





ATLANTIC FLUID TECH HISTORY

02/2013:

AFT SAS France foundation

Local sales and technical support

07/1979:

C.H.S. foundation.

Manufacturing, assembling and testing of hydraulic valves and integrated circuits for third parties hydraulic manufacturers

06/2009:

AFT LTD UK foundation

Local sales and technical support

07/2010:

Turning Tech foundation

Manufacturing of hydraulic components, turning, grinding and lapping

77

11/2013:

Cartech foundation

Manufacturing, and testing of hydraulic and solenoid operated cartridges

1979 2008 2009 2010 2011 2012 2013 2014 2015 2016

01/2008:

Atlantic Fluid

Tech foundation.

Design, development and sales of hydraulic valves and integrated circuits

Atlantic

Huld Tech

02/2011:

AFT and CHS merging.



Atlantic Fluid Tech

Development, manufacturing and sales of hydraulic valves and integrated circuits

04/2011:

AFT BV Benelux foundation.

Local sales and technical support

01/2014:

AFT Co. LTD China foundation

Atlantic

Fluid Tech

Local sales and technical support

09/2016:

AFT KK Japan foundation.

Local sales and technical support

Atlantic

Fluid Tech

CarTech

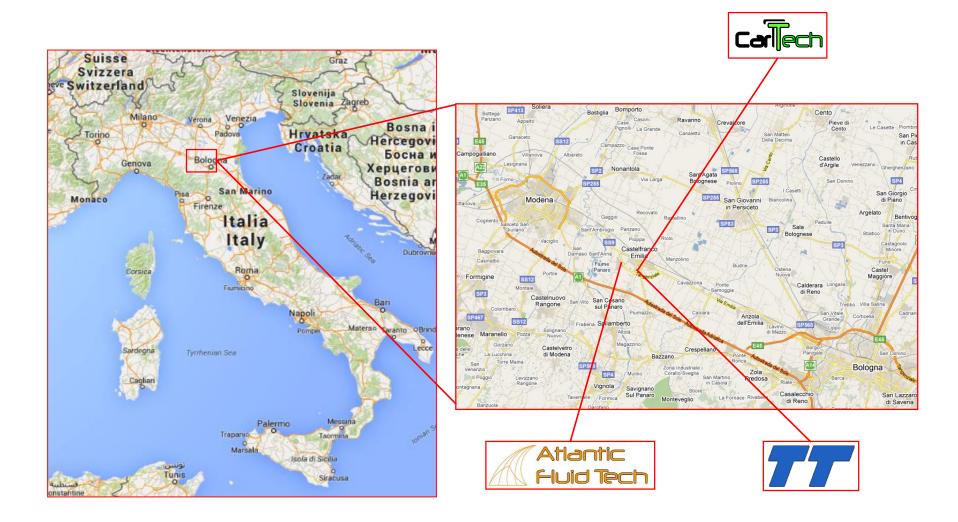
02/2014:

AFT LLC South Korea foundation

Local sales and technical support

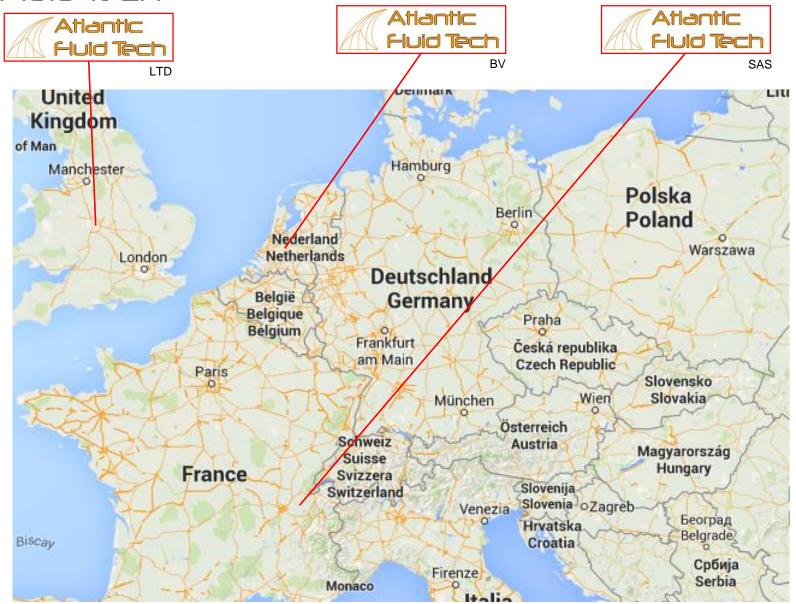


COMPANIES LOCATION MANUFACTURING PLANTS



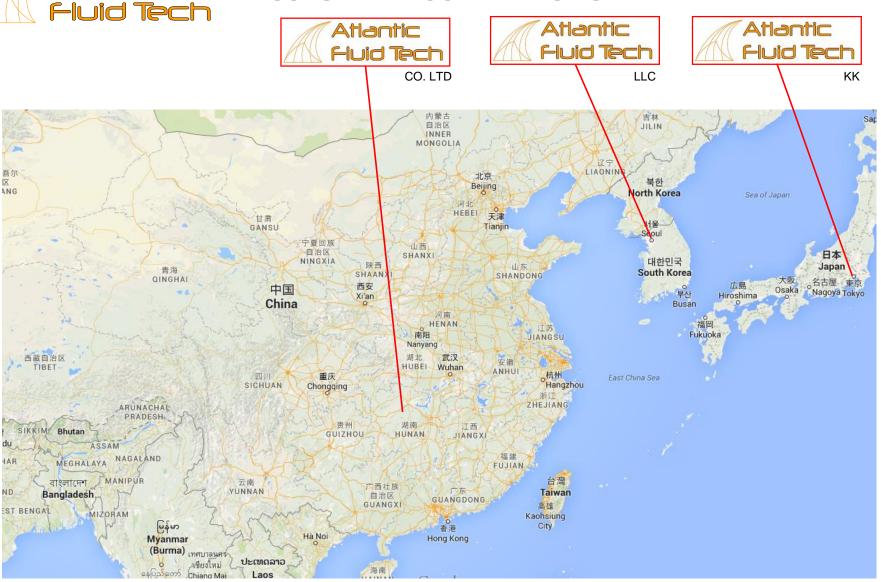


COMPANIES LOCATION SUBSIDIARY COMPANIES EUROPE





COMPANIES LOCATION SUBSIDIARY COMPANIES ASIA





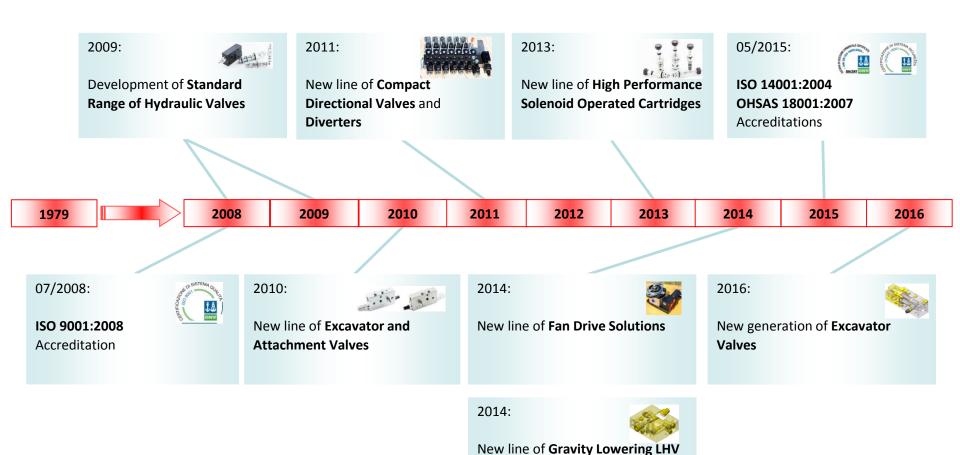
COMPANIES LOCATION DISTRIBUTORS



- Manufacturing Plants (Atlantic Fluid Tech, Cartech, Turning Tech)
- Subsidiary Companies
- Distributors



ATLANTIC FLUID TECH TECHNICAL MILESTONES

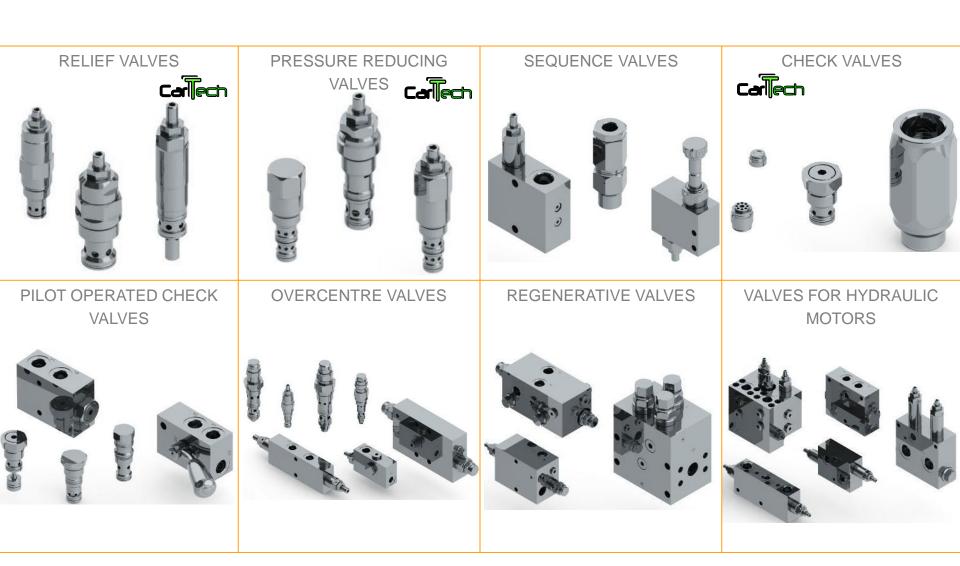


for Telehandlers and Aerial

Platforms



PRODUCT LINES





PRODUCT LINES

CHECK METERING VALVES
FOR EXCAVATORS



VALVES FOR ATTACHMENTS



FLOW CONTROL AND FLOW DIVIDER VALVES



SOLENOID OPERATED
CARTRIDGES



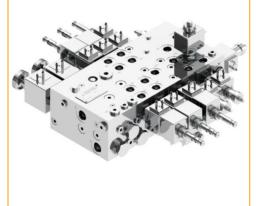
DIVERTER VALVES



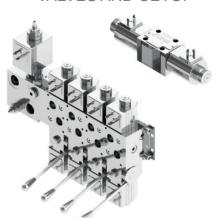
PROPORTIONAL VALVES



CUSTOMIZED INTEGRATED CIRCUITS



COMPACT DIRECTIONAL VALVES AND CETOP





PRODUCT LINES

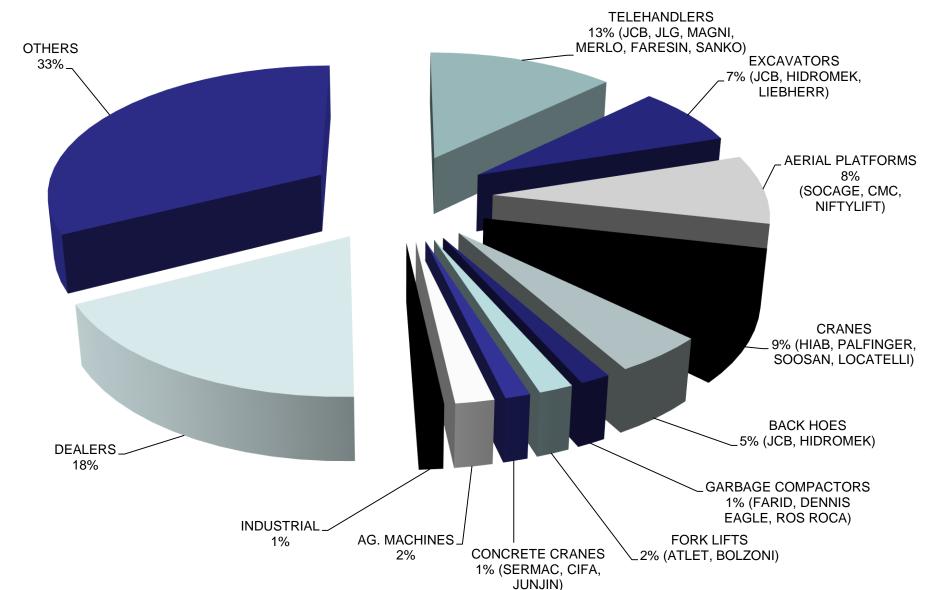


TOURNING, GRINDING AND LAPPING OF INTERNAL PARTS





TURNOVER BY MARKET SEGMENTS YEAR 2017





MAIN FIELDS OF APPLICATION





MAIN FIELDS OF APPLICATION





MAIN CUSTOMERS (DIRECT OR THROUGH DISTRIBUTORS)



EXCAVATORS, BACK-HOES & LOADERS











TELEHANDLERS













CRANES





















MAIN CUSTOMERS (DIRECT OR THROUGH DISTRIBUTORS)

GARBAGE COMPACTORS



















FORK LIFTS & ATTACHMENTS











AGRICULTURAL MACHINES













AT & RT CRANES







MAIN CUSTOMERS (DIRECT OR THROUGH DISTRIBUTORS)

HOOK LIFT LOADERS













DRILLING MACHINES













CONCRETE PUMP
CRANES



<u>Betonstar</u>









SCRAP LOADERS









PRODUCTION PLANT CNC MACHINES









WE MACHINE:

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



PRODUCTION PLANT CNC MACHINES



Daewoo multi-pallet

5 vertical CNC machines

Mori Seiki multi-pallet horizontal machine

11 horizontal CNC machines



Centralized recycling system for drilling water-glicol liquids

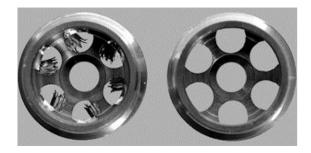
vertical machine



PRODUCTION PLANT DEBURRING AND WASHING



Washing machine



Thermal deburring



Manual deburring



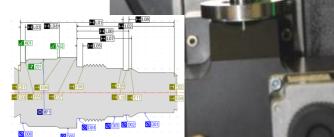




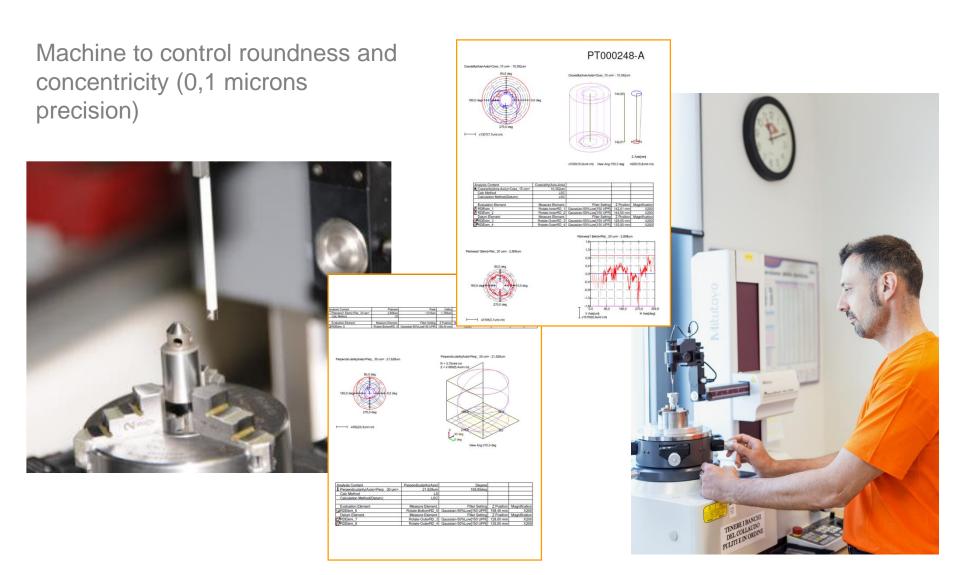


Machine for fast control of turned parts (3 microns precision)

C.Eti Descrizione	LTS	LTI	Media	Range	Grafico Range	Nomin	Max	MinUnità
+ L01 Lunghezza	97.200	96.800	97.020	0.035		97.000	97.036	97.001mm
++L02 Lunghezza	61.500	61.400	61.411	0.040		61.500	61.427	61.387 mm
+ L03 Lunghezza	3.100	2.900	3.027	0.014		3.000	3.033	3.019 mm
+ L04 Lunghezza	11.100	10.900	10.980	0.023		11.000	10.991	10.968 mm
++ L05 Lunghezza	4.300	4.000	3.780	0.056		4.000	3.802	3.746 mm
+ L06 Lunghezza	33.100	32.900	32.983	0.009		33.000	32.988	32.979 mm
++ L07 Lunghezza	34.800	34.600	34.692	0.053		34.700	34.723	34.670 mm
+ L08 Lunghezza	3.700	3.500	3.616	0.012		3.500	3.622	3.610 mm
D01 Ø Medio	25.400	25.200	25.276	0.015		25.400	25.285	25.270 mm
2002 Ø Min	27.900	27.848	27.899	0.018	_	27.900	27.909	27.891 mm
OD03 Ø Min	30.470	30.440	30.436	0.015		30.500	30.444	30.429 mm
D04 Ø Medio	32.600	32.500	32.582	0.016		32.600	32.591	32.575 mm
D05 Ø Medio	44.900	44.500	44.653	0.012		44.700	44.658	44.646 mm
MF1 Interpiano Max	42.600	42.200	42.362	0.021		42.400	42.372	42.351 mm
D06 Ø Medio	38.200	37.800	37.984	0.015		38.000	37.993	37.978 mm
A01 Metà angolo	48.000	42.000	44.980	0.371		45.000	45.148	44.777 Gradi
Ana Metà angolo	32 000	28 000	29 946	1.025		30 000	30 249	29 224 Gradi

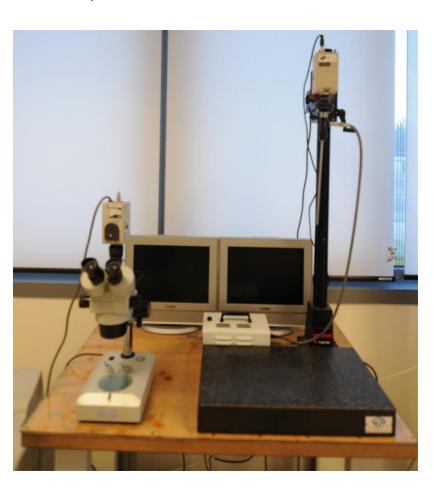








Microscope and endoscope, connected to the computer to take pictures



Machine to control precision of the internal diameters of the manifolds





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

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





PRODUCTION PLANT ASSEMBLING AREA

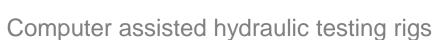


All torques are applied with certified dynamometric wrenches

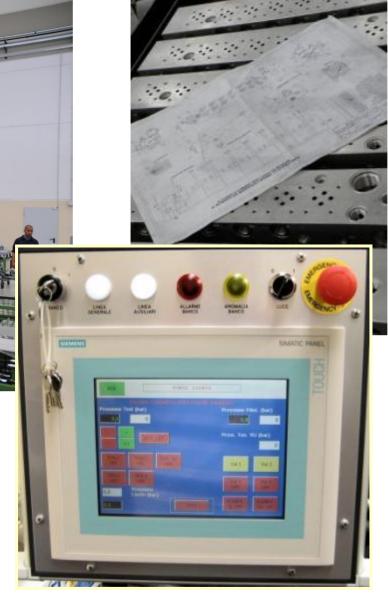


PRODUCTION PLANT TESTING AREA





All products are 100% hydraulically tested





PRODUCTION PLANT TESTING AREA

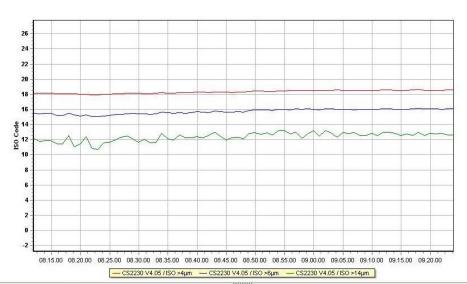




Leakage test with pneumatic equipment



PRODUCTION PLANT TESTING AREA



Ų.		de	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



Real time contamination monitoring

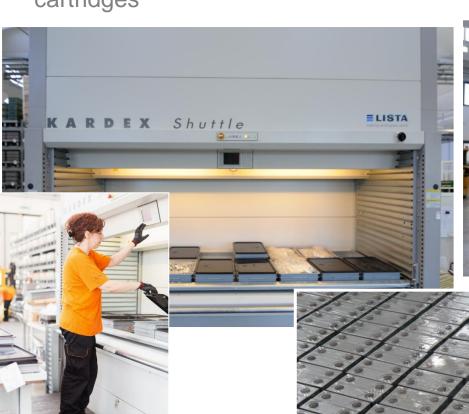


Centralized hydraulic circuit for all test benches



PRODUCTION PLANT STORAGE

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







QUALITY **CERTIFICATIONS**

ISO 9001:2015:

Achieved in July 2008



ISO 14000:2004:

Achieved in May 2015



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

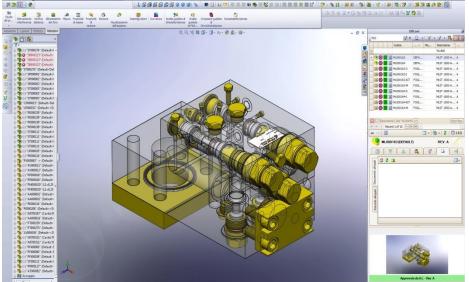
Luogo e Data/Place and Date Vimercate (MB), 2015-05-22 Per l'Organismo di Certificazione For the Certification Body: Vittore Marangon

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

Atlantic Fluid Tech

ENGINEERING





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

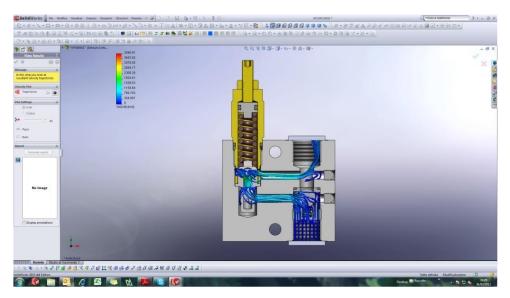
2008: **101** new projects developed 2009: **408** new projects developed 2010: **512** new projects developed 2011: **754** new projects developed 2012: **726** new projects developed 2013: **769** new projects developed 2014: **582** new projects developed 2015: **473** new projects developed 2016: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

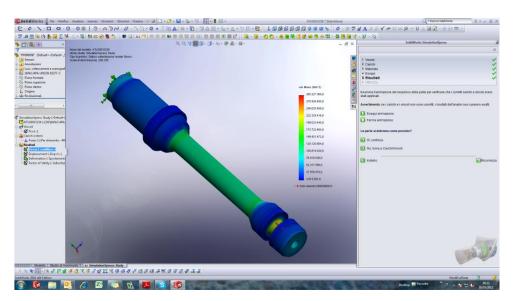
MTTF / MTTFd / β_{10} : Method implemented in July 2011 / Dedicated software (Minitab) for calculation of product reliability in place since January 2012

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



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



