







HEADQUARTER and MAIN MANUFACTURING
PLANTS - AFT1 and AFT2



HEAT TREATMENTS AND THERMAL DEBURRING

SATELLITE MANUFACTURING PLANTS







SUBSIDIARIES



United Kingdom, Nederland, France, South Corea, Japan, China

LOCAL SALES, TECHNICAL SUPPORT AND STOCK



COMPANIES LOCATION - MANUFACTURING PLANTS



Group of more than 300 people and 5 plants of 4500+2500 sq meters (AFT), 1700 (TT), 1700 (Cartech), 1500 (Simal) and 3500 (CTB)



COMPANIES LOCATION - SUBSIDIARY COMPANIES



Manufacturing Plants (Atlantic Fluid Tech, Cartech, Turning Tech, Simal, CTB)



COMPANIES LOCATION - DISTRIBUTORS

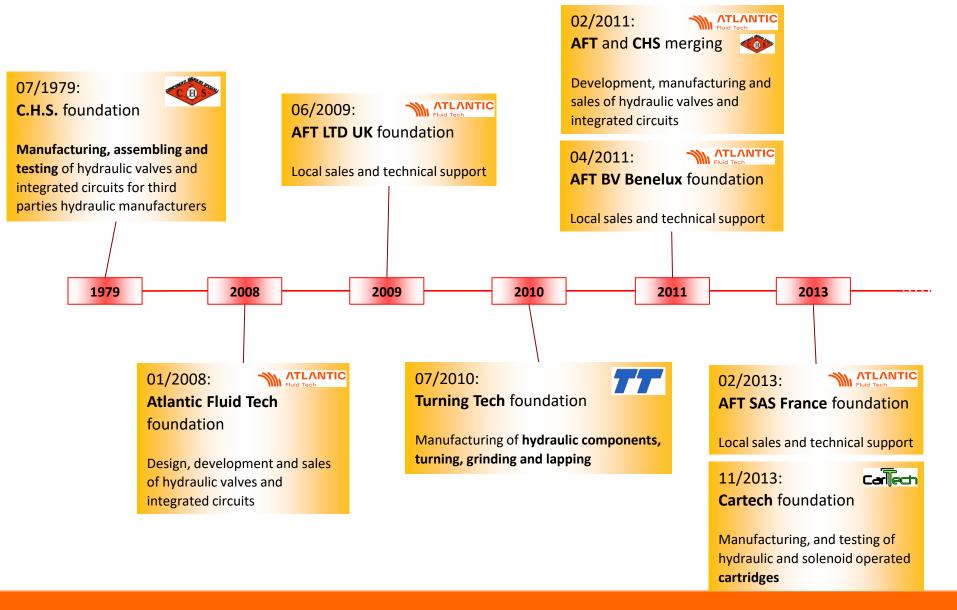


Manufacturing Plants (Atlantic Fluid Tech, Cartech, Turning Tech, Simal, CTB)

Distributors

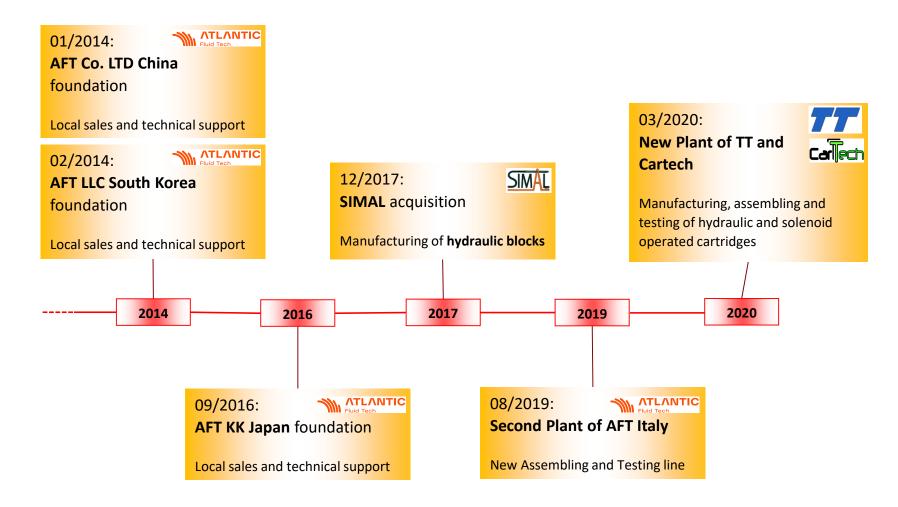


ATLANTIC FLUID TECH - HISTORY











ATLANTIC FLUID TECH - TECHNICAL MILESTONES

2009:



Development of Standard Range of Hydraulic Valves 2011:



New line of **Compact Directional Valves** and **Diverters**

2013:



Solenoid Operated Cartridges

05/2015:



ISO 14001:2004 OHSAS 18001:2007 Accreditations

1979

2008

2009

2010

2011

2012

2013

2014

2015

2017

07/2008:

ISO 9001:2008 Accreditation

2010:



New line of Excavator and **Attachment Valves**

2014:



New line of Fan Drive Solutions

2017:

New generation of Excavator **Valves**

2014:



New line of Gravity Lowering LHV for Telehandlers and Aerial **Platforms**





- 4500 sq.m facility
- 150 employees
- 15 CNC machines

ENGINEERING, MANUFACTURING AND SALES OF HYDRAULIC VALVES

PILOT OPERATED CHECK VALVES



CHECK METERING VALVES
FOR EXCAVATORS



CUSTOMIZED INTEGRATED CIRCUITS



OVERCENTRE VALVES



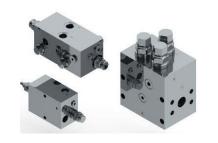
VALVES FOR ATTACHMENTS



COMPACT DIRECTIONAL VALVES AND CETOP



REGENERATIVE VALVES



FLOW CONTROL AND FLOW DIVIDER VALVES



VALVES FOR HYDRAULIC MOTORS



DIVERTER VALVES







- 1700 sq.m facility
- 25 employees
- 5 test benches

ASSEMBLING AND TESTING OF CARTRIDGE TYPE VALVES

RELIEF VALVES CARTRIDGE



OVERCENTRE VALVES
CARTRIDGE



PRESSURE REDUCING VALVES - CARTRIDGE



FLOW CONTROL AND FLOW DIVIDER VALVES CARTRIDGE



CHECK VALVES
CARTRIDGE



SOLENOID OPERATED VALVES - CARTRIDGE



PILOT OPERATED CHECK VALVES - CARTRIDGE



PROPORTIONAL VALVES
CARTRIDGE







- 1700 sq.m facility
- 21 employees
- 8 CNC machines

TOURNING, GRINDING AND LAPPING OF INTERNAL PARTS



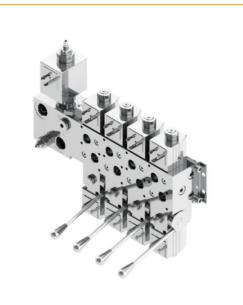


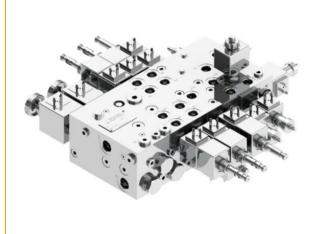


- 1500 sq.m facility
- 20 employees
- 4 CNC machines

MANUFACTURING OF HYDRAULIC MANIFOLDS











- 3500 sq.m facility
- 80 employees

HARDENING HEAT TREATMENTS AND THERMAL DEBURRING





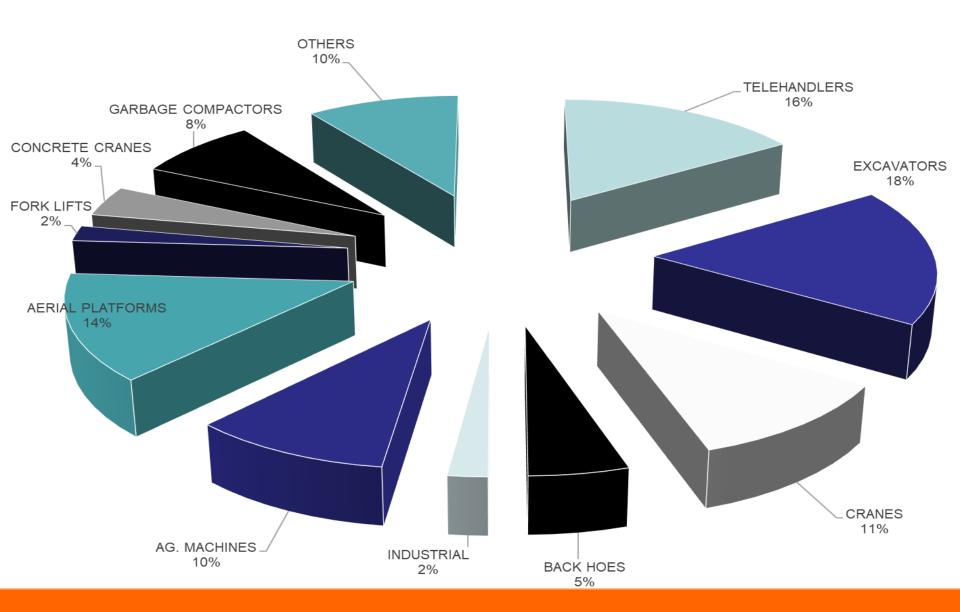








TURNOVER BY MARKET SEGMENTS - YEAR 2019























































PRODUCTION PLANT CNC MACHINES





WE MACHINE:

- ALUMINIUM
- STEEL (NORMAL AND WELDABLE)
- CAST IRON



PRODUCTION PLANT CNC MACHINES





IoT connected CNC
Machines (AFT Engineered
– Arduino Powered) declare
parts and quantities
autonomously

Operator has self –check instruments right on the machine



Mori Seiki and Kiwa multi-pallet horizontal machine

-14 horizontalCNC machines-92 pallets

Centralized recycling system for drilling water-glicol liquids





PRODUCTION PLANT DEBURRING AND WASHING



Washing machine



Thermal deburring



Manual deburring

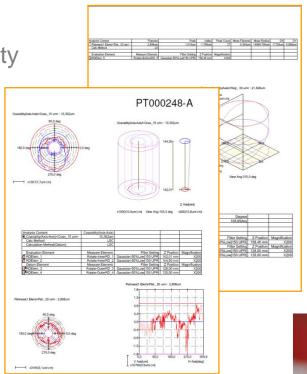


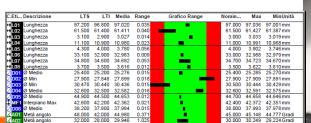


PRODUCTION PLANT METROLOGICAL LAB AND QUALITY CONTROL

Machine to control roundness and concentricity (0,1 microns precision)











PRODUCTION PLANT METROLOGICAL LAB AND QUALITY CONTROL



Microscope and endoscope



Dynamometric press, to control springs and solenoid valves pulling/pushin g force



Machine to check cavities of the manifolds



Machine to control sharpness and profile of the drilling tools and to fix them on the tool holder







All torques are applied with certified dynamometric wrenches







Computer assisted hydraulic testing rigs

All products are 100% hydraulically tested





TLANTIC Fluid Tech





Leakage test with pneumatic equipment



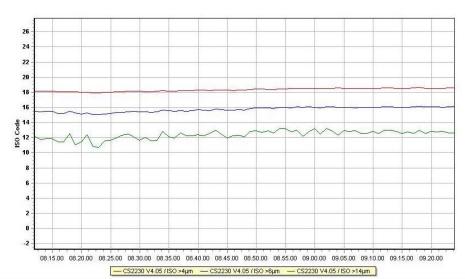
PRODUCTION PLANT TESTING AREA



Real time contamination monitoring

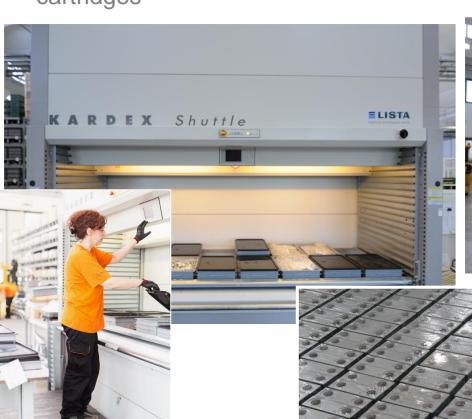


Centralized hydraulic circuit for all test benches



			CS2230 V4.05		
	Date	Time	ISO >4µm	ISO >6µm	ISO >14µm
73	01/10/2013	9.23.57	18.58	16.12	12.65
72	01/10/2013	9.22.57	18.56	16.04	12.62
71	01/10/2013	9.21.57	18.50	15.98	12.83
70	01/10/2013	9.20.57	18.53	16.06	12.72
69	01/10/2013	9.19.57	18.54	16.10	12.85
68	01/10/2013	9.18.57	18.54	16.08	12.56
67	01/10/2013	9.17.57	18.63	16.18	12.99
66	01/10/2013	9.16.57	18.57	16.10	12.51
65	01/10/2013	9.15.57	18.50	16.02	12.79
64	01/10/2013	9.14.57	18.53	16.00	12.54
63	01/10/2013	9.13.57	18.50	16.02	12.85
62	01/10/2013	9.12.56	18.56	16.10	12.95
61	01/10/2013	9.11.56	18.57	16.08	13.00
60	01/10/2013	9.10.56	18.53	16.03	12.56

Vertical automatic storage system for components and cartridges Shelf storage system for manifolds and finished valves







ISO 9001:2015:

Achieved in July 2008



ISO 14000:2004:

Achieved in May 2015



DNV BUSINESS ASSURANCE MANAGEMENT SYSTEM CERTIFICATE

Certificato No. / Certificate No. 178996-2015-AE-ITA-ACCREDIA

Si attesta che / This is to certify that

ATLANTIC FLUID TECH S.r.l.

Via della Meccanica, 50 - 41018 San Cesario Sul Panaro (MO) - Italy

è conforme ai requisiti della norma per i sistemi di gestione: has been found to conform to the management system standard:

UNI EN ISO 14001:2004 (ISO 14001:2004)

Valutato secondo le prescrizioni del Regolamento Tecnico RT-09 Evaluated according to the requirements of Technical Regulations RT-09

Questa Certificazione è valida per il seguente campo applicativo: This Certificate is valid for the following product or service ranges:

Progettazione, produzione e assistenza di valvole e gruppi integrati per l'oleodinamica. Produzione e assemblaggio di componenti e valvole oleodinamiche su specifica del cliente. Processi di: lavorazioni meccaniche, lavaggio e assemblaggio (Settore EA: 17-18)

Design, manufacturing and after-sales services of oleo dynamic valves and integrated groups. Production and assembly of hydraulic valves and components based on customer specification. Processes: machining, cleaning and assembling (Sector EA: 17-18)

ACCREDIA N

Data Prima Emissione/Initial Certification Date 2015-05-27

Il Certificato è valido fino a This Certificate is valid until: 2018-05-27

L'audit è stato esequito sotto la supervisione di

Gianpaolo Quatraro

La validità del presente Certificato è subordinata al rispetto delle condizioni contenute nel Contratto di Certificazio.

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

Luogo e data/Place and Date: Vimercate (MB), 2015-05-27 Per l'Organismo di Certificazion For the Certification Body: Vittore Marangon

BS OHSAS 18001:2007:

Achieved in May 2015



DNV BUSINESS ASSURANCE MANAGEMENT SYSTEM CERTIFICATE

Certificato No. / Certificate No. 178994-2015-AHSO-ITA-ACCREDIA

Si attesta che / This is to certify that

ATLANTIC FLUID TECH S.r.l.

Via della Meccanica, 50 - 41018 San Cesario Sul Panaro (MO) - Italy

è conforme ai requisiti della norma per i sistemi di gestione: has been found to conform to the management system standard:

BS OHSAS (Occupational Health and Safety Assessment Series) 18001:2007

Valutato secondo le prescrizioni del Regolamento Tecnico RT-12 Evaluated according to the requirements of Technical Regulations RT-12

Questa Certificazione è valida per il seguente campo applicativo: This Certificate is valid for the following product or service ranges:

Progettazione, produzione ed assistenza di valvole e gruppi integrati per l'oleodinamica. Produzione ed assemblaggio di componenti e valvole oleodinamiche su specifica cliente (Settore EA: 17 - 18)

Design, manufacturing and after-sales services of oleodynamic valves and integrated groups. Production and assembly of hydraulic valves and components based on customer specification (Sector EA: 17 - 18)

ACCREDIA T

Data Prima Emissione/Initial Certification Date: 2015-05-22

Il Certificato è valido fino al This Certificate is valid until: 2018-05-22

L'audit è stato eseguito sotto la supervisione di/ The audit has been performed under the

Gianpaolo Quatraro

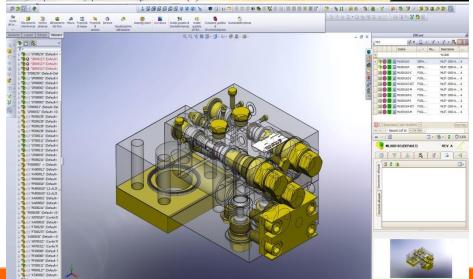
Luogo e Data/Place and Date Vimercate (MB), 2015-05-22 Per l'Organismo di Certificazione For the Certification Body: Vittore Marangon

La validità del presente Certificato è subordinata al rispetto delle condizioni contenute nel Contratto di Certificaz Lack of fulfillment of conditions as set out in the Certification Agreement may render this Centificate invalid

ENGINEERING







9 design stations equipped with **3D cad** (Solid Works) with integrated PDM system connected to ERP system;

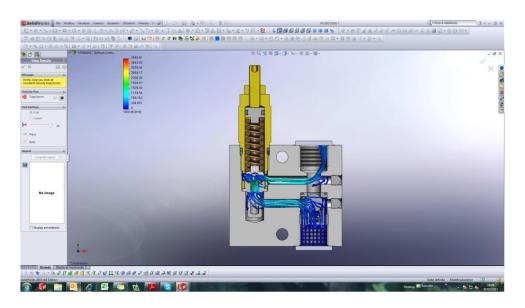
2008: **101** new projects developed 2009: **408** new projects developed 2010: **512** new projects developed 2011: **754** new projects developed 2012: **726** new projects developed 2013: **769** new projects developed 2014: **582** new projects developed 2015: **473** new projects developed 2016: **514** new projects developed 2017: **429** new projects developed 2018: **429** new projects developed

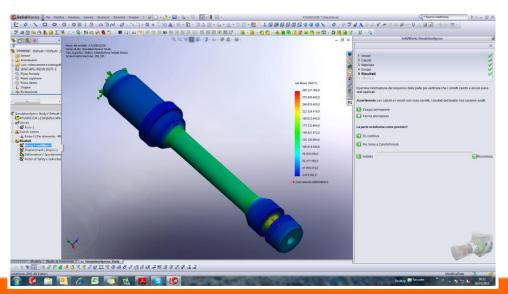
MTTF / MTTFd / β_{10} : Method implemented in July 2011 / Dedicated software (Minitab) for calculation of product reliability in place since January 2012

CRM: new products development process under control with precise time schedules since 2015 through dedicated software



RESEARCH & DEVELOPMENT





1 workstation equipped with **CFD** simulation system;

1 workstation equipped with **FEM** simulation system

2010: 1 European patent

2011: 3 European patents

2012: 2 European patents

2013: **2** European patents

2014: 1 European patent

2016: 2 European patents

2017: 1 European patent

2018: 3 European patents

2019: 1 European patent



RESEARCH & DEVELOPMENT



Improved functional test bench permanently connected to data acquisition software:

300 l/min / 550 bar



Portable data acquisition equipment, for field tests





Burst test equipment 1850 bar



