

Introducing LVL by Stora Enso

Division Wood Products



The investment in the LVL production is a strategic move to meet growing urban construction needs, serve new geographic areas and markets, and offer customers a broader portfolio of wooden solutions.

LVL is an abbreviation for laminated veneer lumber

In 2015, Stora Enso announced the investment of EUR 43 million in a new production line for wooden building elements in Varkaus, Finland. The LVL (laminated veneer lumber) production line is the most modern of its kind with estimated yearly capacity of 100,000m³. The production has now started and the first products were delivered in June 2016.

LVL by Stora Enso is an advanced structural wood product that suits various end usages and can be fully combined with other building materials. Being one of the strongest wood-based construction materials relative to its

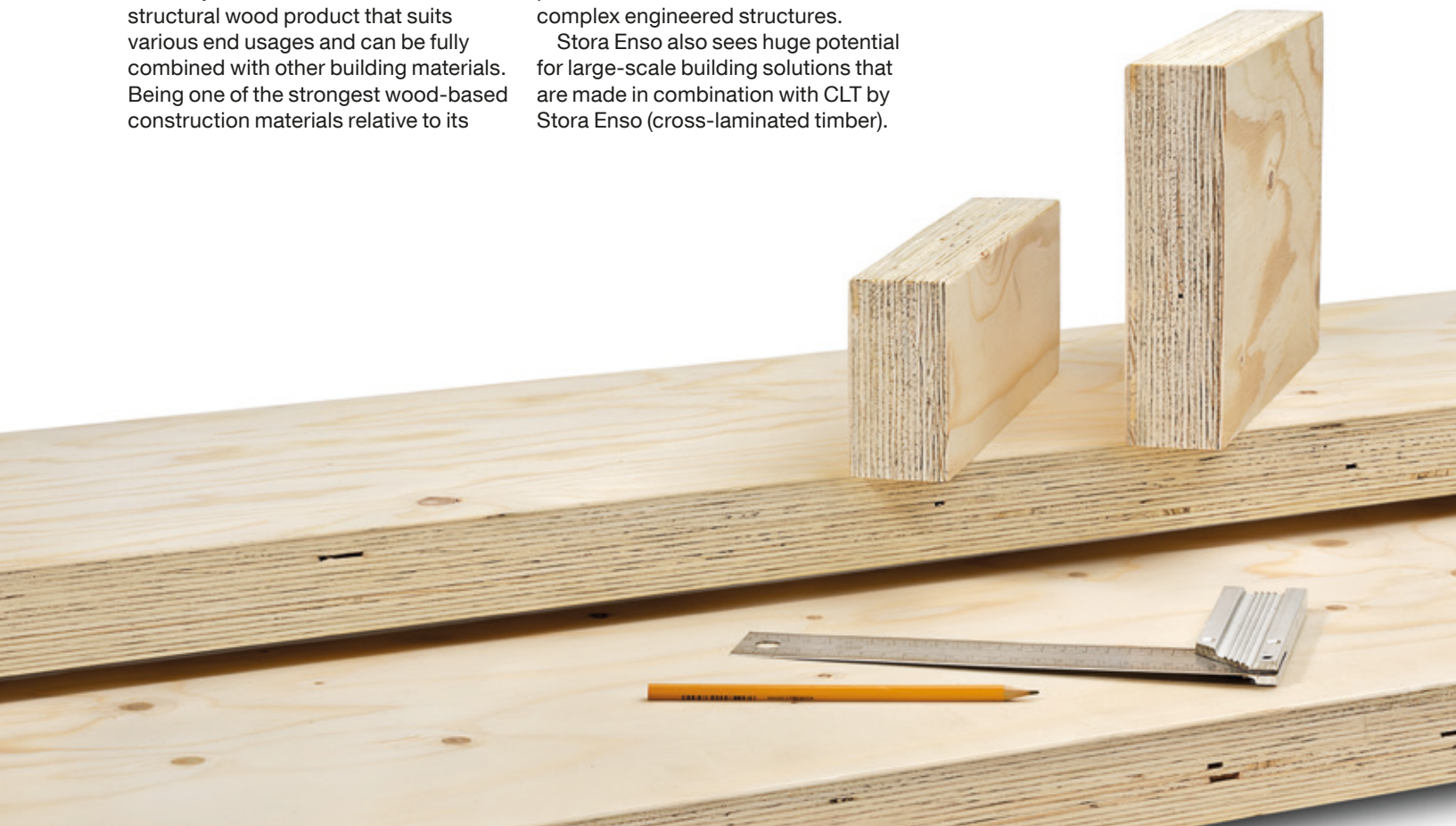
weight, LVL provides an ideal solution when strength, dimensional stability and high load-bearing capacity are essential.

Typical applications range from I-joists, posts and beams to roof trusses, wood-frame construction and prefabricated building elements. Modern solutions can be found in vehicle and shipbuilding industry, wind power installations or even in other complex engineered structures.

Stora Enso also sees huge potential for large-scale building solutions that are made in combination with CLT by Stora Enso (cross-laminated timber).

Benefits of LVL

- Light but strong
- Homogeneous and uniform quality
- Dimensionally stable, straight and no warps or twists
- Easy to work with
- One of the biggest billet sizes in the market (24m x 2,5m)





Greater efficiencies with the best of modern technologies

LVL is based on peeling technology: logs are rotary peeled into 3mm thick veneers and bonded together under heat and pressure. Every sheet of veneer is individually measured in terms of density, moisture content and modulus of elasticity to optimise the product performance. Sheets are then re-glued into a continuous billet on the most advanced production line built to date.

Standard products

LVL by Stora Enso will be available in following qualities:

- **T grade**, best suitable for wall studs
- **S grade**, best suitable for beams
- **X grade**, cross-laminated veneers, best suitable for construction panels and boards.

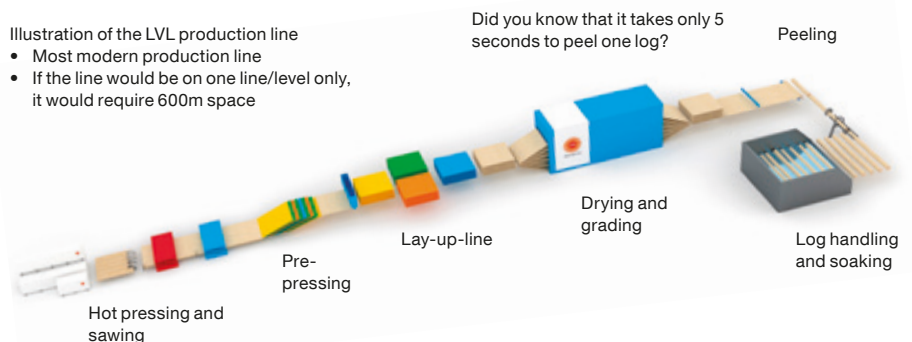
Continuous improvements

Stora Enso as a company is continuously working in the field of R&D in order to further improve our product portfolio enabling us to build wooden future with our customers.

When the LVL line is up and running

Illustration of the LVL production line

- Most modern production line
- If the line would be on one line/level only, it would require 600m space



we expect to expand our product line, improve production efficiencies and utilisation of resources. This will result in optimised costs and enhanced product and service performance.

Wider economic impact

Once in the full run, LVL investment will create some 80 new jobs at Stora Enso, and over 150 jobs overall in Varkaus region, including employment with providers of wood procurement and logistics services. All in all, together with the newly opened kraftliner production, the renewed Varkaus mill

directly employs some 400 people and the estimated total employment impact for the region is 1 600 FTEs. In addition, the new lines will annually need about two million cubic metres of wood, mainly sourced from the surrounding region.

Find out more:

www.storaenso.com/woodproducts
www.storaenso.com/lvl
www.facebook.com/storaensolivingroom