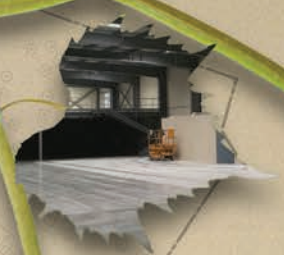


# The Doorway

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# Alcore Brigantine Enjoys Growing ~~P~~PGains



# Alcore Brigantine Enjoys Growing ~~P~~Gains

Nestled in the wine country of southwestern France lies Alcore Brigantine. As a subsidiary of The Gill Corporation, it has evolved into the European center of manufacturing excellence for 5-axis machining of specialty honeycomb for The Gill Corporation.

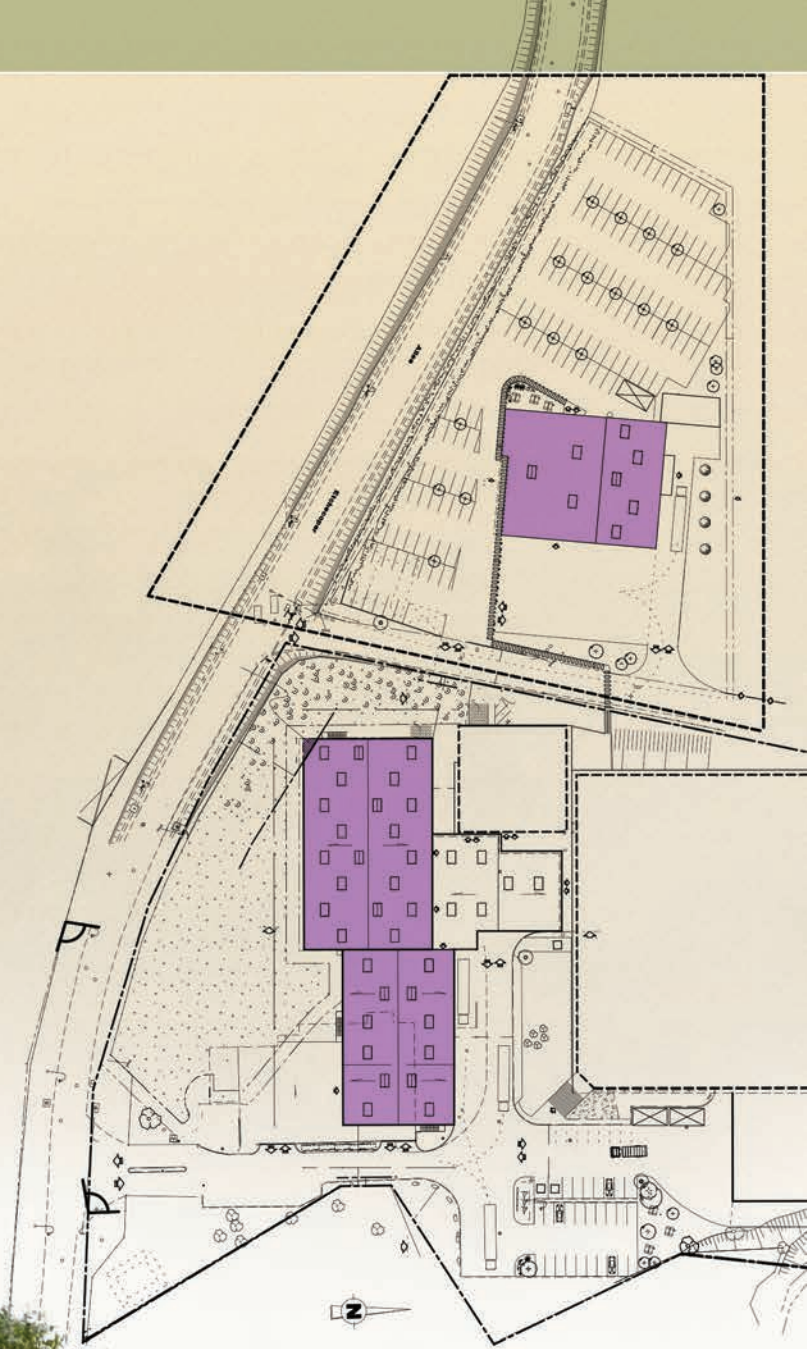






Alcore Brigantine offers broad capabilities in structural core materials technology in Europe, including aluminum honeycomb, with special processing expertise and an in-house design office. Alcore Brigantine manufactures sandwich panels from simple shapes to extremely complex parts and advanced aluminum honeycomb shock absorption materials used as a kinetic energy absorber for high-speed trains and automotive safety. Alcore Brigantine is the only company in Europe offering this range of capabilities and expertise in structural core materials technology and technical bonding.

In early 2013, senior leadership at Alcore Brigantine concluded that they would need significant additional manufacturing space, equipment and personnel to achieve their sales goals and meet future demand from their existing as well as new customers. They met with Stephen Gill, Chairman and CEO of The Gill Corporation, to present their findings and shared a proposal to address their needs. Stephen Gill reviewed the request with the shareholders and offered approval for the purchase of land, equipment and the addition of 45 new staff positions.



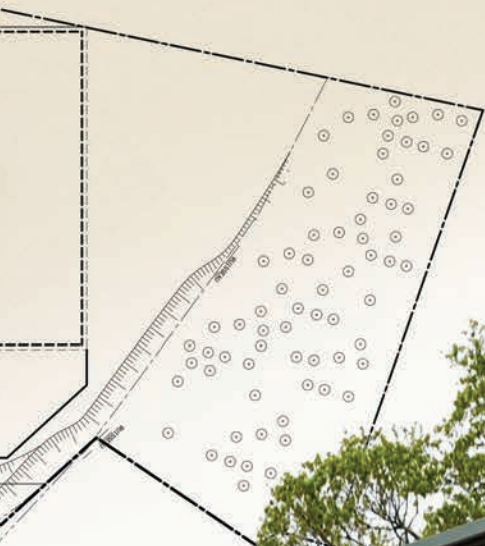


Phase one was the negotiation and purchase of the land adjacent to the existing facility. Securing this parcel was the most efficient way to increase production area without a major disruption to business.

Initial plans called for two separate structures to be constructed on the new property. The existing facility features an office, finishing/inspection and staging areas that adjoin the main manufacturing plant where Alcore Brigantine houses honeycomb and sandwich panel manufacturing, precision processing and shipping.

With its significant bonding expertise, Alcore Brigantine manufactures sandwich panels for the industrial market using a complete range of structural core materials. These panels incorporate a variety of skins: aluminum, wood, carbon, glass prepregs and more. Panels range from simple, basic shapes to extremely complex and technical parts.

For the non-aerospace markets, Alcore Brigantine has developed unique expertise in using aluminum honeycomb as a kinetic energy shock absorber. This broad familiarity with both commercial- and aerospace-grade materials is applied to help solve problems in aerospace, high-speed trains including the TGV, hazardous materials transportation, and automobile safety.





The first new building (ABB1) would be situated behind the manufacturing and office space leaving a broad area between the two structures for deliveries of raw materials, staging finished products and inspection prior to customer pickup.

The current industrial honeycomb group makes commercial-grade core. ABB1 will be dedicated to non-aerospace commercial-grade honeycomb core detail work and house new equipment and personnel. This includes sandwich panel manufacturing, precision processing and shock- and energy-absorption materials.





The ABB1 expansion includes:

1,200 sq meters (12,916 sq ft) of additional space

A chemical conversion unit for aluminum foil

A honeycomb stacker/printer

A hydraulic press

15 new employees for this space

This will allow Alcore Brigantine to easily handle the demands of the non-aerospace and peripheral markets for The Gill Corporation.



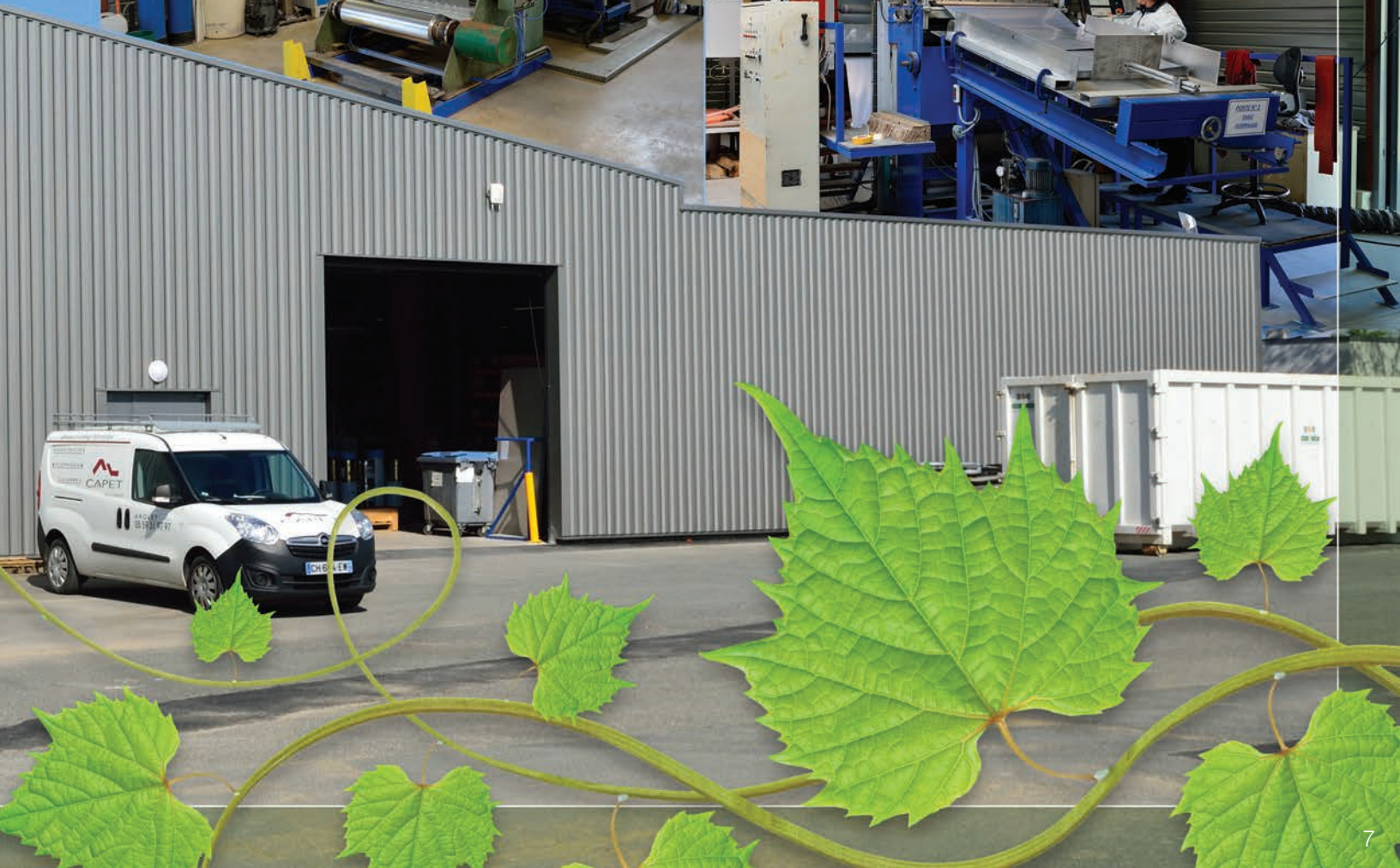
**Hydraulic press**



**Chemical conversion unit**



**Honeycomb stacker/printer**



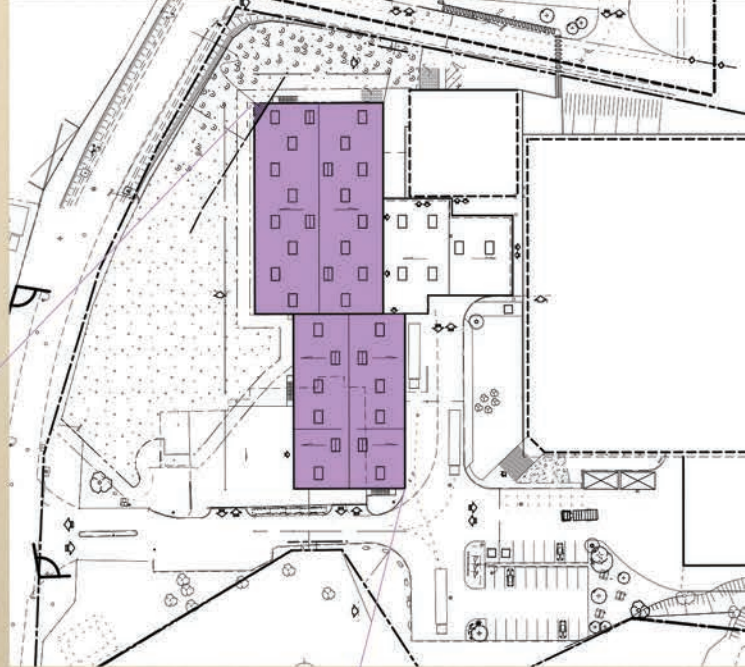


The second building (ABB2) will abut the large existing manufacturing plant. The existing plant is primarily dedicated to aerospace manufacturing, specifically machining of aerospace-grade honeycomb.

Upon completion, ABB2 will offer:

- 3,800 sq meters (40,902 sq ft) of additional space
- 5 new CNC 5-axis machines
- 2 new heat-set ovens
- New honeycomb block saw
- New testing equipment
- 30 new employees for this space

All of this so that Alcore Brigantine can further its ability to capture new business and provide customer-pleasing solutions.







**3,800 sq meters**



**5 new CNC 5-axis machines**



**New honeycomb block saw**



**2 new heat-set ovens**



**New testing equipment**



In 2009, we reported on the original manufacturing plant. The 2015 expansion project with state-of-the-art new equipment, new buildings and 45 new positions will directly impact our ability to serve our global customer base with:

Dedicated cutting, profiling and heat-forming stations

Dedicated presses for block curing, sandwich panel bonding stations

One 3-axis milling center

12 5-axis milling centers

6 hydraulic presses

2 panel saws

4 honeycomb block saws

7 heat-set ovens

Precision Process N03 (PP3) workshop for non-metallic honeycomb machining and forming.

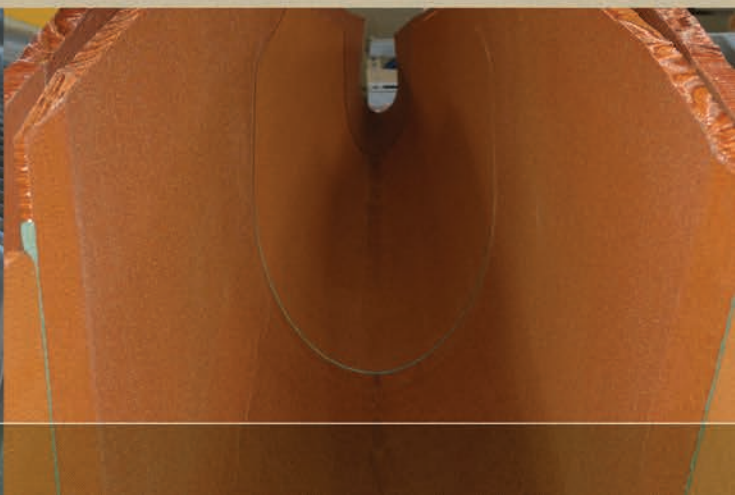
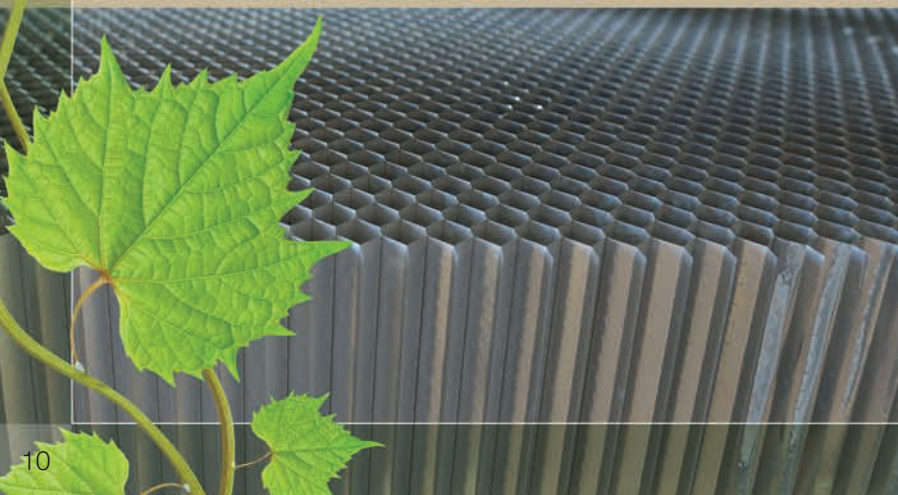
Contamination Control Area (CCA) workshop to process composite products in development, including thermal stabilization, forming, splicing and potting

Alcore Brigantine's diverse manufacturing capabilities are only matched by its strict adherence to quality standards. It has been NADCAP-qualified for Quality Systems and Composite Core Processing since 2006.

NADCAP is a worldwide cooperative program of industry prime contractors that governs precise standards used to measure the competency, capability and consistency of suppliers and associated products within the aerospace and automotive industries. Its mission is to provide international, unbiased, independent manufacturing process and product assessments and certification services to add value, reduce costs, and facilitate relationships between primes and suppliers.

In addition, Alcore Brigantine is ISO 9001:2008- and EN 9100-certified. The AS/EN 9100 certification was introduced in 1997 by the International Aerospace Quality Group (IAQG) to encourage international quality, safety and technology standards in air transport. The AS/ EN 9100 standard meets the complex and unique demands of the aerospace industry. The certification can be applied to all areas in aviation such as the design and manufacture of equipment, airport and airline operations, aircraft accessory supply, spares supply and maintenance.

AS/EN 9100 emphasizes areas that have the greatest impact on safety like management, verification and validation, process control, purchasing, inspection and testing, and control of non-conformances. The AS/EN 9100 certification enables an organization to demonstrate its commitment to quality, safety and reliability.





Clearly, Alcore Brigantine's broad skill set in both commercial- and aerospace-grade materials is an integral reason it earns new business while retaining an assortment of key customers such as Aircelle, core details for nacelles; Dassault, core details for the Falcon landing door; FACC, core details for nacelles; SONACA, slats; and Alstom, railway shock absorption on the TGV.

The folks at Alcore Brigantine are willing to endure the pain of a few months of noise and dust because they know that no pain – no gain.



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# THE FUNNY SIDE

## Things to Ponder

What if there were no hypothetical questions?

Is there another word for synonym?

Where do forest rangers go to "get away from it all?"

What do you do when you see an endangered animal eating an endangered plant?

If a parsley farmer is sued, can they garnish his wages?

Would a fly without wings be called a walk?

If a turtle doesn't have a shell, is he homeless – or naked?

Can vegetarians eat animal crackers?

What was the best thing *before* sliced bread?

One nice thing about egotists: they don't talk about other people.

If one synchronized swimmer drowns, do the rest drown too?

If you ate both pasta and antipasto, would you still be hungry?

If you try to fail, and succeed – which have you done?

Why is there an expiration date on sour cream?

## Engineering Conversion Factors

Ratio of an igloo's circumference = Eskimo pi

1 millionth of a mouthwash = 1 microscope

Time between slipping on a peel and smacking the ground = 1 bananosecond

Time it takes to sail 200 yards at 1 nautical mile per hour = knotfurlong

365.25 days of drinking low-calorie beer = 1 lite year

Half a large intestine = 1 semicolon

1,000,000 aches = 1 megahertz

Shortest distance between two jokes = a straight line

2,000 mockingbirds = 2 kilomockingbirds

8 nickels = 2 paradigms



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