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| Report No. ITT/112/10/09 | INITIAL TYPE TESTING REPORT This ITT report contains revised and/or additional grading machine settings to those given in EN 14081-4:2009. | DATE OF ISSUE March 2014 |
|------------------------------------|--|------------------------------------|

Note. ITT reports for EN 14081-4 are numbered using the initials ITT followed by three numbers separated by slashes. The first number denotes the number of each report in chronological order. The second number denotes the number for the particular type of grading machine as given in EN 14081-4:2009. The third number gives the report number for the type of machine in chronological order.

GRADING MACHINE

The settings in this ITT report are relevant to the **GoldenEye-706** timber strength grading machine.

MANUFACTURER

The manufacturer of the GoldenEye-706 timber grading machine is:

MiCROTEC s.r.l. - GmbH
Via Julius Durst 98
39042 Bressanone (BZ)
Italy

REFERENCE

Clause 5 of EN 14081-4:2009 contains the following paragraph:

‘The accepted grading machines and settings in this European Standard are based on initial type testing (ITT) and initial type calculation (ITC). When additional ITT and ITC documentation from the manufacturers has been evaluated by CEN/TC124/TG1 and the accepted values are given in an ITT report, which is the basis for certification by the Notified Bodies overseeing the producers factory production control (FPC). Those ITT reports may be used as ITT documentation before the information they contain becomes available in an amendment or revision of this European Standard, EN 14081-4.’

This ITT report is one of a number of reports to which the above paragraph refers and may therefore be used as documentation prior to a further revision of EN 14081-4, or until it is superseded by a later dated ITT report for the same grading machine.

CHANGES TO SETTINGS LISTED IN EN 14081-4:2009

The settings listed in the following tables 10-1 to 10-34, which are the subject of the research reports listed in the table titles, have been assessed by CEN TC124/WG2/TG1 and are approved for use in the production of structural timber to EN 14081-1 from the date of this ITT report.

The existing tables 10-1 to 10-11 in EN 14081-4 and tables 10-1 to 10-17 in ITT/07/10/01 and tables 10-18 to 10-19 in ITT/20/10/02 and tables 10-1 to 10-19 in ITT/31/10/03 and tables 10-1 to 10-21 in ITT/38/10/04 and tables 10-1 to 10-24 in ITT/55/10/05 and tables 10-1 to 10-27 in ITT/70/10/06 and tables 10-1 to 10-29 in ITT/85/10/07 and tables 10-1 to 10-29 in ITT/100/10/08 are superseded by the tables given in this ITT report. Tables 10-30 to 10-34 are new tables.

On behalf of CEN TC 124/TG1

Signature of convener

Date March 2014

Table 10-32 — Settings for GoldenEye-706 (Model given in TG1/201403/10rev) (continued)

| Source country or countries | Source mark ^b | Species | Permitted timber size ^c (mm) | Grade ^d or grade combination | Model value | | | Comments and additional requirements |
|-----------------------------|--------------------------|-------------------------------------|---|---|------------------|------------------|------------------|--|
| | | | | | f _{mod} | E _{mod} | ρ _{mod} | |
| Austria | AT | Norway spruce <i>Picea abies</i> | 27 ≤ t _n ≤ 66 63 ≤ b _n ≤ 319 | T28 | 36,4 | 12 100 | 426 | Requirements for grading: – Timber temperature: > -10°C. – If the timber temperature is between -10°C and -20°C then f _{mod} and E _{mod} shall be adjusted to be more conservative by 2%. – Whenever the machine uses the measured moisture content and adjusts the settings model for each individual piece, the moisture content of each piece shall be between 4% and 24% otherwise, the mean moisture content of the batch shall be between 8% and 20%, and all pieces in the batch shall not deviate by more than four percentage points from the mean. – Maximum feed speed: X-ray scanner not greater than 450 m/min. ViSCAN not greater than 180 pieces/min. – Timber surface planed or sawn. <i>Picea abies</i> and <i>Abies alba</i> are processed together in Europe, and this species combination is referred to WPCA according to EN 14081-1. |
| Czech Republic | CZ | | | T18 | 24,1 | 9 300 | 377 | |
| Germany | DE | | | T11 | 8,7 | 3 800 | 296 | |
| Finland | FI | Sliver fir <i>Abies alba</i> | | T28 | 36,4 | 12 100 | 426 | |
| Poland | PL | | | T16 | 17,9 | 8 300 | 364 | |
| Romania | RO | | | T11 | 12,4 | 7 100 | 296 | |
| Russia ^e | RU | | | T26 | 33,5 | 10 900 | 411 | |
| Sweden | SE | | | T18 | 23,4 | 9 800 | 379 | |
| Slovakia | SK | | | T11 | 8,7 | 3 800 | 296 | |
| Ukraine | UA | | | T26 | 33,5 | 10 900 | 411 | |
| | | | | T14 | 13,3 | 7 700 | 328 | |
| | | | | T24 | 31,4 | 10 200 | 398 | |
| | | | | T14 | 16,2 | 8 400 | 333 | |
| | | | | T10 | 11,6 | 3 800 | 296 | |
| | | | | T22 | 29,5 | 9 400 | 386 | |
| | | | | T14 | 15,7 | 8 900 | 336 | |
| | | | | T11 | 12,7 | 7 500 | 296 | |

^a These settings are approved to permit each piece of timber with a width up to 250mm to be graded as if it is two pieces of timber of smaller widths. The timber is subsequently cut lengthwise into two pieces with the correct grade marked on each piece. This requires the machine to have the appropriate software, and the timber sizes before and after grading, to be as required by that software. The sizes of the two pieces after splitting must be within the permitted timber size. This note is valid for all approved source countries and species for this machine.

^b Code identifying the country or region of origin in accordance with EN ISO 3166-1.

^c Timber size shall be to EN 336.

^d Grades prefixed by T are tensile strength classes given in EN 14080.

^e Settings apply only to timber grown west of the Urals and north of the 55 degree line of latitude.

Table 10-33 — Settings for GoldenEye-706 (Model given in TG1/201403/10rev) (continued)

| Source country or countries | Source mark ^b | Species | Permitted timber size ^c (mm) | Grade ^d or grade combination | Model value | | | Comments and additional requirements |
|-----------------------------|--------------------------|-------------------------------------|---|---|------------------|------------------|------------------|--|
| | | | | | f _{mod} | E _{mod} | ρ _{mod} | |
| Austria | AT | Norway spruce <i>Picea abies</i> | 27 ≤ t _n ≤ 66 63 ≤ b _n ≤ 319 | T22 | 29,5 | 9 400 | 386 | Requirements for grading: – Timber temperature: > -10°C. – If the timber temperature is between -10°C and -20°C then f _{mod} and E _{mod} shall be adjusted to be more conservative by 2%. – Whenever the machine uses the measured moisture content and adjusts the settings model for each individual piece, the moisture content of each piece shall be between 4% and 24% otherwise, the mean moisture content of the batch shall be between 8% and 20%, and all pieces in the batch shall not deviate by more than four percentage points from the mean. – Maximum feed speed: X-ray scanner not greater than 450 m/min. ViSCAN not greater than 180 pieces/min. – Timber surface planed or sawn. <i>Picea abies</i> and <i>Abies alba</i> are processed together in Europe, and this species combination is referred to WPCA according to EN 14081-1. |
| Czech Republic | CZ | | | T14 | 19,5 | 8 900 | 336 | |
| Germany | DE | | | T10 | 11,0 | 3 800 | 296 | |
| Finland | FI | Sliver fir <i>Abies alba</i> | | T22 | 29,5 | 9 400 | 386 | |
| Poland | PL | | | T13 | 12,0 | 3 800 | 296 | |
| Romania | RO | | | T21 | 28,2 | 9 400 | 386 | |
| Russia ^e | RU | | | T13 | 12,7 | 5 200 | 298 | |
| Sweden | SE | | | T21 | 28,2 | 9 400 | 386 | |
| Slovakia | SK | | | T11 | 6,4 | 3 800 | 296 | |
| Ukraine | UA | | | T18 | 20,9 | 6 900 | 374 | |
| | | | | T11 | 11,6 | 3 800 | 296 | |
| | | | | T16 | 16,5 | 3 800 | 360 | |
| | | | | T8 | 8,4 | 3 800 | 296 | |
| | | T14 | 10,7 | 3 800 | 297 | | | |
| | | T13 | 6,4 | 3 800 | 296 | | | |
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^a These settings are approved to permit each piece of timber with a width up to 250mm to be graded as if it is two pieces of timber of smaller widths. The timber is subsequently cut lengthwise into two pieces with the correct grade marked on each piece. This requires the machine to have the appropriate software, and the timber sizes before and after grading, to be as required by that software. The sizes of the two pieces after splitting must be within the permitted timber size. This note is valid for all approved source countries and species for this machine.

^b Code identifying the country or region of origin in accordance with EN ISO 3166-1.

^c Timber size shall be to EN 336.

^d Grades prefixed by T are tensile strength classes given in EN 14080.

^e Settings apply only to timber grown west of the Urals and north of the 55 degree line of latitude.

Table 10-34 — Settings for GoldenEye-706 (Model given in TG1/201403/18) (continued)

| Source country or countries | Source mark ^b | Species | Permitted timber size ^c (mm) | Grade ^d or grade combination | Model value | | | Comments and additional requirements |
|-----------------------------|--------------------------|---------------------------------------|---|---|------------------|------------------|---|--------------------------------------|
| | | | | | f _{mod} | E _{mod} | ρ _{mod} | |
| Finland Poland Sweden | FI PL SE | Scots pine <i>Pinus sylvestris</i> | 32 ≤ t _n ≤ 55 86 ≤ b _n ≤ 220 | T26 | 33,5 | 11 300 | <div>Requirements for grading:</div> <div><div>– Timber temperature: > -10°C.</div><div>– If the timber temperature is between -10°C and -20°C then f_{mod} and E_{mod} shall be adjusted to be more conservative by 2%.</div><div>– Whenever the machine uses the measured moisture content and adjusts the settings model for each individual piece, the moisture content of each piece shall be between 4% and 24% otherwise, the mean moisture content of the batch shall be between 8% and 20%, and all pieces in the batch shall not deviate by more than four percentage points from the mean.</div><div>– Maximum feed speed: X-ray scanner not greater than 450 m/min. ViSCAN not greater than 180 pieces/min.</div><div>– Timber surface planed or sawn.</div></div> | |
| | | | | T14 | 24,1 | 9 200 | | |
| | | | | T10 | 5,1 | 5 400 | | |
| | | | | T24 | 29,8 | 10 500 | | |
| | | | | T13 | 13,3 | 6 600 | | |
| | | | | T22 | 26,9 | 9 900 | | |
| | | | | T13 | 11,0 | 8 400 | | |
| | | | | T21 | 24,9 | 9 900 | | |
| | | | | T11 | 5,1 | 5 400 | | |
| | | | | T18 | 19,2 | 7 500 | | |
| | | | | T10 | 15,7 | 5 400 | | |
| | | | | T16 | 15,4 | 5 600 | | |
| T8 | 6,0 | 5 400 | | | | | | |
| | T14 | 8,6 | 5 400 | | | | | |
| | T13 | 5,1 | 5 400 | | | | | |

^a These settings are approved to permit each piece of timber with a width up to 250mm to be graded as if it is two pieces of timber of smaller widths. The timber is subsequently cut lengthwise into two pieces with the correct grade marked on each piece. This requires the machine to have the appropriate software, and the timber sizes before and after grading, to be as required by that software. The sizes of the two pieces after splitting must be within the permitted timber size. This note is valid for all approved source countries and species for this machine.

^b Code identifying the country or region of origin in accordance with EN ISO 3166-1.

^c Timber size shall be to EN 336.

^d Grades prefixed by T are tensile strength classes given in EN 14080.