

LE CATTIN

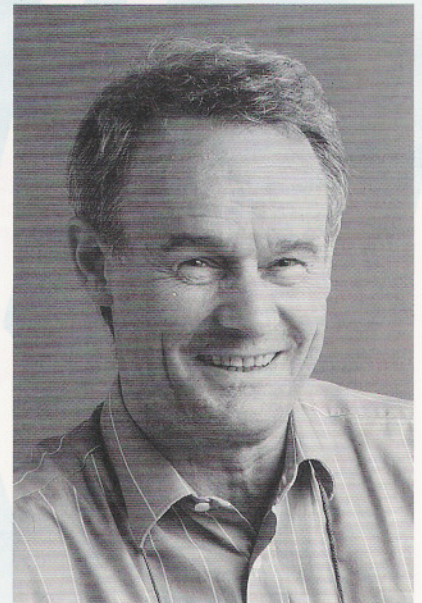
JOURNAL D'INFORMATION CATTINAIR N° 4

é d i t o

Pont de Roide: along the Doubs river, between two mountains, the Jura and the Vosges, South of Alsace; ... close to Switzerland and Germany.

Cattinair has chosen its labor resource from this land, known for its quest of quality, organization, and efficiency. Its workers have researched and developed a machine using the principles of rotation, vibration, abrasion with mechanical, pneumatic and hydraulic components. This machine, which first looked like a submarine, was marketed in 1986. It is currently a space shuttle which reached its target 140 times in a technological market niche. Its peculiarity and uniqueness motivate Cattinair sales task force traveling all over Europe and the world.

Finally Cattinair became the unique and un-challenged leader of the wood chair sealer sanding. In that regard, Cattinair was recognized in February 21, 1991, in Pont de Roide, the 140th French member of the "Club of the Number Ones at Exporting".

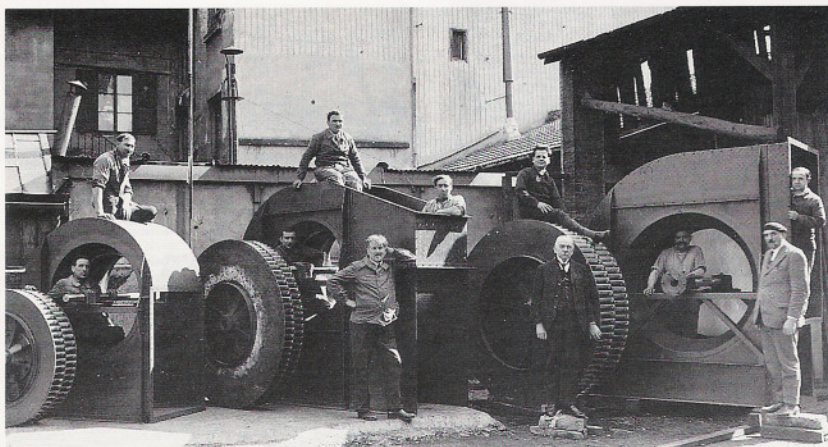


OPPORTUNITY



The former BOUCHET LANAT Company founded early in the century considerably gained abilities in Aeraulics, expanding their influence to the pollutant industries within the Lyon area in particular.

During the 70's, Cattinair formed a joint venture with the Bouchet Lanat company. The latter was founded early in the century. Highly recognized in the Lyon area (the second largest city in France), Bouchet Lanat had an expertise in air flow handling. Bouchet Lanat then based its development on the cyclofilters technology and the piping normalization, following Cattinair's strategy. While both companies competitively created and manufactured dusting equipment, a dependency was created between the two companies. The successful joint venture then was turned into a merger when the Bouchet Lanat chairman retired. To consolidate the operations of both companies, a sales and research office was opened in Lyon, followed by a production facility. A new plant was built in Meyzieu, replacing the old facilities in Villeurbanne, while the marketing department was moved to a pleasant office complex at 76 cours Tolstoi in Villeurbanne.



The location of Villeurbanne near Lyon was an asset in attracting highly qualified commercial and international personnel, needed to expand the second Cattinair department: the flat finishing technology. Finally, a showroom

with a finishing line was opened for tests.

That was five years ago... Since then, our facility in Villeurbanne has welcomed customers from every continent.

A TEAM TO SERVE YOU

IN EUROPE:

The team members of the export department are:

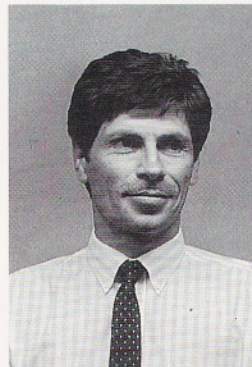
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tel: 81 32 68 81 fax: 81 32 68 89 tlx: 360 752

IN NORTH AMERICA:

Christian DE POLY is in charge of our subsidiary CATTINAIR CORP. fully equipped with our line of machines. You are welcome to process your own parts and finishing materials in our CHARLOTTE showroom located at 8334-J Arrowridge Blvd CHARLOTTE, N.C. 28273 tel: 704/ 523 0300 - fax: 704/ 523 0200.



Yves CATTIN



Pierre-Louis GIRAUD



Jean-Luc BLANCK

RELOCATION TO PONT DE ROIDE (Eastern France)

Cattinair's leading position in the industry, as illustrated by the Chair Sealer Sander success has influenced the decision to consolidate the marketing and production structures.

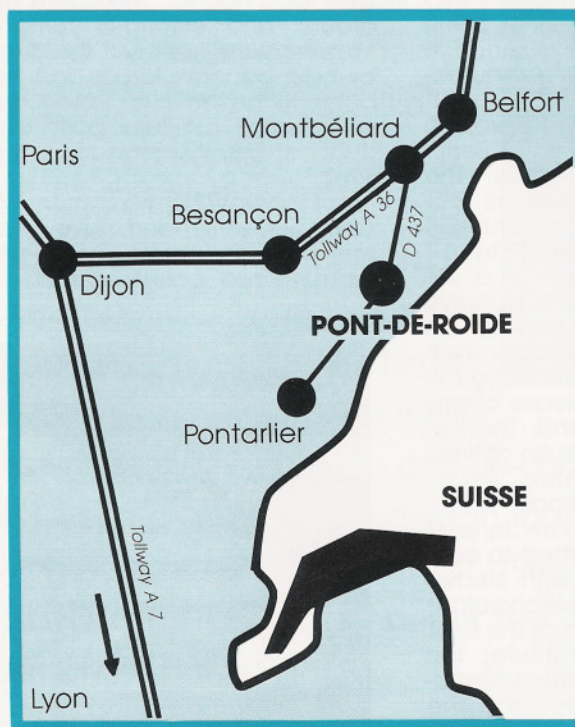
Another influencing factor was the recognition by Cattinair of cultural differences between each country and the need to offer adapted machines to the need of each customer.

The decision-making process and the strategic choices ought to be flexible. A synergy is needed between the market needs expressed by the sales force, and the available technological resources expressed by the research and development efforts of Cattinair.

In order to better link the marketing with the research department, the logical decision was to consolidate both at Pont de Roide. Prototypes developed in Pont de Roide would then be easily integrated in the showroom.

Pont de Roide, between two mountains, the Vosges and Jura, at the border of Germany, and at the center of the 1992 Europe, is ideally located to consolidate all research, development, international marketing operations in addition with several agencies marketing at the French market. A sales and administrative office has been created at 48 Rue de Besançon, in Pont de Roide, and was opened in December 1990.

To meet the ambitious research and development program that Cattinair started in Spring of 1990, the Pont de Roide factory is being enlarged. A new prototype room, and a showroom, twice as large as the current Villeurbanne showroom are being built. Both facilities should be completed by the End of 1991.



PONT DE ROIDE
located:

- 100 km from the Basel airport
- 15 km from the Swiss border
- 90 km from the German border
- 320 km from Lyon
- 500 km from Paris
- 180 km from Strasbourg
- 180 km from Lausanne
- 220 km from Geneva
- Town with direct access to tollway A36.

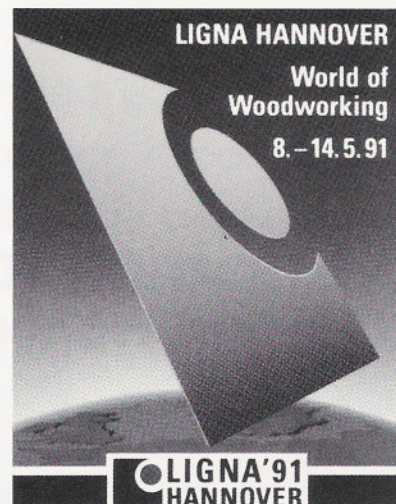


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To present you with our latest developments:

- 2 automatic spray machines redesigned from scratch, with total gun tracking systems, exceptionally efficient filtration and other innovations you must be aware of
- 3 automatic denibbing machines, for panel, millwork and chairs,
- 2 cyclofilters in compliance with European Dust Collection standards.



CATTINAIR CHAIR SEALER SANDER'S DEVELOPMENT



In an effort to modernize the furniture industry, the company Bertin, in 1981, accepted to conceive a machine automatizing the chair sanding process which was still manual, dusty, irregular and non-motivating. After extensive research, the company conceived a drum filled with abrasive glass beads, and vibrating along an horizontal axis. After a few unsuccessful tests with several chair manufacturers, Bertin requested Cattinair's expertise in finishing equipment manufacturing. Cattinair accepted to put its resources into that project, and in 1985 patented with Bertin the Chair Sealer Sander. The solution found by Cattinair was to incline the rotative drum. It had two advantages. First, it suppressed the need for a second drum holding the abrasive beads. Second, it created an extensible and retractable shaft facilitating and automatizing the air clamping and release of any chair at the shaft end. The last step was to determine an optimal inclination for the drum.

The first Bertin-Cattinair prototype was marketed late June of 1985 and was submitted to continuous tests along with studies from highly qualified technicians from associations such as the C.T.B. (Wood Technology Institute), the U.N.I.F.A. (French Furniture Manufacturers Association), and the A.D.E.P.A. (Development Agency for Applied Robotic). In September of 1985 a second patent was written while a second prototype was manufactured with an hydraulic group and a programmable control unit. The drum inclination was reduced to maintain better dust cleaning of the beads. The

drum was lengthened to be able to sand chairs with high backs. Finally, the machine was constructed in one compact block for an easier and more economical way of transportation (truck, train or container) and for an easier set-up and start-up.

In January of 1986, 12 Chair Sealer Sanders were manufactured to meet the French furniture manufacturer's demand. A third prototype was studied. The same hydraulic and electro-pneumatic features were kept but the drum cylinder became larger and less deep to be able to sand chair arms, small furniture parts and larger chairs. It was marketed in 1987.

As of early 1991, more than 140 Chair Sealer Sanders have been sold worldwide, especially in highly industrialized countries such as

Germany, and Japan. The market is expected to expand along with wage increases in Europe, the United States and Asia.

Cattinair is pursuing its research programs. It aims at developing an automatic sander which would avoid manual bare-wood sanding, an operation more delicate, time and labor-consuming than sealer sanding. The existing market for it is already large.

