

Innovations in CAAB[®] Brazing

Revolutionising Continuous Atmosphere
Aluminium Brazing Technology

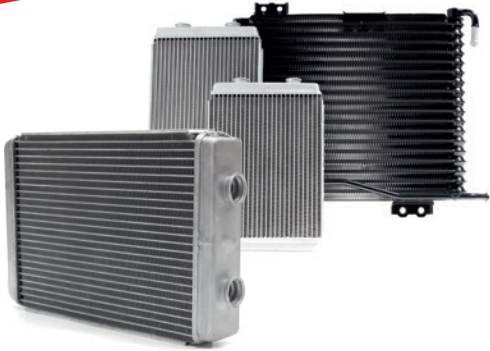


Patented design offers up to
40% overall energy savings
in normal production



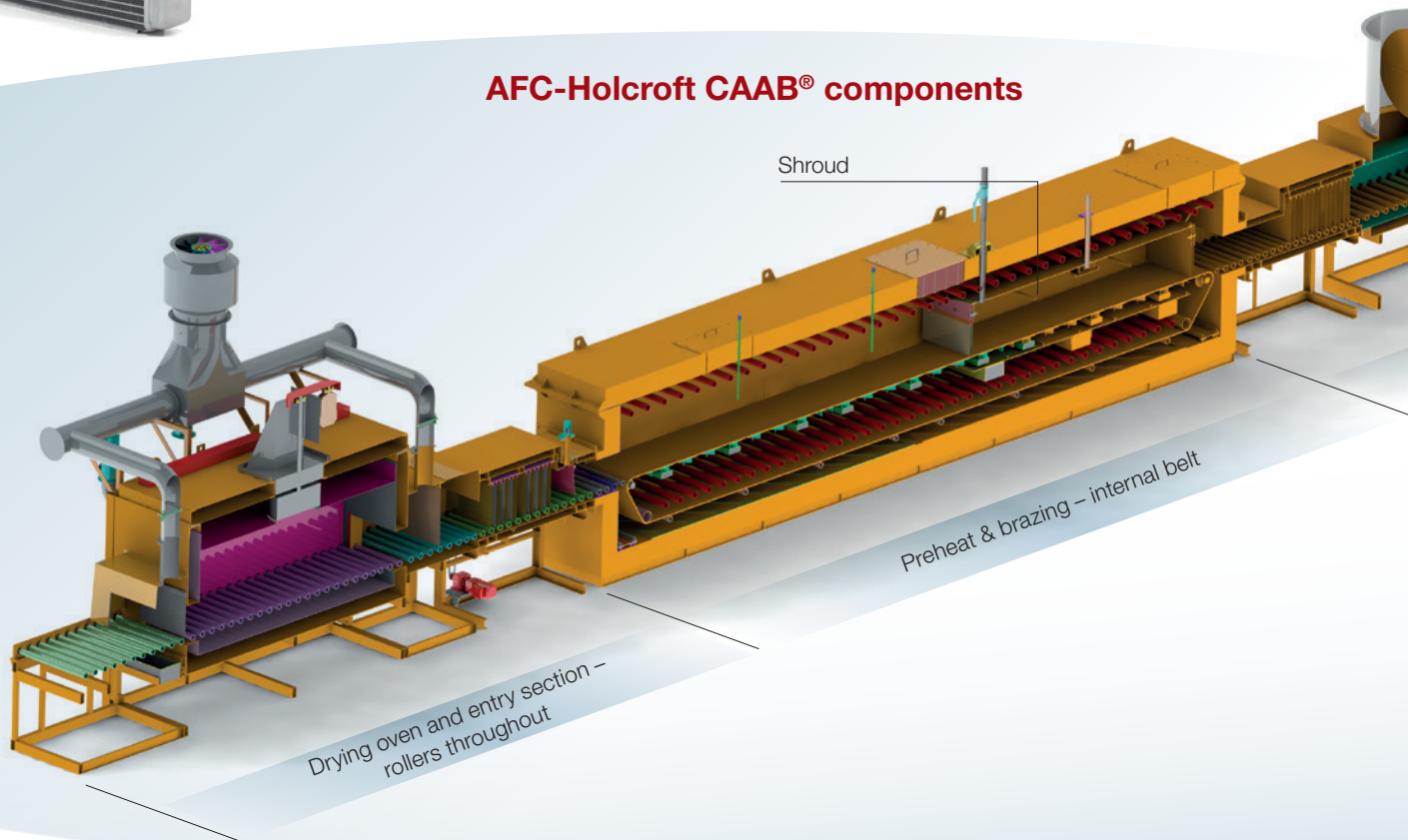
AFC-Holcroft Controlled Atmosphere Aluminium Brazing CAAB®

Relying on decades of experience and successful installations worldwide, AFC-Holcroft CAAB® furnaces have been completely redesigned to provide substantial energy savings, trouble-free operation, greater uptime, ease of maintenance, and lower cost per part.



AFC-Holcroft CAAB® gives you the latest technological advantages for processing aluminium heat exchangers such as radiators, heater cores, condensers, evaporators, charge air, and oil coolers. Our patented design drastically reduces operating costs vs. traditional designs, and other enhancements have been developed to increase productivity and improve profits.

AFC-Holcroft CAAB® components



In step with today's needs

Traditional aluminium brazing furnace designs have been around for at least 30 years. Although effective, they are notorious for their immense energy use. Recent environmental concerns have become a global directive, requiring immediate action to combat climate change.

In response to this call for action, AFC-Holcroft has completely redesigned our continuous atmosphere aluminium brazing line, bringing with it never-before-seen energy savings and improved technical benefits.





Fluxer



Degreaser

The energy savings alone will result in direct reduction of component cost, but they are not the only contribution to reducing the per-piece processing costs:

Production improvements

- Long ramp-up to operating temperatures has been greatly reduced – equipment can be operational in only 3 hours from cold start.
- The complete line is suitable for large or small product.
- Nitrogen usage is comparable with traditional designs, as are oxygen ppm and component finish.

Process improvements

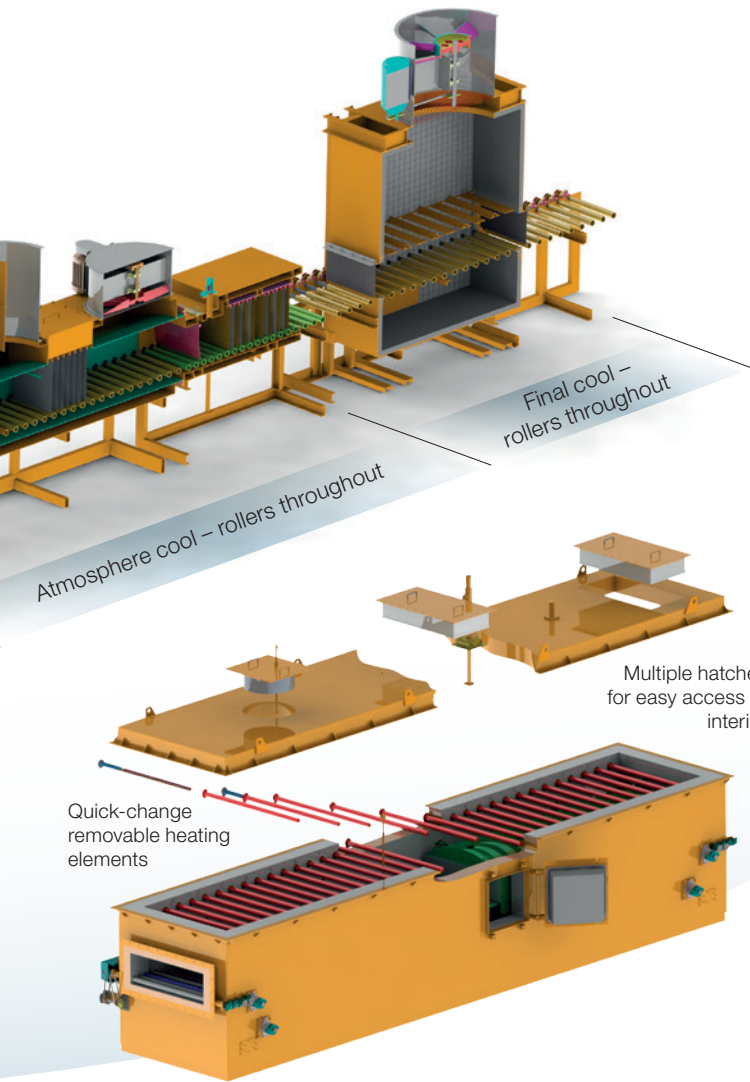
- Internal stainless steel shroud has been extended beyond the braze zone, to ensure all flux activation is completed within the shroud.
- Curtains at either end help maintain low oxygen levels, even with low nitrogen consumption.

Maintenance improvements

- The muffle has been eliminated – no hump clean out due to flux build-up under the belt.
- Multiple access doors provide easy entry into the equipment.
- Heating elements can be changed quickly and easily, without shutting down the line.
- The equipment can be started up or shut down without supervision.

Capital savings

Smaller substation and cabling costs reduce the overall installation costs.



Test results

The component finish and quality are as good – or better – than previous CAAB® processing technology – the achievement of significant energy savings has not compromised quality or production.

Testing has proved the new patented design to be extremely sustainable, even after years of actual operation. For more information on test methods, data and proven results from the field, contact AFC-Holcroft.

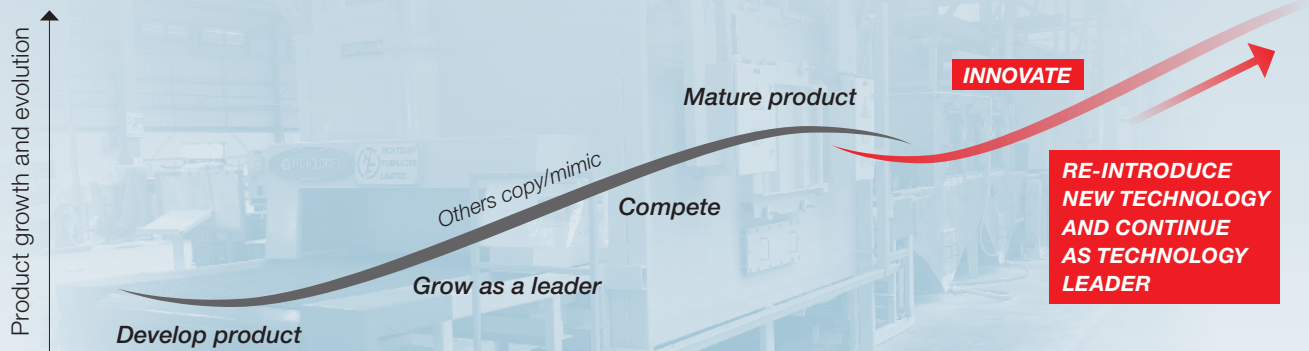
Decades of evolution: AFC-Holcroft CAAB® furnaces

Moving technology forward:

It is time for true innovation, not just iterative improvements

All products – whether they are automobiles or CAAB® furnaces – experience a product cycle. CAAB® equipment has remained largely the same since its introduction decades ago, barring some incremental improvements over time. Leading designs are imitated, leaving many products looking remarkably similar. Like all things,

the time comes to make substantial changes and innovate into the next generation of product. Significant changes, such as the energy-saving design and the replacement of the conventional, limiting full muffle is what this next generation CAAB® design offers. Product development is a journey and AFC-Holcroft has been involved since the first step.



1970's

1980's

1990's

2000's

2010's

Today

Alcan patents become reality

First automotive lines built in UK, Japan and USA

Automotive lines for production in USA and Europe

Automotive lines for production in Asia

New environmental focus invigorates market, leading to design improvements

First simple continuous line built in UK

AFC-Holcroft begins supplying numerous automotive lines (thru legacy companies ThermAlliance and Holcroft)

Gradual decline in automotive orders

Built in Europe under license



REMIX S.A.

Poznańska 36 Str. · 66-200 Świebodzin · Poland
Tel.: +48 68 47 55 400 · Fax: +48 68 47 55 404
E-mail: office@remixsa.pl
www.remixsa.pl

Built in Asia under license



HIGHTEMP FURNACES LTD

1C, 2nd Phase · Peenya Industrial Area · Bangalore 560058 · India
Tel.: +91 80 28395917 · Fax: +91 80 28390490
E-mail: marketing@hightemp-furnaces.com
www.hightemp-furnaces.com

www.afc-holcroft.com

AFC-Holcroft USA

Wixom, Michigan
Tel. +1 248 624 8191
E-mail: sales@afc-holcroft.com

AFC-Holcroft Europe

Boncourt, Switzerland
Tel. +41 32 475 56 16
E-mail: europe@afc-holcroft.com

AFC-Holcroft Asia

Shanghai, China
Tel. +86 21 5899 9100
E-mail: asia@afc-holcroft.com

