

**AUBERT & DUVAL**

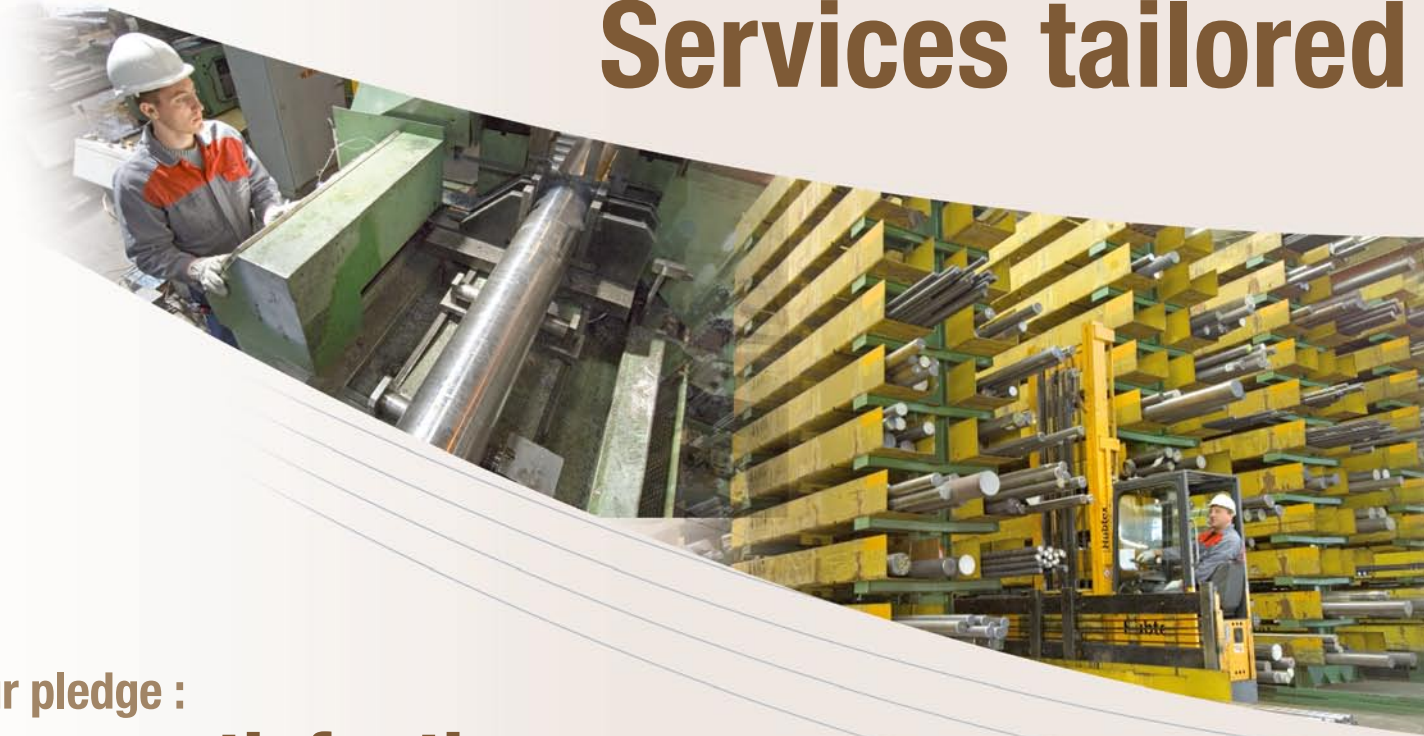


## **Service Centers for Aerospace and other highly-demanding industries**



**Enhancing your performance**

# Services tailored



## Our pledge : Your satisfaction

### The Material you need, when you need it

Offering state-of-the-art products would be of no use if not supported by a first-class logistics service. We understand the pressures on our customers of minimum capital exposure and lean manufacturing requiring reduced inventories and just-in-time supplies.

Aubert & Duval, well-known for its superior product quality, is constantly adapting its service offer to meet changing logistical requirements. We are therefore able to deliver medium or small-size orders on a regular basis for call-off supplies, or rapidly when it comes to emergency shortages. This is done while adhering to quality requirements regarding goods sorting and shelving, cutting to specifications, identification and packaging.

### The warehouse of a metal specialist

Our production capacity is based on a unique and complementary range of industrial equipment for melting and converting.

- melting shop
- powder atomization
- foundry
- heat treatment
- re-melting
- open and closed-die forging
- hot rolling

### State-of-the-art cutting and stocking facilities

Located in the largest European distribution platform (Lyon - France), our main warehouse is equipped with the most modern equipment, such as a 1,700 rack transtocker, the latest Amada PCSAW 430 double-pulse saws and the Amada VM 3800 bandsaw, the largest of its kind in Europe. We have additional facilities throughout the world.

### ISO 9120 certified

In addition to general certifications (ISO 9001, ISO 14001, ISO 18001), our Lyon Service Center is certified to the most stringent industry specific standards: ISO 9100 (aero design and manufacturing), ISO 9120 (aero distribution) and AQAP 2110 (NATO).

### Main Markets

#### Aerospace

- Actuators/Bearings
- Engines
- Fasteners
- Frames
- Landing Gears

#### Energy

- Nuclear
- Oil & Gas
- Turbines

#### Specialties

- Automotive
- Defense
- Mechanical
- Medical
- Motorsport
- Tooling

### An international customer base

Airbus, Alstom, Asco, Avic, Boeing, Bombardier, Dassault, Eurocopter, Ferrari, HAL, Hispano Suiza, Latécoère, Liebherr, Manoir, Messier Bugatti, Montabert, Nexter, Siemens, SKF, Snecma, SNR, Turbomeca.

### Global sales network

Our sales network added to our customer technical support operates in close partnership with our clients to provide a prompt and efficient service which is tailored to their needs.

# to your needs



## Added-value Solution Provider, to reduce your cost of ownership

### Supply-chain management

As your service provider, we will meet your one-stop-shopping requirements:

- Any material or product can be stocked on request
- We can offer customized operations including batch preparation, hot conversion, and specific heat treatment
- Full logistic service : forecast integration, planning adjustment, safety stocks

### Speed

From order receipt to delivery we guarantee a speedy and reliable process, so that our international customers can focus on their own tasks

### Traceability

- Automated marking by inkjet, laser or engraving
- 100% batch marking
- Batch management with EDI transmission

### Storage

- Fully automated transtocker (Lyon)
- 1<sup>st</sup> Class multiple-storage capacities in a growing number of locations

### Sawing

- High-quality saws (Amada)
- Double-pulse cutting to guarantee  $Ra < 3.2 \mu m$  and tolerance  $< 0.4mm$  (0.0157 inches)
- 24-hour automatic sawing for large dimensions (sections up to 1,000 mm dia.) (39 inches)

### Machining

- Full range of customized machining
- Chamfering
- Grinding
- Sheet cutting-to-shape





# A Complete Product Offering

Multi-specification products enhance stock flexibility

Our grades are designed to simultaneously meet the specifications of various OEMs so that a single bar has multiple potential customers.

## Main Grades

|                  | A&D Grade        | Common Name  |
|------------------|------------------|--------------|
| Steels           | <b>50NILYW</b>   | M50NIL       |
|                  | <b>819B</b>      | 35NCD16      |
|                  | <b>FADCW</b>     | 9310         |
|                  | <b>FADHW</b>     | E16NCD13     |
|                  | <b>FDGW</b>      | E20NCD13     |
|                  | <b>GH4</b>       | 40CrMoV12    |
|                  | <b>GKH</b>       | 32CDV13      |
|                  | <b>MARVAL18</b>  | Maraging 250 |
|                  | <b>NC40SW</b>    | 300M         |
|                  | <b>RA50YW</b>    | M50          |
| <b>SCV</b>       | 15CDV6           |              |
| Stainless Steels | <b>APX</b>       | 431          |
|                  | <b>APX4</b>      | Z8CND17-04   |
|                  | <b>CX13VDW</b>   | AMS 5719     |
|                  | <b>MARVAL13X</b> | PH13-8Mo     |
|                  | <b>MLX17</b>     | AMS 5937     |
|                  | <b>X13VD</b>     | JETHETE M152 |
|                  | <b>X15U5W</b>    | 15-5PH       |
|                  | <b>X17U4</b>     | 17-4PH       |
|                  | <b>XDBD</b>      | 440C         |
|                  | <b>XD15NW</b>    | AMS 5925     |
|                  | <b>XN26TW</b>    | A286         |
| Superalloys      | <b>PER3</b>      | WASPALLOY    |
|                  | <b>PER75</b>     | NIMONIC 75   |
|                  | <b>PER625</b>    | INCO 625     |
|                  | <b>PER718</b>    | INCO 718     |
|                  | <b>XSH</b>       | KC20WN       |

## Surface Conditions

- Black
- Peeled
- Ground
- Others

## Heat treatment Conditions

- Annealed
- Hyperquenched
- Normalized
- Solution-annealed
- Quenched
- Heat treated
- Aged

## Main Sizes

|                  | mm                | inches           |
|------------------|-------------------|------------------|
| • Round Bars     | Ø 7.5-350         | Ø 0.30-14        |
| • Flat Bars      | T ≤ 170 ; L ≤ 400 | T ≤ 6.7 ; L ≤ 16 |
| • Square billets | ∇ 50-200          | ∇ 2-8            |
| • Sheets         | 0.5 ≤ T ≤ 150     | .02 ≤ T ≤ 6      |



# Our Storage & Service locations



## Our distribution centers



**CHINA** - Wuxi



**ITALY** - Ferrara



**FRANCE** - Lyon



**USA** - Chicago



**GERMANY** - Mönchengladbach

## Sales offices

- France
- Benelux
- Germany
- Italy
- Poland
- Russia
- Spain
- United Kingdom
- Brazil
- USA
- China
- India
- Japan
- Korea
- Taiwan

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