Grading of sawn timber

Trämarknaden i Karlstad 2019-11-22 Johan Fröbel – Swedish Wood Tomas Ivarsson – Svenskt Trätekniskt Forum





Background – Nordic Timber Grading Rules

- Nordic Timber Grading Rules (The Grey book)
 - Published 2015.
 - Co-operation between Svenskt Trätekniskt Forum, STTF, Suomen Sahateollisuusmiesten Yhdistys, STMY and Treindustriens Tekniske Forening, TTF.
 - Language versions: Swedish, English, French, Russian and German.
 - Production and export.



O Treindustriens Tekniske Forening







Background – Grading of sawn timber in Europe according to EN 1611-1

- Grading of sawn timber in Europe according to EN 1611-1
 - Published in May and October 2016.
 - Swedish Wood.
 - Language versions: Swedish and English.
 - Sales in Sweden and contracts such as SVEA 2015, ABM 07-Träbilaga, AMA Hus 18, RA Hus 18 and additional building description text.







Background

- First meeting between Swedish Wood and Svenskt Trätekniskt Forum, STTF, on January 12, 2018.
- Both associations have clear goals where we shall try to agree regarding a regulation for grading of sawn timber and to work to delete defects in respective book.
- In the production of a new common standard for the trade the project group will also co-operate with sister associations in Finland and Norway.





Background

- When a new Nordic grading system is established and has been accepted by our customers the next step in the process might be to influence the European standard *EN 1611-1*.
- The standard *EN 1611-1* will be reviewed 2020. Earlier periodic 5-years reviews have not resulted in any revision.
- The project is financed jointly by Svenskt Trätekniskt Forum, STTF, Swedish Wood, Suomen Sahateollisuusmiesten Yhdistys, STMY and Treindustriens Tekniske Forening, TTF.





What differs the two grading rules?

• The grading rules in the two different grading rule books differ to some part and a couple of questions are for example:

Nordic Timber Grading Rules

- Fissures:

Allowed number of pieces with fissures.

Ring shakes: size is missing.

- Knot size is unlimited in Grade VI. This means that in Grade V unlimited knot size is allowed on the inside face.
- The maximum number of knots in Grade V is 10.





What differs the two grading rules?

- Nordic Timber Grading Rules, continued,
 - The format of tables does not use the whole page.
 - Errors of fact: among others a picture that shows measurement of knots (only the Swedish version).
 - Unknown in the construction sector.





What differs the two grading rules?

- Grading of sawn timber in Europe according to EN 1611-1
 - Damages by handling is missing.
 - Given size and compensation rule for spike knots and splay knots are missing.
 - Compensation rule for traversing edge knots is missing.
 - Compensation rule for bark pockets and resin pockets is missing.
 - Allowed length of end shake.
 - Other grade (lower) than contracted not limited in the grading rule.
 - Unknown by the production staff at the sawmill.





Test grading

- STTF performed in 2017 an automatization project together with Anders Lycken, RISE, where test grading of sawn timber based on both *Grading of sawn timber in Europe according to EN 1611-1* and *Nordic Timber Grading Rules* was done.
- Swedish Wood did test gradings together with Jan Brundin and Gert Eriksson at three sawmills; in the south, middle and north of Sweden.
- The two associations' test gradings have given rather similar results.
- One can observe that the two grading rules often give corresponding grade (*Grading of sawn timber in Europe according to EN 1611-1*) and class (*Nordic Timber Grading Rules*) according to the relations between the grading rules that are generally accepted.





Test grading

• The test grading of Swedish Wood shows that 76 % of all test graded pieces of timber are given the corresponding quality according to both regulations. *Grading of sawn timber in Europe according to EN 1611-1* gives lower quality for 10 % and higher quality for 14 %.





New test gradings

- Svenskt Trätekniskt Forum, STTF, and Swedish Wood have done three test gradings during the project in order to see if the values in the tables are applicable over the whole country and are according to results in previous test gradings.
- The tests have been done at the following member companies:
 - J G Anderssons Söner AB in Linneryd
 - Martinsons Såg AB in Kroksjön
 - Sandåsa Timber AB in Åkers Styckebruk.
- The test gradings have given approximately the same results as the two previous test gradings.





The new grading book -Grading of sawn timber

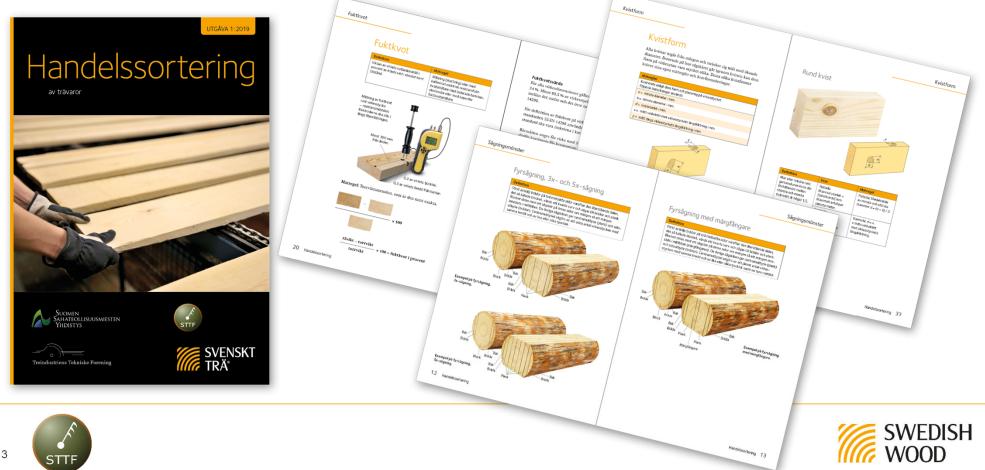
- Shortly a new grading book will take place on the market.
- Grading of sawn timber (The Black book)
- Co-operation between Swedish Wood, Svenskt Trätekniskt Forum, STTF, Suomen Sahateollisuusmiesten Yhdistys, STMY and Treindustriens Tekniske Forening, TTF.
- Language versions: Swedish and English.
- Production and export.







Grading of sawn timber (The Black book)



What will happen?

- Shortly a new grading book will take place on the market.
- Marketing launching to our member through information meetings in 8 regions around Sweden.
- Education material for both Sorters and Sales representatives.



