

# The commercialisation of wood acetylation and the market challenges involved

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#### **Corporate Background**



- Titan Wood Limited was formed on April 17th 2003 by Accsys Technologies PLC
- From 2003 2006 technology development and design of a large scale production plant
- 2006 2007 construction of the plant
- 2007 production commenced

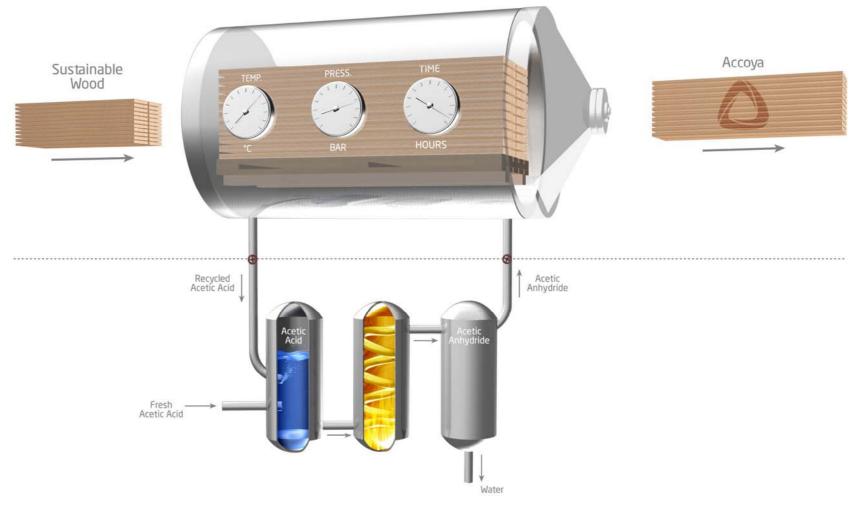
 This is the world's first plant producing acetylated wood on large scale at a commercially viable cost





#### **Acetylation process**



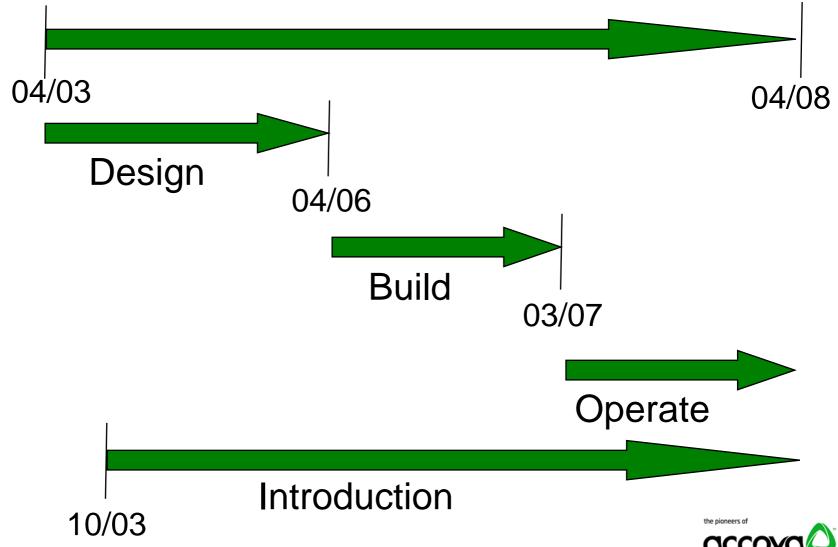






#### Time frame for commercialisation







#### Path to success



- Certification of process
- Certification of product

No European standard for wood modification!

Acetylation is 'new in the industry'

Example; durability





#### **Quality assured**











Foto: Titan Wood





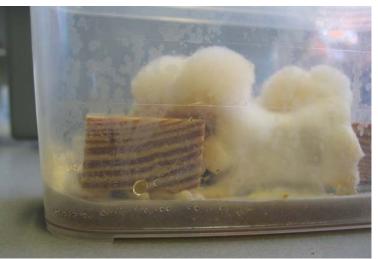
#### **Durability**



- 1800 samples in EN 113
- Low up to high acetyl

 What acetyl % is needed to reach durability class 1 with most aggressive fungi

Same for ENV 807



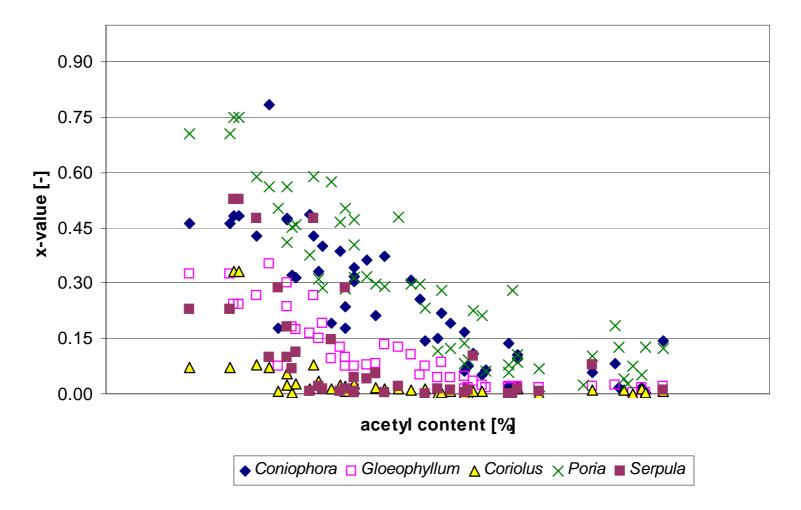






#### Resistentie klasse 1



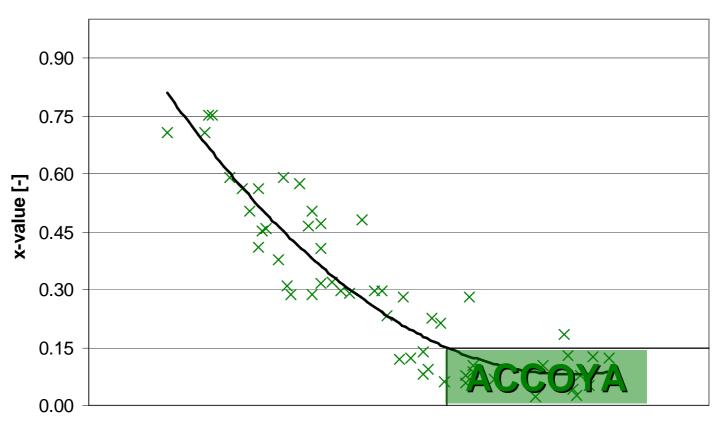






#### Resistentie klasse 1





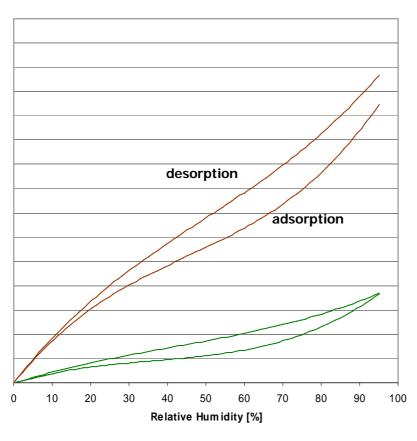
acetyl content [%]

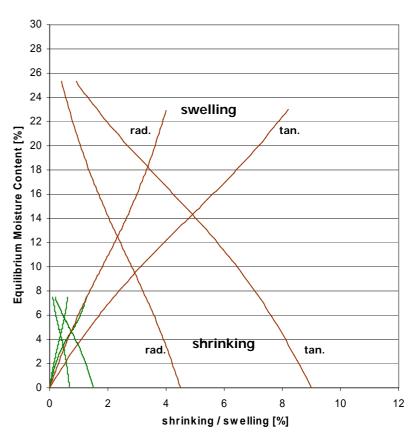




#### Accoya<sup>™</sup> – meranti (red)











#### **UV** stability









#### Path to success



- Have small core group of customers
- Involvement of branche related companies such as coating and glue producers
- Run testprograms upfront commercial stage
- Work together to optimize end-quality
- Guidance and support
- Monitor building sides
- Evaluate projects with the parties involved





#### **Decking**







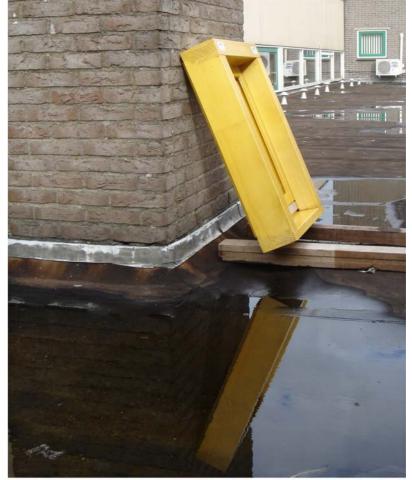


#### **Windows**





Helwig, Geleen









#### **Cladding**







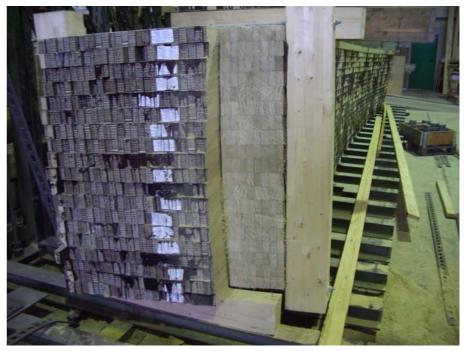




#### **Constructions**











#### Machining, Gluing, Fabricating

















#### **Information**









#### **Acetylation plant**



































































































































































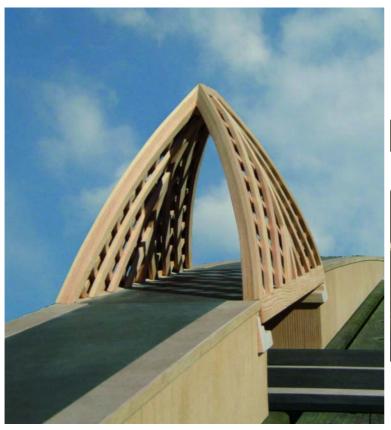




















- Follow projects
- Monitor them during building period
- Have evaluation sessions with all parties involved
- Work consistently to improve end-quality





















#### Thank you for your attention





