Alloys and standards

<table>
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<th>Alloys</th>
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<td>CWA</td>
<td>ISO 4957:1996</td>
<td>Cu: remainder</td>
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<tr>
<td>NSE</td>
<td>DIN 17666 wn 2.0855</td>
<td>Cu: remainder</td>
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There is no substitute for experience

Thanks to a multidisciplinary know-how in copper alloys, le Bronze Industriel is at the heart of wide industrial technologies, such as aerospace, shipbuilding, oil & gas, automotive, power, transport and metallurgy.

Located for 40 years in the heart of Champagne region, a brand new factory of 20 000 m² was inaugurated in 2004. The same year, a major investment was carried out with the introduction of a new extrusion press rated at 5400 tons, this was installed to satisfy an ever increasing demand in the international markets that we serve.

75% of our copper alloys production is exported towards 45 countries.

We offer a complete range of semi-finished products (round bars, hollow bars, flat bars, polygons, plates).

With a task force of 300 people, including 60 for machining, Le Bronze is also supporting its customers in the conception and fabrication of any kind of parts.
Pistons production

Regarding pistons for aluminium pressure die casting, we produce both Nickel and Beryllium copper alloys. Material is either extruded or forged by ourselves in order to achieve the best possible mechanical properties for the alloy. Heat treatment and machining are carried out in house in our dedicated production cell.

We manufacture pistons according to customer drawings ranging from 30mm (1.18”) diameter to 300 mm (11.8”) diameter, larger diameters can be accommodated if necessary. Additionally for those not wanting to take delivery of fully finished pistons we also offer to manufacture and supply pre-machined blanks or hollow bars.

From casting to machining

One of Le Bronze Industriel major strengths relies in its fully integrated production process, from casting thru to machining. This uniqueness guarantees complete traceability and thus a perfect control of quality.

Le Bronze Industriel offers you a faster and easier ordering process (logistic, lead time, administrative and costs):

- A much longer life span of extruded pistons compared to non extruded pistons
- Competitive prices thanks to a completely integrated manufacturing process
- Possibility to stock pistons for our customers and to deliver upon request
- Recycling your used pistons thus reducing your costs and both our carbon footprints

Customer’s benefit

Our approvals

Our quality control system complies with the criteria established by:
ISO 9001 : 2008 (AFAQ)

Our references

Many companies in France, Germany, Italy, Belgium and United Kingdom are using Le Bronze Industriel components.

We deliver pistons to car builders as well as Tier 1 suppliers and our pistons are also used with success in Marine, Civil Work or Electrical industries.

Applications

Aluminium or magnesium pressure die casting foundries

![Image of pistons and production process](image_url)