Acceptance for deformation of dried sawnwood: A survey among practitioners in Norwegian sawmilling

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Introduction

Two new domestic technical specifications for interior panelling and exterior cladding

The introduction of new production standards does often pose problems

A survey was conducted to find possible challenges for the new grading rules
Grading rules and standards in Norway

Sawnwood:
• Gröna boken - late 1800s
• ØS-reglene - 1930s
• Nordic Timber - 1994

Structural timber:
• NS-INSTA 142 - 1997

Interior panelling and exterior cladding:
• NS 3180 - 1976
• SN TS 3183 and SN TS 3186 - 2008
Survey design

Personnel from Norwegian sawmills

Number of respondents: 31

58 % where between 45-59 years

65 % had more than 15 years of experience

Cup:
- interior panelling
  - 0.0 %
  - 0.8 %
  - 1.3 %
  - 2.4 %
  - 2.5 %

Twist:
- 1 mm
- 3 mm
- 5 mm
- 10 mm
- 33 mm

exterior cladding

0.5 %
0.5 %
1.1 %
2.5 %
2.1 %
Results standards in use

Which standard/standards does your company use in grading?

INSTA 142 is most commonly used

SN TS 3183 and SN TS 3186 is not yet implemented
Results cup: Exterior Cladding

Which of these cladding samples do you think have to much cup to be suited for a cladding?

Acceptance were according to the new technical standards
Results twist: Exterior Cladding and Sawnwood for Construction

Which of these planks do you think have too much twist to be suited as raw material for structural timber?

Which of these planks do you think have too much twist to be suited as raw material for cladding?

Acceptance for structural timber were according to INSTA 142

There are no formal requirements for raw material used for exterior cladding.
Discussion

Several appearance grading rules are used in Norwegian sawmilling.
Respondents were able to distinguish minor quality changes (cup and twist).
The new grading rules are more precise and perhaps more conservative.
The new grading rules correspond well with previous experience and should therefore be easy to implement in Norwegian sawmilling.
Close cooperation with the industry is required for a successful implementation of a new standard.

Possible influences on result:
• Not carried out in an industry setting
• More time to evaluate the samples
• Size of pieces can affect the appearance of deformation
Thank you for your attention!