

## New market for Silver fir products (LVL)

### Introduction

Silver fir is a species for which it is important to find markets with added value. Numerous works, carried out by the Auvergne inter-professional association (FIBOIS AURA), on this species have shown that there are potential outlets for peeling as well as for small sections; thus reducing the difficulties associated with drying.

### Methodology and results

A first meeting was organized for the entire forest-timber sector to present the work previously carried out on the manufacture of plywood and LVL (Laminated Veneer Lumber) in order to encourage volunteers to go further on a common project. The objective being to continue work on the LVL in silver fir with the aim of validating the achievement of the expected quality and perhaps manufactured in Auvergne.

This meeting allowed the partners to clearly express their fears and expectations regarding the project and to better define the contours of the action program:

- Shared interest in a new product within our reach;
- Difficulty unwinding large and very large fir wood;
- Need to scan the veneers to know the density and quality and carry out the sorting necessary for the manufacture of LVL;
- Need for a share of business self-financing;
- Role of the interprofession to collect, in complete confidentiality, comments, interests and wishes for each person to continue the study.

After numerous discussions, two companies in particular took on the project and were thus supported by the Auvergne Promobois inter-professional association (FIBOIS AURA): Company C.B.D and Company Scierie Borie.

**Search for a new peeling company and partnership agreement:** For the project, it was necessary to find equipment capable of peeling very large fir wood with diameters of up to 1.20 meters. Only exotic wood peelers

are able to meet this demand and there are few of them on French territory. Thus the TOUBOIS Company located in Chasseneuil sur Bonnieure (16260) was contacted and a partnership could be established.

**International market study:** An international market study was carried out on the basis of specifications and the search for service providers.

**Choice and harvest of silver fir trees:** The specific needs for the wood to be harvested have been defined. Then cutting plots were visited and the wood marked with the sawmill technicians according to quality needs.

**Selection of silver fir logs, followed by peeling and veneer:** The fir logs are classified upon their arrival at the park in the sawmills. The identified and sorted logs are then transported to the peeling company TOUBOIS.

**Monitoring of veneers and LVL manufacturing:** 2000 veneers were selected and sent from the TOUBOIS company to the Raute company in Finland.

Each stage of LVL manufacturing was followed and analyzed together with the heads of partner companies:

- Veneer scans; - Design of the “millefeuilles” making up the LVL panels; - Gluing and manufacturing of LVL panels;
- Cutting samples for in situ tests and for the laboratory; - Glue resistance tests at Raute company.

## Lessons learned



The first difficulty was finding companies willing to take on such a project. Given the ambitious objectives of creating an industrial LVL production unit, the commitment of entrepreneurs took place in a delicate context without a regional industry. Experimentation and testing of LVL product samples demonstrates here that Auvergne silver fir veneers are technically suitable for the manufacture of LVL panels. The production of LVL always requires careful planning of the constitution of the "millefeuille" of the panels with sheets of adequate density. The market study validated the export potential essential to this project. The project has been approved in full and has entered its industrial development phase belonging to the two partner companies.

The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

## Further information

[www.fibois-aura.org](http://www.fibois-aura.org)



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