

# ArianeGroup Support in selecting machining equipment

ArianeGroup called on Cetim to determine the machining equipment for the jet nozzles of the Ariane 6 boosters and to monitor the manufacture of these new items of production equipment.



© ArianeGroup

## OUR CUSTOMER

**Corporate name**  
ArianeGroup SAS

**Turnover**  
EUR 2.52 billion (in 2017)

**Workforce**  
9,000 people

**Business activity**  
Manufacturer of commercial and military space launchers. The group has eight sites in France (including the facility in Haillan, Gironde with 1,200 employees), four sites in Germany and one site in Kourou, French Guiana.

**W**ith the new Ariane 6 launcher, ArianeGroup has to thoroughly overhaul its production equipment at its Haillan facility close to Bordeaux (Gironde - France) where it designs and manufactures the components of the solid propulsion boosters for its rockets. The goal is to cut manufacturing costs in half and increase production speeds. In 2017, the company called on Cetim with a view to meeting this ambitious two-fold challenge. *“We entered into a contract for project management assistance with choosing two items of machining equipment, selecting a supplier and supervising the production of these items of equip-*

*ment until their acceptance,”* stated Arnaud Coupard, head of the facility’s “industrial equipment-solid propulsion cluster” department.

## Selecting a supplier

The first step was choosing the supplier of two vertical lathes used to produce the large-sized composite parts (up to 3,000 mm in height and 2,500 mm in diameter). Consultation specifications were drawn up for each machine, then sent to approximately fifteen potential suppliers worldwide. This study phase served to identify five manufacturers which were then cut to three. Ultimately, the final selection was made by ArianeGroup in February 2018.

## Monitoring the production of the equipment

Cetim then undertook the second stage: careful monitoring of the production of the equipment until acceptance of the lathes at the customer’s premises. At the same time, the centre created a 3D virtual machine for each lathe to check, via simulation, based on CAD files of the parts and ArianeGroup CAM software, the absence of collision between the part, the tools and the cutting tools, before any machining. *“Cetim’s expertise in machining and machine-tool technology provided us with significant technical and operational support. Another advantage of this support is that we had only one single point of contact from the needs analysis stage until acceptance of the machines,”* added Arnaud Coupard.

## Getim's asset

Cetim draws on its multidisciplinary expertise to provide support to industrial manufacturers in the development of their products and equipment.

