borosilicate glass tube variable area flowmeters
1976	Magnetic coupling flowmeters
	Metal tube variable area flowmeters
	Target disk flowmeters
1978	Oscillating piston flowmeters
	Turbine flowmeters
1979	Level indicators and switches activated by magnetic coupling
1980	By-pass flowmeters (orifice plate)
1984	Electronic converters
1987	Flow switches
1990	Electromagnetic flowmeters
1992	Plastic tube variable area flowmeters
1997	Vibrating fork level switches
2001	ATEX and Lloyd's Type Approval Certifications
2003	HART® communication protocol
2006	Ultrasonic level transmitters
2010	Guided radar level transmitters
2015	New line of electronic converters
	TR CU Certificate of conformity
2018	IECEx Certification
2022	UK CA Certification
2024	Calorimetric flowmeters and switches

In 1974, the company we know as TECFLUID emerged from the hand of its founder Jordi Picazo.

Jordi's vision, his conviction and knowledge of both the industrial world and the product itself, and the fact that manufacturing in our country brought numerous benefits, pushed him to want to supply his own equipment for flow measurement.

TECFLUID began its activity as a manufacturer with the series of glass tube variable area flowmeters (series 6000), continuing with the SC250 and DP series of magnetic coupling flowmeters, until reaching the current range, which goes from purely mechanical products to equipment with high added value that incorporates advanced and reliable process electronics.

Jordi's way of working, his passion for his work and his seriousness in dealing with clients are factors that are present in each of the people who make up TECFLUID and its current partners.

My sister Marta and I, her daughters, knowledgeable about both the product and the roots of TECFLUID, continue to move forward with the same conviction that a job well done and the commitment to the customer are essential guidelines for success.

On behalf of the entire TECFLUID team, we thank you for continuing to trust our brand after 50 years.

Eva Picazo - *CEO*

"Common sense has solved my problems better than my own knowledge. Just think..."

Jordi Picazo, Founder of Tecfluid S.A. (1944-2023)

	Series PS **Plastic tube variable area flowmeters**	Series 2000 **Glass tube variable area flowmeters for low flows**	Series 6000 **Glass tube variable area flowmeters**
			
Sizes	1/2" ... 3"	1/4" ... 3/4"	1/2" ... 3"
Flow range H_2O	4 l/h ... 50 m³/h	0.1 l/h ... 1000 l/h	2.5 l/h ... 50 m³/h
Flow range AIR	200 Nl/h ... 1500 Nm³/h	0.5 Nl/h ... 30 Nm³/h	40 Nl/h ... 1500 Nm³/h
Accuracy	4% ... 6% (q_G=50%)	1.6% ... 3.5% (q_G=50%)	1.6% (q_G=50%)
Materials	Flow tube: Polysulfone (PSU) or NAS® Connections: PVC, PP, painted steel, EN 1.4404 (AISI 316L)	Flow tube: borosilicate glass Connections: EN 1.4404 (AISI 316L)	Flow tube: borosilicate glass Connections: painted steel, EN 1.4404 (AISI 316L), PVC, PP, PTFE, PVDF
Features *Accessories* *Options*	1 or 2 switches 4-20 mA output (max. resolution 18 points) Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request	1 or 2 switches Regulating valve Constant flow regulator	1 or 2 switches 4-20 mA output (max. resolution 18 points) Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request

	Series 60M1 **Glass tube variable area flowmeters for low flows**	Series PR **Orifice plate flowmeters**	Series AD / VH **Flow switches and indicators**
			
Sizes	1/4" or 1/2"	DN50 ... DN1000	AD: 1/4" ... 2 1/2" / VH: DN32 ... DN500
Flow range H_2O	0.1 l/h ... 100 l/h	2 m³/h ... 20000 m³/h	AD: 15 l/h ... 16000 l/h
Flow range AIR	0.5 Nl/h ... 3600 Nl/h	30 Nm³/h ... 300000 Nm³/h	AD: 300 Nl/h ... 130 Nm³/h
Accuracy	3% (q_G=50%)	±4% f.s.	AD: ±5% f.s.
Materials	Flow tube: borosilicate glass Connections: EN 1.4404 (AISI 316L)	Plastic coated steel, PVC, PP, EN 1.4404 (AISI 316L)	AD: brass, EN 1.4404 (AISI 316L), aluminium VH: EN 1.4404 (AISI 316L), PTFE
Features *Accessories* *Options*		1 or 2 switches 4-20 mA output Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request depending on the transmitter model	VH: insertion switch (1"). Non-adjustable switching position AD: up to 4 switches depending on model 4-20 mA output for models ADI Ex version and HART® or MODBUS RTU RS485 protocols on request

	Series M21 Metal tube variable area flowmeters for low flows	Series SC250 Metal tube variable area flowmeters	Series DP Target disk flowmeters
			
Sizes	1/4" ... 3/4"	DN15 ... DN150	DN40 ... DN500
Flow range H_2O	0.4 l/h ... 1000 l/h	2.5 l/h ... 180 m³/h	0.8 m³/h ... 1600 m³/h
Flow range AIR	12 Nl/h ... 30 Nm³/h	70 Nl/h ... 5500 Nm³/h	45 Nm³/h ... 24000 Nm³/h
Accuracy	4% (q_G=50%)	2.5% (q_G=50%)	DP65: ±2.5% f.s. / DP500: ±4% f.s.
Materials	EN 1.4404 (AISI 316L), Titanium, Hastelloy C	EN 1.4404 (AISI 316L), PVC, PP, PTFE, Titanium, Hastelloy C	Painted steel, EN 1.4404 (AISI 316L), Hastelloy C
Features *Accessories* *Options*	1 or 2 switches 4-20 mA output Ex version and HART® or MODBUS RTU RS485 protocols on request Regulating valve Constant flow regulator AISI 316L housing optional	1 or 2 switches 4-20 mA and digital outputs, totalizer Ex version and HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable AISI 316L or PP housing optional Accuracy 1.6% (q_G=50%)	1 or 2 switches 4-20 mA and digital outputs, totalizer Ex version and HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable AISI 316L or PP housing optional Accuracy DP65 ±1.6% f.s.

	Series CTR Calorimetric flowmeters and switches	Series FLOMID Electromagnetic flowmeters	Series FLOMAT Insertion electromagnetic flowmeters
			
Sizes	1/4" ... 3/4"	DN3 ... DN500	DN40 ... DN2000
Flow range H_2O	-	5 l/h ... 7060 m³/h	900 l/h ... 113000 m³/h
Flow range AIR	up to 170 m³/h	-	-
Accuracy	pending of confirmation	±0.5% measured value	±3.5% measured value
Materials	Sensor: Ceramics Body: EN 1.4404 (AISI 316L)	Lining: PP, PVDF, Ebonite, PTFE Electrodes: Hastelloy C, EN 1.4404 (AISI 316L), Titanium, Tantalum	Sensor: EN 1.4404 (AISI 316L), PVDF Head: PVDF Electrodes: EN 1.4404 (AISI 316L). Others on request
Features *Accessories* *Options*	CTR: Flow indication, totalizer 4-20 mA and digital outputs CTD: Digital output MODBUS RTU RS485 protocol on request Programmable by means of PC & USB cable Digital display on request for CTR models	Flow indication, totalizer 4-20 mA and pulse outputs 2 alarm outputs HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable	Flow indication, totalizer 4-20 mA and pulse outputs 2 alarm outputs HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable FLOMAT-TAP for maintenance purposes without flow interruptions

	Series TM Turbine flowmeters	Series COVOL Oscillating piston flowmeters	Series CIP / CP / MT / DFD420 Displays and converters
			
Sizes	DN15 ... DN150	DN10 ... DN100	Associated to series COVOL, TM and others
Flow range H_2O	400 l/h ... 650 m³/h	25 l/h ... 60 m³/h	-
Flow range AIR	-	-	-
Accuracy	±0.5% measured value	±0.8% measured value	Depending on associated converter
Materials	Body: EN 1.4404 (AISI 316L) Propeller: EN 1.4460 (AISI 329), EN 1.4016 (AISI 430) Shaft / bearing: tungstene carbide / graphite	Body: EN 1.4404 (AISI 316L), PVC, PP, PTFE Piston: PTFE-graphite, PVDF, bronze, aluminium	-
Features *Accessories* *Options*	Pick-up coil output Displays and converters: CIP, CP, MT03 and DFD420 HART® or MODBUS RTU RS485 protocols on request Ex d IIC T6 version on request	Viscosity up to 120000 mPa·s Reed switch output Displays and converters: CIP, CP, MT03 and DFD420 HART® or MODBUS RTU RS485 protocols on request Ex d IIC T6 version on request	CIPII: non-resettable totalizer and resettable partial counter CP420: flow indication, totalizer, 4-20 mA output. HART® protocol for models CH420 MT03/MT04: flow indication, totalizer, 4-20 mA and pulse outputs and 2 x relay outputs. MODBUS RTU RS485 protocol on request DFD420: pulse divider with opto-isolated and 4-20 mA outputs

	Series LT / LS Level indicators, transmitters and switches	Series LP Level indicators, transmitters and switches	Series NPC Level indicators
			
Measuring range	0.15 ... 15 m	0.3 ... 6 m	Up to 15 m
Accuracy	±10 mm	±5 mm mesured value	±10 mm
Materials	LT: EN 1.4404 (AISI 316L), PVC, PP, PTFE, PVDF LS: EN 1.4404 (AISI 316L)	Body: EN 1.4404 (AISI 316L), Hastelloy C, Titanium Float: EN 1.4404 (AISI 316L), PVC, PP, PVDF, Hastelloy C, Titanium	Pulleys and counterweight (external indicator): PVC Float: PP, PVC, PVDF, EN 1.4404 (AISI 316L)
Features *Accessories* *Options*	LT: Side mounted LS: Top mounted Adjustable switches. Ex d IIC T6 version optional for LT series 4-20 mA output (plastic housing, aluminium optional) Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request	Side or top mounted 1 or 2 switches 4-20 mA and digital outputs Ex version and HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable AISI 316L or PP housing optional	Adjustable switches 4-20 mA output (plastic housing, aluminium optional) Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request

	Series LTDR Guided radar TDR level transmitters	Series LU Ultrasonic level transmitters	Series LR Radar level transmitters
			
Measuring range	Single rod probe: 100 ... 3000 mm Coaxial probe: 100 ... 6000 mm Rope probe: 1 ... 20 m	Liquids: up to 12 m Solids: up to 7 m	Up to 15 m
Accuracy	±3 mm	±2 mm (between 0.35 ... 2 m)	C11: ±5 mm ; C21: ±2 mm
Materials	EN 1.4404 (AISI 316L) PTFE coating on request	Body: PP, PVDF Transducer: PVDF Housing: polycarbonate, aluminium	Body: PVDF Seal: FKM (VITON®) Cable: isolated with PVC or PUR
Features *Accessories* *Options*	Top or side mounted Suitable for liquids and solids 4-20 mA output, 1 alarm output Ex version and extended temperatura range version on request MODBUS RTU RS485 protocol on request	Top mounted Suitable for liquids and solids Level indication (display optional) 4-20 mA output, 2 alarm outputs HART® or MODBUS RTU RS485 protocols on request Programmable by means of PC & USB cable	Top mounted Suitable for liquids and solids 4-20 mA output HART® or MODBUS RTU RS485 protocols on request Programmable by means of Bluetooth or dedicated software

	Series LC / LE Float level switches and transmitters	Series LC40 Float level switches	Series LD Vibrating fork level switches
			
Measuring range	0.3 ... 6 m	Switching differential: 52 ... 1100 mm	Detection length: up to 2 m
Accuracy	±10 mm	-	Hysteresis ±2 mm (with H_2O)
Materials	Body and float: EN 1.4404 (AISI 316L), PVC, PP, PTFE, PVDF Housing: polycarbonate, aluminium	Body and float: EN 1.4404 (AISI 316L), PVC, PP, PTFE, PVDF Housing: aluminium, PVC, AISI 316L	EN 1.4404 (AISI 316L) HALAR® coating on request
Features *Accessories* *Options*	Top mounted. Side mounted with special design LC: 1 ... 6 switches depending on model. Ex version LE: 4-20 mA output, Ex version and HART®, Profibus, Fieldbus or MODBUS RTU RS485 protocols on request	Side or top mounted Alarm switches: micro-switch (AMM), reed (AMR), pneumatic (AMP), inductive (AMD) Ex d IIC T6 version on request	Side or top mounted Suitable for liquids (model LD61) and for solids (model LD60) NAMUR Exi version and relay output on request

For more detailed information please refer to specific product catalogue

Flow rig for sizes
DN3 ... DN500

Manufacturing of tapered
borosilicate glass tubes

Production facilities including fully automatic machining with
±0.001 mm accuracy, welding center and electronics manufacture

Subsidiary
Tecfluid France S.A.R.L.
Paris

Main offices and production facilities
Sant Just Desvern (Barcelona)

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