Excellence in the
Companies’ Expertise

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For several decades now, the KaliStrut Aerospace company, on the banks of the River Rhône, has been designing and producing vital mechanical elements, in this case connecting rods, for both fixed and rotary wing civil and military aircraft.

Higher energy costs, respect for the environment, use of new technologies, continuous exponential increase in the number of passengers to be transported, all evolve the de facto construction of thousands of new aircraft over the next few decades. The aeronautics sector is once again confronted by new issues.

Achieving this aim implies that the great construction companies and the equipment manufacturers who assist them will be able in turn to count on industrial partners who can be depended on through any ordeal, who are capable not only of supporting them on a daily basis, but also of projecting into the future and following them through new programmes.

Their expertise in this discipline and the business model they have set up make them worth considering as leading partners by all the aeronautics construction and equipment companies, for whom the Drôme SME displays solutions optimised to meet their numerous demands and to grow their markets.

Ever bigger, ever faster, ever more numerous, ever more comfortable, not to say luxurious, and also ever more affordable, and especially, ever safer. In a word, ever more advanced. Wherever they may come from and wherever they may be going to, the thousands of planes that now cross the skies at various heights in every direction have little in common these days with the aircraft that came before them. And, very likely, they have little in common with the ones that will follow them in years to come.
There is nothing random about the company’s name KaliStrut. It came from a collective decision made by all the employees.

And this as much from the point of view of quality as quantity, and what is more, with strict regard to the deadlines imposed by specification documents, which only goes to add to the complexity that is there in no small measure already. This Drôme-based SME, KaliStrut Aerospace, is one of those industrial partners most in demand, and for good reason. Within their chosen domain, the design and manufacture of connecting rods for both structure and motion, they are the unrivalled specialist. Their precedence in the field gives them authority to the point of making them key players, as indicated by their industrial knowhow, their organisational chart, and the social and environmental policies they follow.

“There is nothing random about the company’s name KaliStrut. The prefix Kali, from the Greek, means ‘good’, with the suggestion of quality, and the word Strut is a synonym in English for a connecting rod. Whether at the level of production or of administration, everything here is done with the aim of achieving that objective, even going beyond, to achieve whatever our customers assign to us, like Airbus Group especially, one of our customers going back a long way, with whom we maintain commercial and industrial links that in reality are more characteristic of a partnership than merely a customer-provider relationship. We are a very big contributor to the A380 model, and we supply complete ready-to-install kits for their best-selling A320, direct to the just-in-time assembly lines. We are proud to have been awarded ‘Best Performer’ three years running by Airbus”, smiles Sylviane Grimaldi, the managing director.

Seven decades’ worth of industrial expertise in aeronautics

The manufacture of connecting rods for civil and military planes and helicopters is in fact the historic core business of this SME, member of GIFAS (French Aeronautics and Space Industries Group) for nearly 40 years. In their workshops on the Drôme side of the Rhône, they have produced and marketed connecting rods, at first under the brand name SARMA, then under the KaliStrut brand. These are aimed at providing for two major families of functions and applications which are found in the end in every area of an aircraft.

“We make connecting rods that are used for fixing various units in the plane, such as electrically operated lockers, water tanks and air-conditioning pipes, or for load transmission such as thrust connecting rods and floor supports. We also make connecting rods for transmitting movement, such as in flight controls, door activating mechanisms, landing gear and the moving parts of the wings”, summaries Sylviane Grimaldi.

One of the company’s strengths rests on the industrial business model it has put in place, which ultimately enables it to keep control of its delivery deadlines and to make the most of its flexibility in line with the fluctuations in activity while reinforcing the experience. This is based on the 3 pillars of vertical integration, lean management, and continuous improvement.

Excellence in the Drôme
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Whatever the part number on the order sheet, however many parts have to be made, and whatever material they have to be made from (aluminium, steel, titanium or inconel), our production plant is up to the job, fitted out and equipped so as to enable us to carry out inhouse the majority of operations necessary to obtain the final product, given that connecting rods are specific to each aircraft programme. We have become expert at producing highly specialised solutions, such as, for example, hot swaging, a technique we have invested in heavily over the last few years. We also have a machine that is the only one of its kind in the world, which allows deformation of materials under very high temperatures, enabling us to gain time and guarantee the long-term mechanical properties of our products, thereby measurably boosting our competitiveness.

From initial conceptualisation of the product to site delivery, KaliStrut Aerospace thus offers worldwide service provision to its customers, whether this relates to hot and cold forging, heat treatments, machining and various surface treatments, via (obviously) the essential and panmating operations of non-destructive, destructive and product quality controls. “We provide inhouse dye penetrant inspection, magnetic particle inspection, eddy current testing, ultrasound testing, loading tests and metallography”, emphasises the managing director of the site, whose office is next to a display unit which enthrones the numerous awards of distinction from the company’s customers relating to performances obtained in terms of quality and meeting delivery deadlines.

A valid social and environmental model

As attested to by the numerous certifications attributed to it, the Drôme company has also set up a particularly pro-active social and environmental policy, which should enable its activity to go on, as well as confirming its links with its customers, motivated for the most part by the same intentions and attentions.

“Notwithstanding the dynamic of our markets, our growth can only be profitable and durable if we rely on the expertise of our teams and our capacity to limit our energy consumption and volume of waste”, Sylviane Grimaldi asserts. While it rests on the installation in all the workshops of lots of tools that allow us to follow the progress of production in real time, using indicators and charts, management gives prominence to individual and collective initiative and aims to keep as close as possible to the ground. “We try to release people’s energies and manage to get everyone involved in the smooth running of the company. People here don’t have to stand still, on the contrary, they can be engaged in the production flow and be a driving force of suggestions, knowing that all ideas are interesting from first principles, perhaps because they come from people who are in contact with reality.”

In the end, the number of trump cards it holds make KaliStrut Aerospace the European leader in its sector of activity, and the accredited provider to the big names of aeronautics. The French companies Airbus, Dassault and Sfahan, the UK company British Aerospace, the Italian company Leonardo (formerly Agusta-Westland), as well as the Canadian company Bombardier, the Brazilian Embraer, the Indian HAL, the Chinese AVIC, to cite just a few, also put their trust in KaliStrut. Its strategy of being the best solution provider with high added value in the domain of transmission of work and motion can only assert this “premium” positioning and give it access to new markets.

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