„Innovative & High Performance Hydraulics”
ATLANTIC FLUID TECH GROUP

HEADQUARTER and MAIN MANUFACTURING PLANTS - AFT1 and AFT2

SATELLITE MANUFACTURING PLANTS

TOURNE PARTS
CARTRDIGES
MANIFODLS

SUBSIDIARIES

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

LOCAL SALES, TECHNICAL SUPPORT AND STOCK

HEAT TREATMENTS AND THERMAL DEBURRING
Group of more than 300 people and 5 plants of 4500+2500 sq meters (AFT), 1700 (TT), 1700 (Cartech), 1500 (Simal) and 3500 (CTB)
ATLANTIC FLUID TECH - HISTORY

07/1979: C.H.S. foundation
Manufacturing, assembling and testing of hydraulic valves and integrated circuits for third parties hydraulic manufacturers

01/2008: Atlantic Fluid Tech foundation
Design, development and sales of hydraulic valves and integrated circuits

06/2009: AFT LTD UK foundation
Local sales and technical support

04/2011: AFT BV Benelux foundation
Local sales and technical support

02/2011: AFT and CHS merging
Development, manufacturing and sales of hydraulic valves and integrated circuits

02/2013: AFT SAS France foundation
Local sales and technical support

07/2010: Turning Tech foundation
Manufacturing of hydraulic components, turning, grinding and lapping

11/2013: Cartech foundation
Manufacturing, and testing of hydraulic and solenoid operated cartridges
ATLANTIC FLUID TECH - HISTORY

01/2014:
AFT Co. LTD China foundation
Local sales and technical support

02/2014:
AFT LLC South Korea foundation
Local sales and technical support

12/2017:
SIMAL acquisition
Manufacturing of hydraulic blocks

09/2016:
AFT KK Japan foundation
Local sales and technical support

08/2019:
Second Plant of AFT Italy
New Assembling and Testing line

03/2020:
New Plant of TT and Cartech
Manufacturing, assembling and testing of hydraulic and solenoid operated cartridges

2014

2016

2017

2019

2020
2009: Development of Standard Range of Hydraulic Valves

2011: New line of Compact Directional Valves and Diveters

2013: New line of High Performance Solenoid Operated Cartridges


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
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT OPERATED CHECK VALVES</td>
<td>Checks the fluid flow direction in a hydraulic circuit.</td>
</tr>
<tr>
<td>OVERCENTRE VALVES</td>
<td>Directs the fluid flow in a single direction.</td>
</tr>
<tr>
<td>REGENERATIVE VALVES</td>
<td>Regenerates the fluid flow in a hydraulic circuit.</td>
</tr>
<tr>
<td>VALVES FOR HYDRAULIC MOTORS</td>
<td>Controls the fluid flow in hydraulic motors.</td>
</tr>
<tr>
<td>CHECK METERING VALVES</td>
<td>Measures the fluid flow in a hydraulic circuit.</td>
</tr>
<tr>
<td>VALVES FOR ATTACHMENTS</td>
<td>Connects hydraulic circuits to attachments like excavator arms.</td>
</tr>
<tr>
<td>FLOW CONTROL AND FLOW DIVIDER VALVES</td>
<td>Controls and divides the fluid flow in hydraulic circuits.</td>
</tr>
<tr>
<td>DIVERTER VALVES</td>
<td>Diverts the fluid flow in a hydraulic circuit.</td>
</tr>
<tr>
<td>CUSTOMIZED INTEGRATED CIRCUITS</td>
<td>Customizes the fluid flow in a hydraulic circuit.</td>
</tr>
<tr>
<td>COMPACT DIRECTIONAL VALVES AND CETOP</td>
<td>Compact directional valves with CETOP standards for hydraulic systems.</td>
</tr>
</tbody>
</table>

**COMPANY PROFILE**
- 4500 sq.m facility
- 150 employees
- 15 CNC machines

© All rights reserved by Atlantic Fluid Tech srl. Copying and passing on to third parties is forbidden without written consent of Atlantic Fluid Tech srl.
ASSEMBLING AND TESTING OF CARTRIDGE TYPE VALVES

- RELIEF VALVES CARTRIDGE
- PRESSURE REDUCING VALVES - CARTRIDGE
- CHECK VALVES CARTRIDGE
- PILOT OPERATED CHECK VALVES - CARTRIDGE
- OVERCENTRE VALVES CARTRIDGE
- FLOW CONTROL AND FLOW DIVIDER VALVES CARTRIDGE
- SOLENOID OPERATED VALVES - CARTRIDGE
- PROPORTIONAL VALVES CARTRIDGE

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

© All rights reserved by Atlantic Fluid Tech srl. Copying and passing on to third parties is forbidden without written consent of Atlantic Fluid Tech srl.
TOURING, GRINDING AND LAPPING OF INTERNAL PARTS

PISTONS

SEATS

CARTRIDGES’ BODIES

TURNED PARTS IN GENERAL

LAPPING

GRINDING

COMPANY PROFILE
• 1700 sq.m facility
• 21 employees
• 8 CNC machines
MANUFACTURING OF HYDRAULIC MANIFOLDS

COMPANY PROFILE
- 1500 sq.m facility
- 20 employees
- 4 CNC machines
HARDENING HEAT TREATMENTS AND THERMAL DEBURRING

COMPANY PROFILE
- 3500 sq.m facility
- 80 employees
TURNOVER BY MARKET SEGMENTS - YEAR 2019

- Garbage Compactors: 20%
- Concrete Cranes: 16%
- Fork Lifts: 14%
- Aerial Platforms: 10%
- Ag. Machines: 10%
- Industrial: 8%
- Back Hoes: 6%
- Telehandlers: 4%
- Excavators: 2%
- Others: 10%

© All rights reserved by Atlantic Fluid Tech srl. Copying and passing on to third parties is forbidden without written consent of Atlantic Fluid Tech srl.
MAIN FIELDS OF APPLICATION
WE MACHINE:

- ALUMINIUM
- STEEL (NORMAL AND WELDABLE)
- CAST IRON
Mori Seiki and Kiwa multi-pallet horizontal machine

- 14 horizontal CNC machines
- 92 pallets

Centralized recycling system for drilling water-glicol liquids

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

Operator has self-check instruments right on the machine
PRODUCTION PLANT
DEBURRING AND WASHING

Washing machine

Thermal deburring

Manual deburring
Machine to control roundness and concentricity (0,1 microns precision)
Microscope and endoscope

Machine to check cavities 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
All torques are applied with certified dynamometric wrenches
Computer assisted hydraulic testing rigs

All products are **100% hydraulically tested**
Leakage test with pneumatic equipment
Real time contamination monitoring

Centralized hydraulic circuit for all test benches
Vertical automatic storage system for components and cartridges

Shelf storage system for manifolds and finished valves
QUALITY CERTIFICATIONS


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 / $\beta_{10}$: 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
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
Improved functional test bench permanently connected to data acquisition software:
300 l/min / 550 bar

Endurance test equipment
700 bar

Portable data acquisition equipment, for field tests

Burst test equipment 1850 bar
THANK YOU FOR YOUR ATTENTION

„Innovative & High Performance Hydraulics”