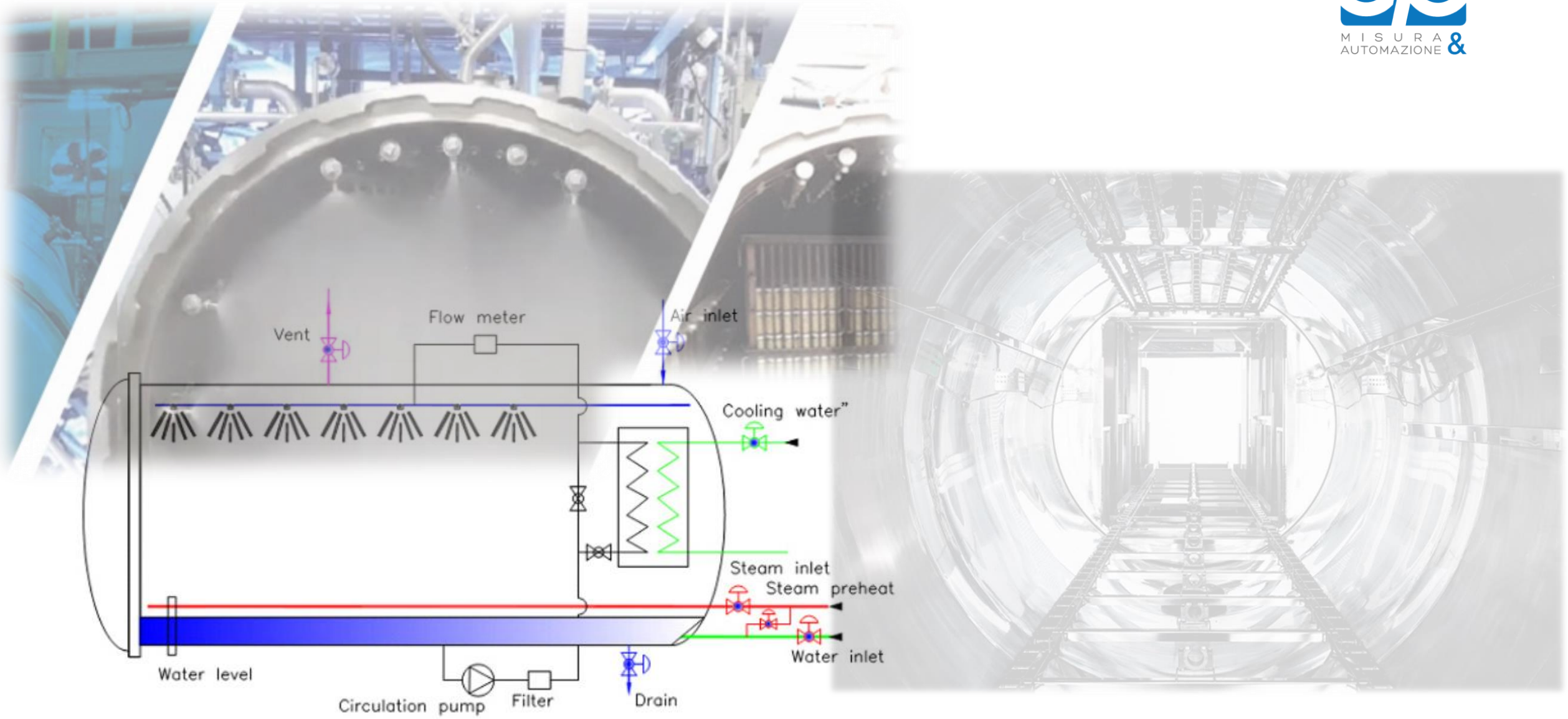
# Presentazione Sensori e Strumenti per Autoclavi

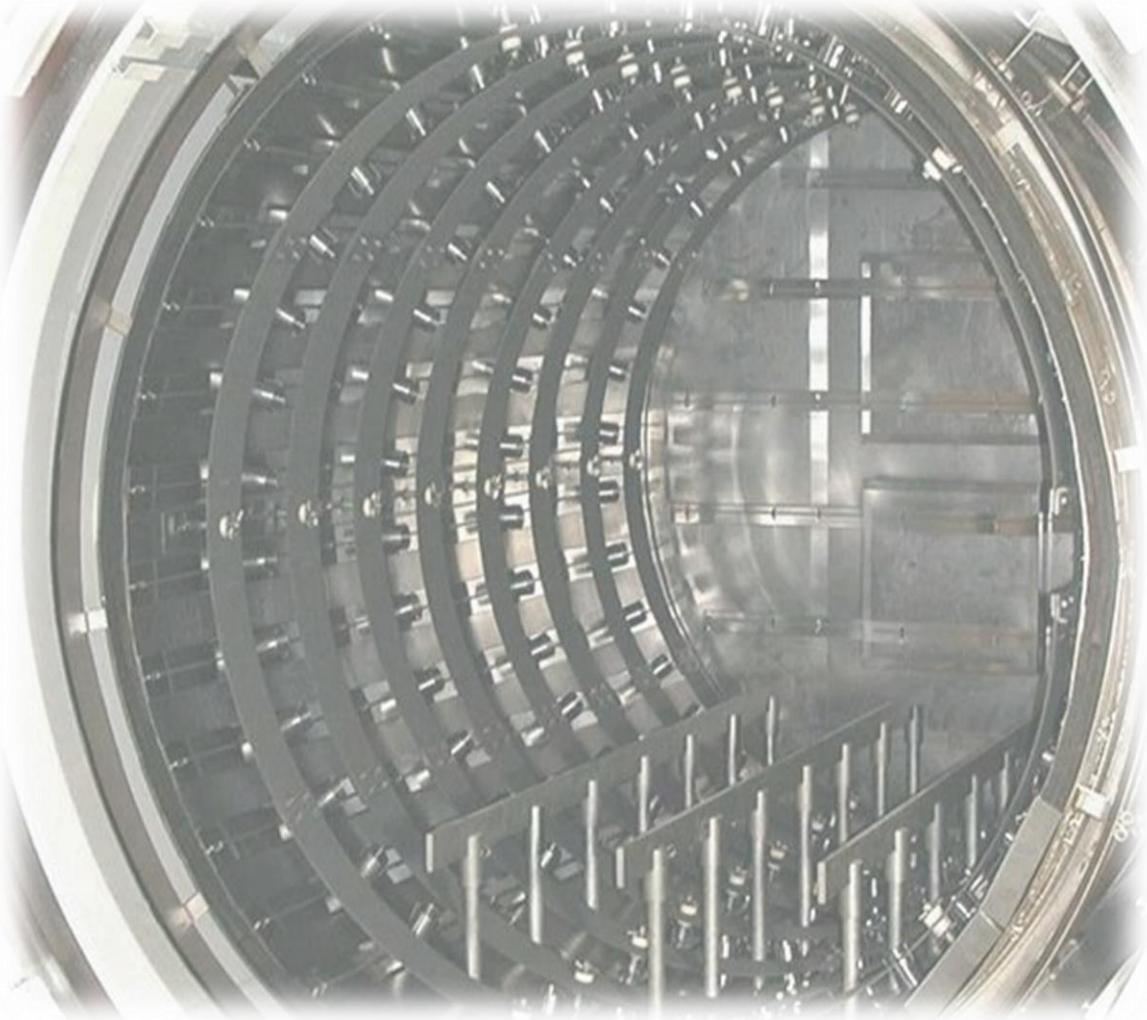
1991-2021 30 ANNI

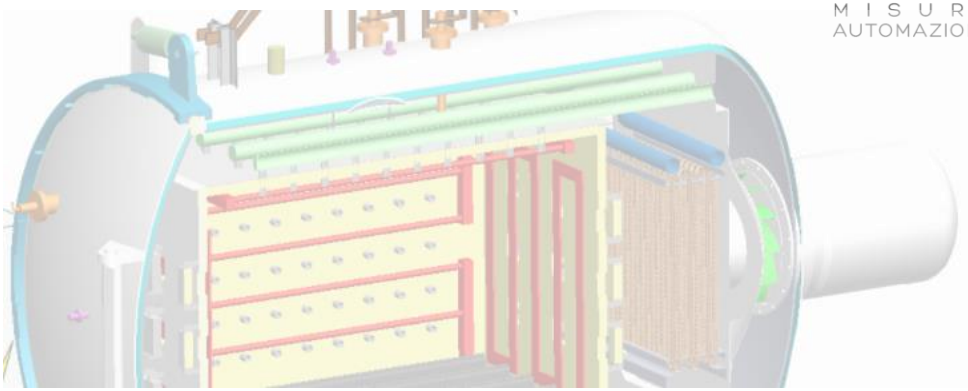
MISURA & AUTOMAZIONE

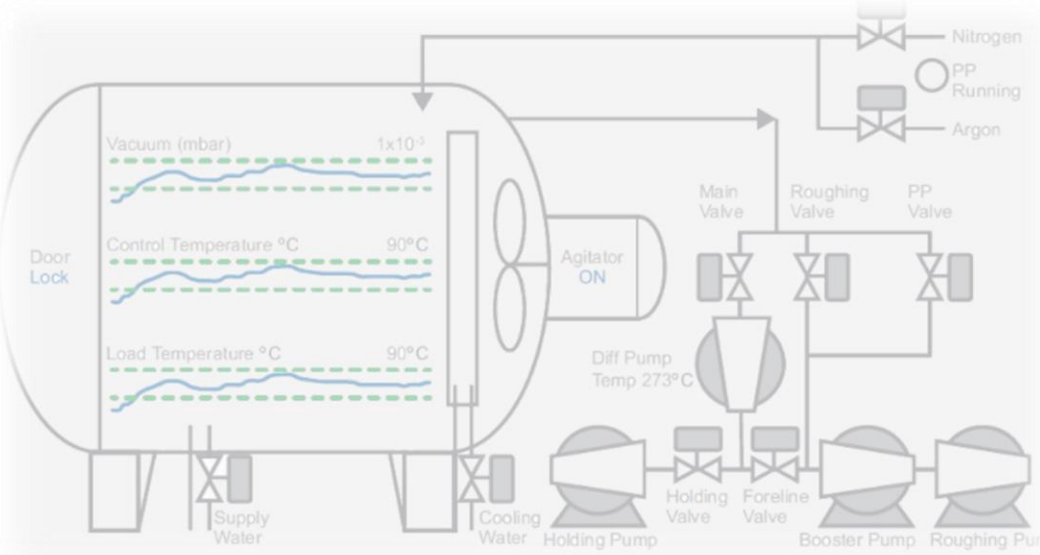
# Autoclavi - Pastorizzazione e Sterilizzazione



# Autoclavi - Forni Ad Alto Vuoto







# Trasmettitori di Pressione

Druck
a Baker Hughes business

**UNIK5000**
**Chamber Pressure Transmitter**
70mBar A/G  up to 700 Bar & 0.04%FS Accuracy
up to 125 °C  temperature compensation

Druck
ADROIT6200

**ADROIT 6200**
**High precision PressureTransmitter**
Digitally Temperature Compensated
Up to 125 °C-  Total Error Band  0.2%FS
Pressure range 200mBar up to 350 Bar

FISCHER
MESS- UND REGELTECHNIK

**FISCHER DE58 Tank Level**
Differential Pressure Transmitter
Static pressure 16 Bar
minimum pressure range 160mbar

FISCHER
MESS- UND REGELTECHNIK

**FISCHER DE40 Water Filter**
Differential Pressure Transmitter

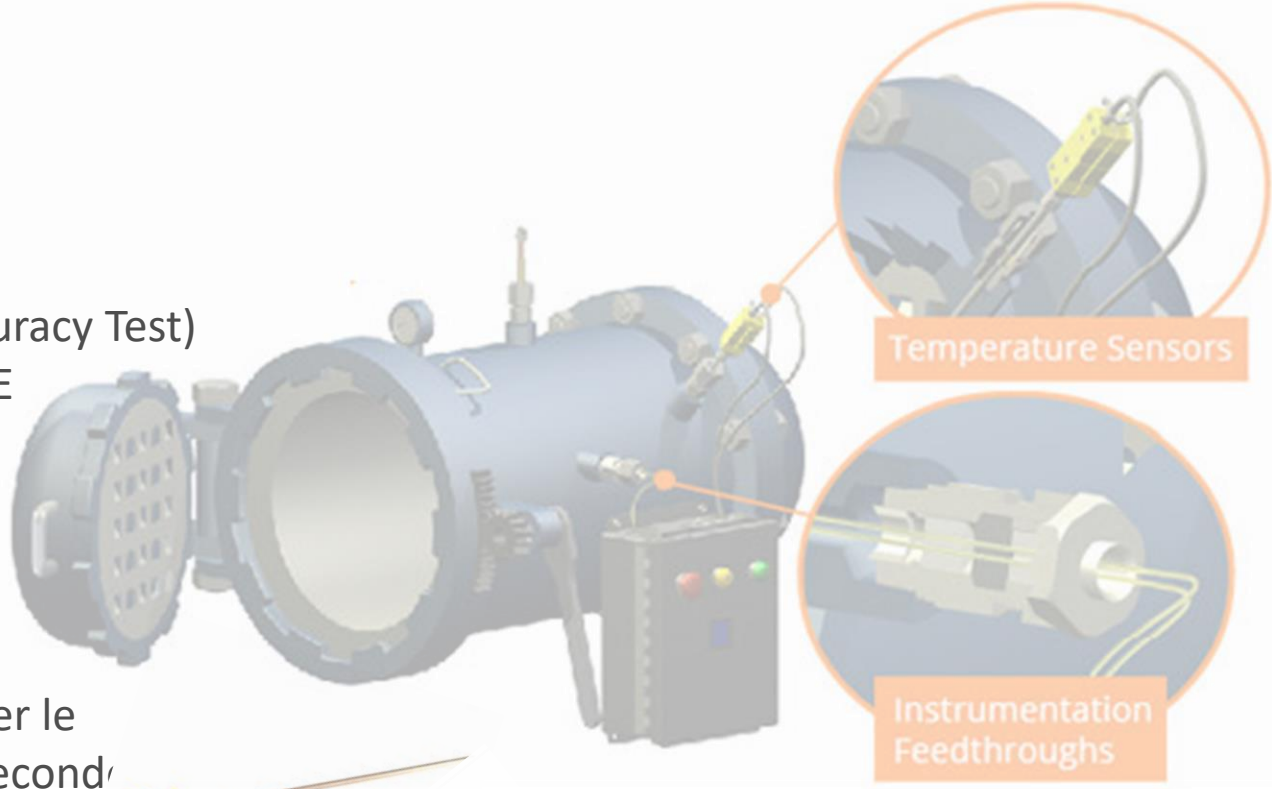
# Sensori di temperatura

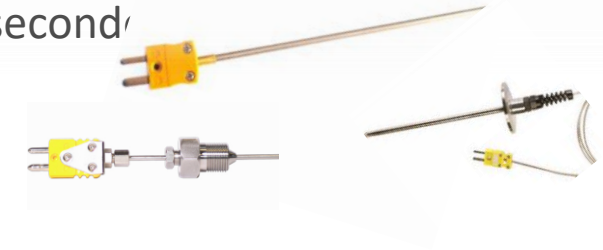
*Termocoppie J , K,  N , S ,R ,B  -Termoresistenze*

- Applicazioni **Alto Vuoto**

- con tubo di ispezione per prove **SAT** (System Accuracy Test) idonea per verifiche NADCAP CQI-9 e AMS 2750 E

- flessibili ad isolamento minerale (MgO) idonea per le verifiche **TUS (**Temperature Uniformity Survey) second le prescrizioni NADCAP, CQI-9 e AMS 2750 E



# Misuratori  Aria e Gas

***(Riempimento in Camera Azoto / Aria -  Argon )***

- Thermal Mass Flowmeter
- Multi Gas/Multi Range gases embedded gas data for 100 unique gases
- Mixture of 5 Gas
- Lowest range 0,014...0,7 mln/min
- Highest range 2...100 ln/min
- Accuracy (incl. linearity)standard: ±0,5% Rd plus ±0,1% FS
- Shut off valve and integrated pressure sensor
- 500 ms response
- Local Display
- 4/20mA or 0-10V  Analog output
- Field Bus : *Modbus RTU/ASCII, FLOW-BUS, EtherCAT®, PROFINET, Modbus/TCP, EtherNet/IP* ,PROFIBUS DP,

Eurotherm
by Schneider Electric

# Registratori e Regolatori di Temperatura

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**Registrazione FDA CFR21 Part 11**

FDA 21 CFR Part 11

AMS2750

- ❑ Display touchscreen a colori
- ❑ Versione Cieca oppure Remota
- ❑ Velocita' Registrazione / Trend Speed 8Hz
- ❑ Fino a 48 canali di ingresso universali
- ❑ Funzionalità batch, totalizzatori,pacchetti matematici
- ❑ Reports /Gruppi
- ❑ EtherNet/IP Server, Modbus TCP/RTU Master & Slave
- ❑ Schede I/O modulari
- ❑ Audit trail completo

- ❑ **Regolazione Doppio Loop  indipendente o cascata**
- ❑ Programmatore : 100 programmi /25 Spezzate
- ❑ Algoritmi User wired
- ❑ Cyber security Certified

Eurotherm
by Schneider Electric

# Registratore portatile Temperatura - TUS

*Temperature Uniformity Survey*

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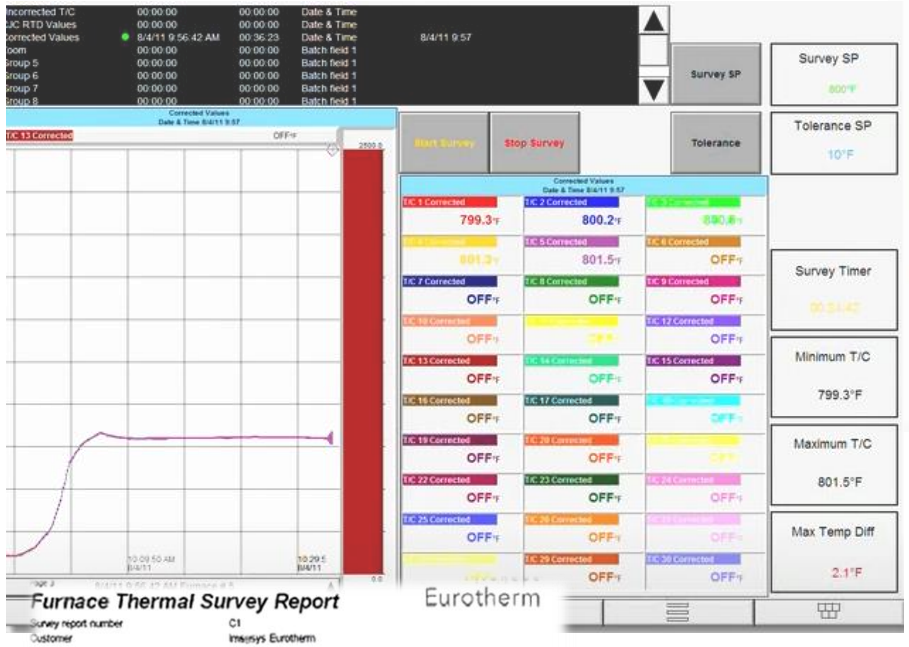
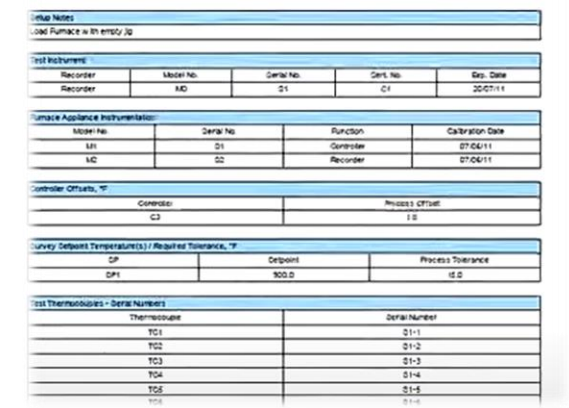
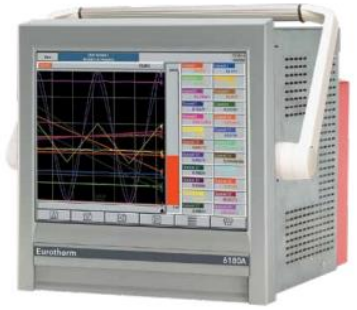




- Portable TUS Recorder 15 Channels
- 5.5" ¼VGA Touch screen
- Thermocouple (J, K, N, R, S, T etc)
- 125 ms Sampling
- AMS2750E
- Audit Trail for 21 CFR Part 11 and Nadcap applications
- Max error of +/-0.5ºF
- Multiple configurations offline and load them locally via USB or remotely over Ethernet.

# Strumentazione di Calibrazione

**Calibratori di pressione Multifunzione**
**Druck  DPI620G**

Generazione ed Acquisizione

- ❑ Segnali elettrici mV/mA/V/Freq
- ❑ Termocoppie/Termoresistenze /Ohm
- ❑ Pressione  da 25mBar a 1000 Bar
- ❑ Leak Test
- ❑ Switch/prove contatto
- ❑ Burst test
- ❑ Datalogging
- ❑ Funzione Analisi
- ❑ Software 4Sight2 compatibile

# Strumentazione di Calibrazione

**Soluzioni Custom EP di Calibrazione**

- ❑ Controllori automatici da campo di pressione
- ❑ Sonde di umidita’ /Temperatura
- ❑ Kit per la taratura Manometri  con pompa Druck

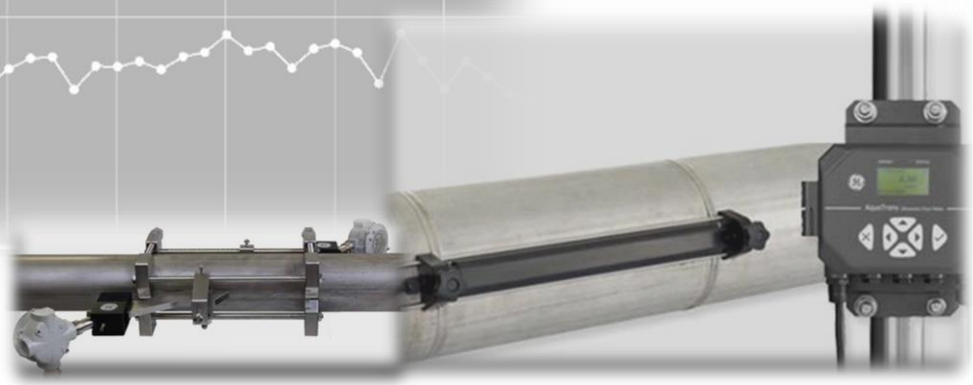
# Fornetti Termostatici

## Fornetti Termostatici Druck

- Fornetto a secco termostatico -35 /+165 °C
- Fornetto a secco 650°C
- Fornetto modalita’ ibrido (secco e bagno ) 255°C

- Accuracy 0.1°C e Stability 0.05°C
- Taratura pirometri ottici ( corpo nero)
- Dimensione e numero dei fori a scelta

# Misuratori di portata acqua Clamp On portatile



**Misuratori di portata acqua Clamp-On ad ultrasuoni Panametrics PT900 / AT600**

- ❑ Diametri del tubo da 15 mm a 600mm
- ❑ Accuracy 2% reading
- ❑ Ripetibilita’ 0.2% reading
- ❑ Tecnologia Bluetooth portatile
- ❑ Opzione di misura fissa
- ❑ Velocity, Volume, Mass, Energy, Total Flow
- ❑ Datalogging
- ❑ 1 o 2 Channel
- ❑ Modbus/Usb /Digital I/O / Analog output

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