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# **Eltomation BV**

**Barneveld, the Netherlands**

## **Innovative Production Technologies in the field of Wood Cement Boards**

**Bert van Elten, CEO**

**IIBCC Suppliers' Day**

**November 15, 2022**

# Eltomation BV

Barneveld, the Netherlands

- 65 years in business
- Supplier of turn-key wood-cement board production plants
- Leader in this field of technology
- Over 160 plants and systems installed in over 35 countries

## **Various Wood Cement Boards:**

- **Wood Wool Cement Board – WWCB**
- **Medium-density Wood Strand Cement Board**
- **Large WWC Wall Elements**
- Wood Residue Cement Board - WRCB
- Cement Bonded Particle Board - CBPB

# Wood Wool Cement Board (WWCB)



# Wood Wool Cement Board

## Applications

- Acoustic & fire-resistant (ceiling) boards
- Decorative WWCB
- Roofing boards
- Permanent Shuttering & Construction boards
- Sound barriers

Details on Applications and Sustainability are presented in the Full Paper Presentation

**Wood Wool Cement Board**

**Production Technologies**

# Eltomation Wood Wool Cement Board production plant





Small diameter soft woods (such as Pine, Spruce or Poplar) are received, debarked and stored in the wood yard.



Debarked logs are cut  
into 50 cm long blocks  
for transfer to the  
Eltomatic  
Wood Wool Machine



Wood Wool is transferred to the Mixing Group, where the proper amount of water, cement and additives will be added



Cement and additives are precisely dosed into the mix





Overview of  
modern  
WWCB Plant  
with  
Main Forming  
Line below





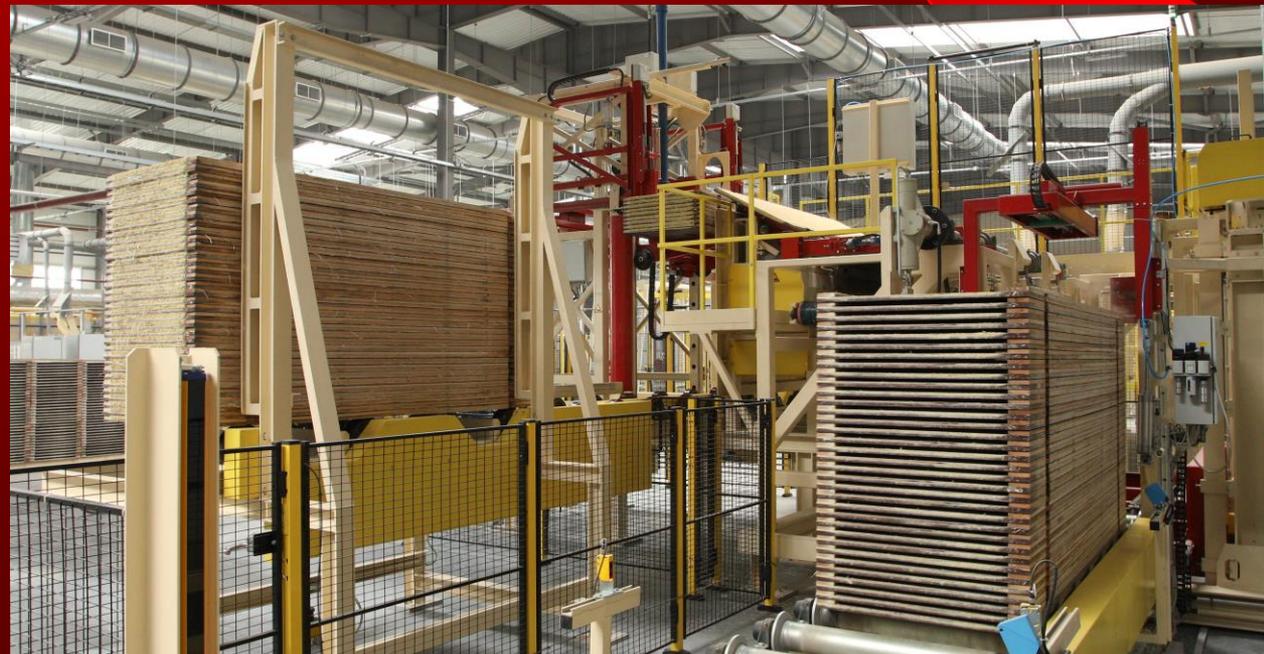
The fresh WWCB mat is cut into proper lengths, whereafter the moulds are stacked for transfer to the First Setting Area





First Setting Area  
for initial 24 hour  
curing of the  
fresh boards

The boards are  
released from the  
moulds in the  
Automatic  
Demoulding  
Machine





Second Setting Area  
for further curing of  
the boards

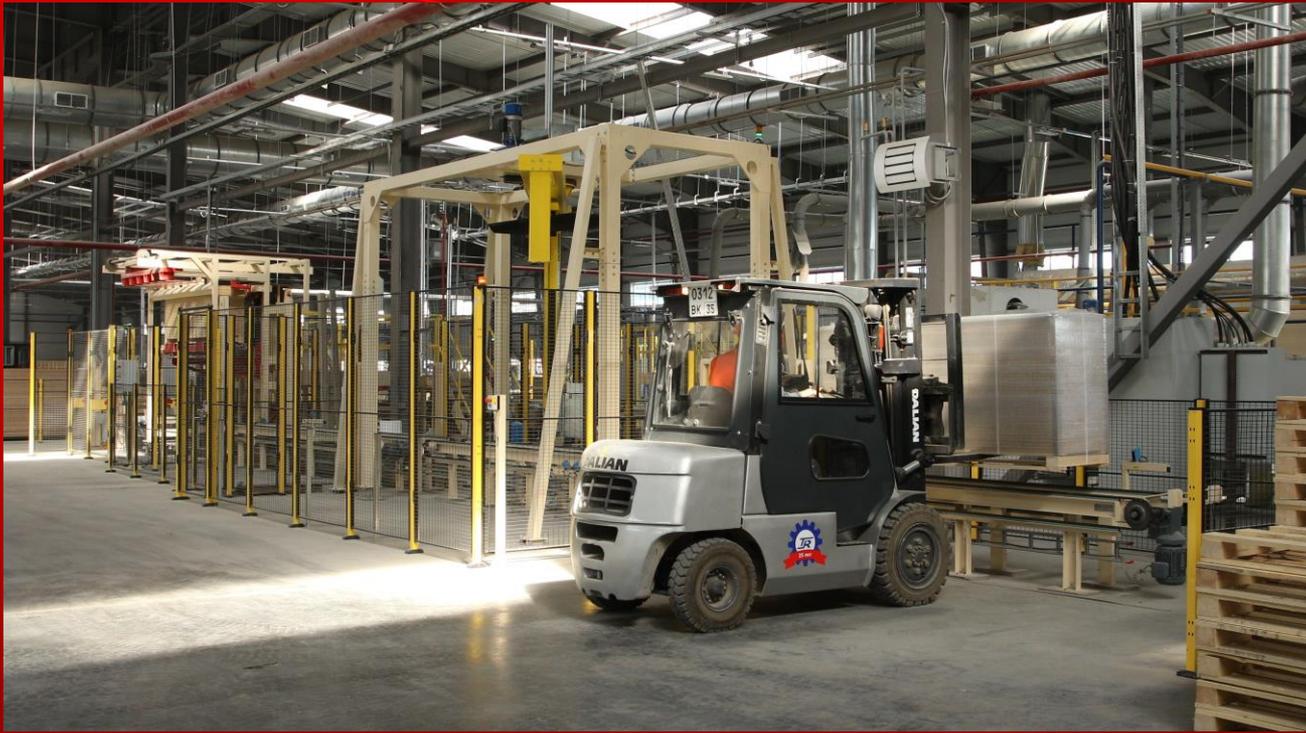
Boards are  
transferred to the  
Automatic Board  
Dryer





Boards are cut  
and profiled to  
the proper  
dimensions and  
spray-painted





Followed by  
proper  
packaging  
and truck  
loading



## Configuration WWCB Plant:

- Board dimensions: 600 x 2000/2400 mm (or 2' x 8')
- Thicknesses: 10 / **15** / **20** / **25** / 35 / 50 / 75 / 100 mm
- Optional 2 or 3- layer Composite Boards (up to 150 mm)
- Line speed: 20 m/min. (1 board per 7 sec.)
- Plant capacity: 4.000 m<sup>2</sup>/shift (up to 2 Million m<sup>2</sup> per year)
- Raw material ratio: 33% ww : 22% water : 45% cement
- Labor: 8 operators/supervisors per shift

# WWCB Producers and brands (Europe)



# Geographic overview WWCB Plants

- **(Western) Europe:** some 20 lines operational
  - Plant capacity: over **20 Million sq.m. per year**
  - Turnover WWCB: **200-300 Million Euro per year**
- **Russia:** 3 modern lines supplied in recent years
- **China:** 8 modern lines supplied in recent years
- **North America:** new lines under development
- **Asia / South America / Africa:** WWCB virtually unknown, potential for Mass Affordable Housing

# EltoBoard

Medium-density Wood Wool Cement Board





EltoBoard Press at combined EltoBoard/WWCB Plant

# EltoBoard

- Density: 700-1100 kg/m<sup>3</sup>
- Bending strength: 12 Mpa
- Modulus of Elasticity (MOE): 2000 MPa
- Fire rating: B1 (optional A2)
- Board dimensions: 600 x 2000-2500 mm
- Board thickness: 10 - 40 mm

# Large WWC Wall Elements

developed by

**Träullit A.B., Sweden**

Main dimensions:

- Thickness: 300 – 500 mm
- Height: 2,8 – 3,0 m
- Length: up to 6 m





Artistic Impressions

Large Element Plant

Eltomation  
Wood Cement Board Plants



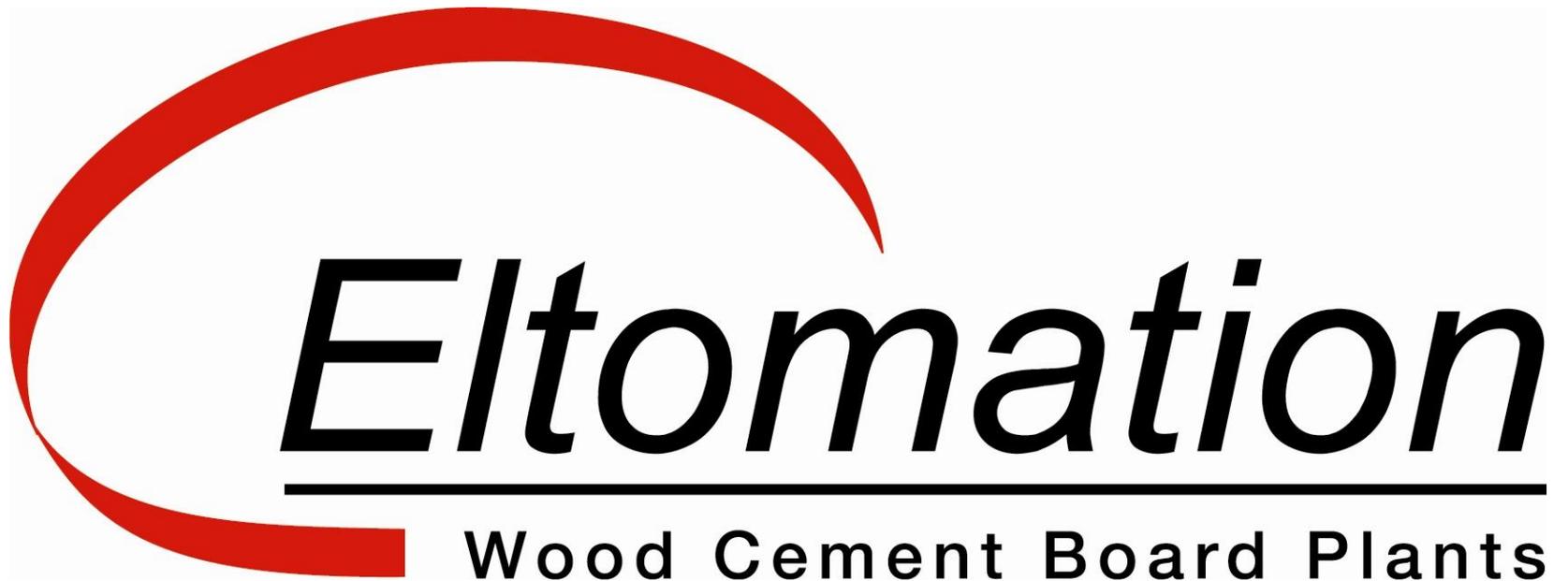






For detailed Applications  
on Wood Cement Products  
and  
new developments  
on Sustainability,  
please review the Full Paper

Thank you for your attention



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