EUROPEAN COMMISSION
DG GROWTH

Equipment Noise by Type, Split by Power Category

23. GRADERS (< 500 KW)

Wheeled dozers, wheeled loaders, wheeled excavator-loaders, dumpers, graders, loader-type landfill compactors, combustion engine driven counterbalanced lift trucks, mobile cranes, compaction machines (non-vibrating rollers), paver-finishers, hydraulic power packs

<table>
<thead>
<tr>
<th>Net Installed Power Category</th>
<th>P &lt;= 55(Kilowatts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Certificate Date</strong></td>
<td><strong>Certificate Number</strong></td>
</tr>
<tr>
<td>LAMPACRESCIA 2 Srl Zona Ind. le P.I.P Sambucheto - 62019 Recanati (MC) IT</td>
<td>7/31/06</td>
</tr>
<tr>
<td>LAMPACRESCIA 2 Srl Zona Ind. le P.I.P Sambucheto - 62019 Recanati (MC) IT</td>
<td>7/31/06</td>
</tr>
<tr>
<td>LAMPACRESCIA 2 Srl Zona Ind. le P.I.P Sambucheto - 62019 Recanati (MC) IT</td>
<td>7/31/06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Installed Power Category</th>
<th>P &gt; 55(Kilowatts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Certificate Date</strong></td>
<td><strong>Certificate Number</strong></td>
</tr>
</tbody>
</table>

Situation on: 08/10/2018

* These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers
  - vibratory plates (< 3kW)
  - vibratory rammers
  - dozers (steel tracked)<
  - loaders (steel tracked) &lt; 55 kW
  - combustion-engine driven counterbalanced lift trucks
  - hand-held hand-held internal combustion-engine concrete-breakers and picks (15 &lt; m &lt; 30)
  - lawn-mowers, lawn trimmers
  - lawmower, lawn trimmers/lawn edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

### Equipment Noise by Type, Split by Power Category

#### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th></th>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Inc</td>
<td>1/9/03</td>
<td>11233</td>
<td>16H</td>
<td>111</td>
<td>111</td>
<td>109</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000202

<table>
<thead>
<tr>
<th></th>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited</td>
<td>12/19/06</td>
<td>15242</td>
<td>G990</td>
<td>107</td>
<td>107</td>
<td>105</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited</td>
<td>12/19/06</td>
<td>15248</td>
<td>G976</td>
<td>107</td>
<td>107</td>
<td>0</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000191

<table>
<thead>
<tr>
<th></th>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited</td>
<td>12/19/06</td>
<td>15243</td>
<td>G970</td>
<td>107</td>
<td>107</td>
<td>104</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000181

* These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers*
  - vibratory plates (&gt;= 3kW)<
  - vibratory rammers<
  - dozers (steel tracked)<
  - loaders (steel tracked &gt;= 55 kW)<
  - combustion-engine driven counterbalanced lift trucks<
  - compacting screed paver-finishers<
  - hand-held internal combustion-engine concrete-breakers and picks (15 &lt; m &lt; 30)
  - lawn mowers, lawn trimmers/lawn-edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).


Situation on: 08/10/2018
## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>2/14/03</td>
<td>2741</td>
<td>G740B</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>2/14/03</td>
<td>2742</td>
<td>G746B</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>2/14/03</td>
<td>2743</td>
<td>G780B</td>
<td>110</td>
<td>110</td>
</tr>
</tbody>
</table>

### Net Installed Power Category: 000180

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>12/19/06</td>
<td>15244</td>
<td>G960</td>
<td>107</td>
<td>107</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>12/19/06</td>
<td>15245</td>
<td>G946</td>
<td>107</td>
<td>107</td>
</tr>
</tbody>
</table>

### Net Installed Power Category: 000179

Situation on: 08/10/2018

*These limit figures are merely indicative for these types of equipment:
- walk-behind vibrating rollers
- vibratory plates (&lt; 3kW)
- vibratory rammers
- loaders (steel tracked &lt; 55 kW)
- combustion-engine driven counterbalanced lift trucks
- compacting screed paver-finishers
- hand-held internal combustion-engine concrete-breakers and picks (15kW &lt; m &lt; 30)
- lawn mowers, lawn trimmers/lawn edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4952</td>
<td>14H CAT0014HPA SE00394</td>
<td>110</td>
<td>110</td>
</tr>
</tbody>
</table>

**Net Installed Power Category :** 000165

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>12/19/06</td>
<td>15246</td>
<td>G940</td>
<td>106</td>
<td>106</td>
</tr>
</tbody>
</table>

**Net Installed Power Category :** 000164

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4949</td>
<td>160H - CAT0160HCA SD00194</td>
<td>109</td>
<td>109</td>
</tr>
</tbody>
</table>

**Net Installed Power Category :** 000160

---

* These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers<
  - vibratory plates (&gt; 3kW)<
  - vibratory rammers<
  - dozers (steel tracked)<
  - loaders (steel tracked &gt; 55 kW)<
  - combustion-engine driven counterbalanced lift trucks<
  - compacting screed paver-finishers<
  - hand-held internal combustion-engine concrete-breakers and picks (15kW &lt; m &lt; 30)
  - lawnmowers, lawn trimmers/lawn-edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).


Situation on: 08/10/2018
## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4953</td>
<td>14H CAT0014HV7 WJ02206</td>
<td>109</td>
<td>109</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000158

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4950</td>
<td>140H</td>
<td>109</td>
<td>109</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000150

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>12/19/06</td>
<td>15247</td>
<td>G930</td>
<td>106</td>
<td>106</td>
</tr>
</tbody>
</table>

**Net Installed Power Category:** 000149

### Situation on: 08/10/2018

* These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers<
  - vibratory plates (&gt; 3kW)<
  - vibratory rollers<
  - dozers (steel tracked)<
  - loaders (steel tracked &gt; 55 kW)<
  - combustion-engine driven counterbalanced lift trucks<
  - compacting screed paver-finishers<
  - hand-held internal combustion-engine concrete-breakers and picks (15 &lt; L&lt;30)
  - lawnmowers, lawn trimmers/lawn-edge trimmers.


Page 5 on 9
## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4948</td>
<td>160H</td>
<td>109</td>
<td>109</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>2/14/03</td>
<td>2740</td>
<td>G720B</td>
<td>109</td>
<td>109</td>
</tr>
<tr>
<td>Caterpillar Sanford BCP 5000 Womack Road Sanford NC 27330-9594 UK</td>
<td>7/30/02</td>
<td>4951</td>
<td>CAT0140HTA PM00219</td>
<td>109</td>
<td>109</td>
</tr>
</tbody>
</table>

*Net Installed Power Category : 000148*

*Net Installed Power Category : 000138*

*Net Installed Power Category : 000134*

---

**Situation on: 08/10/2018**

Page 6 on 9

ART12 Noise Limit by Equipment Code_2

* These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers
  - vibratory plates (&gt;= 3kW)
  - vibratory rammers
  - dozers (steel tracked)
  - loaders (steel tracked &lt;= 55 kW)
  - combustion-engine driven counterbalanced lift trucks
  - compacting screed paver-finishers
  - hand-held internal combustion-engine concrete-breakers and picks (15 &lt; m &lt; 30)
  - lawnmowers, lawn trimmers/lawn-edge trimmers

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orenstein &amp; Koppel AG Staakener Strabe 53-63 DE</td>
<td>3/27/03</td>
<td>34</td>
<td>F 206</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>VOLVO Motor Graders Limited 160 Maitland Road, Goderich, Ontario, N7A 3Y6 CA</td>
<td>2/14/03</td>
<td>2739</td>
<td>G710B</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Orenstein &amp; Koppel AG Staakener Strabe 53-63 DE</td>
<td>12/1/02</td>
<td>10608</td>
<td>F 156A</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Orenstein &amp; Koppel AG Staakener Strabe 53-63 DE</td>
<td>3/27/03</td>
<td>32</td>
<td>F 156</td>
<td>108</td>
<td>108</td>
</tr>
<tr>
<td>Orenstein &amp; Koppel AG Staakener Strabe 53-63 DE</td>
<td>3/27/03</td>
<td>33</td>
<td>F 156A</td>
<td>108</td>
<td>108</td>
</tr>
</tbody>
</table>

### Net Installed Power Category: 000124

### Net Installed Power Category: 000112

### Net Installed Power Category: 000089

Situation on: 08/10/2018

* These limit figures are merely indicative for these types of equipment:
- walk-behind vibrating rollers
- vibratory plates (≤ 3kW)
- vibratory rammers
- dozers (steel tracked)
- loaders (steel tracked ≤ 55 kW)
- combustion-engine driven counterbalanced lift trucks
- compactor screed paver-finishers
- hand-held internal combustion-engine concrete-breakers and picks (15 kW ≤ m ≤ 30)
- lawn mowers, lawn trimmers/lawn-edge trimmers

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

## Equipment Noise by Type, Split by Power Category

### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/02</td>
<td>10635</td>
<td>G 110</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>1/1/02</td>
<td>10636</td>
<td>G 110 6WD</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>3/27/03</td>
<td>43</td>
<td>G 110</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>3/27/03</td>
<td>44</td>
<td>G 110 6WD</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>12/1/02</td>
<td>10607</td>
<td>F 106.5A</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>3/27/03</td>
<td>30</td>
<td>F 106.5A*</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
<tr>
<td>3/27/03</td>
<td>31</td>
<td>F 106.5</td>
<td>106</td>
<td>105</td>
<td>104</td>
</tr>
</tbody>
</table>

**Net Installed Power Category** : 000058

### Notes

- These limit figures are merely indicative for these types of equipment:
  - walk-behind vibrating rollers
  - vibratory plates (&lt; 3kW)
  - vibratory rammers
  - loaders (steel tracked)
  - dozers (steel tracked)
  - compacting screed paver finishers
  - hand-held internal combustion-engine concrete-breakers and picks (15kW &lt; m &lt; 30kW)
  - lawn mowers, lawn trimmers
  - Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

### Equipment Noise by Type, Split by Power Category

#### 23. GRADERS (< 500 KW)

<table>
<thead>
<tr>
<th>Certificate Date</th>
<th>Certificate Number</th>
<th>Equipment Model Name</th>
<th>Equipment Permissible Sound Power L</th>
<th>Guaranteed Sound Level</th>
<th>Measured Sound Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orenstein &amp; Koppel AG</td>
<td>12/1/02</td>
<td>10609</td>
<td>MH City</td>
<td>104</td>
<td>101</td>
</tr>
</tbody>
</table>

Situation on: 08/10/2018

*These limit figures are merely indicative for these types of equipment:
- walk-behind vibrating rollers
- vibratory plates (&lt;= 3kW)
- vibratory rammers
- dozers (steel tracked)
- loaders (steel tracked &lt;= 55 kW)
- combustion-engine driven counterbalanced lift trucks
- compacting screed paver-finishers
- hand-held internal combustion-engine concrete-breakers and picks (15&lt;=m&lt;<=30)
- lawnmowers, lawn trimmers/lawn-edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20(1).

These limit figures are merely indicative for these types of equipment:

- walk-behind vibrating rollers
- vibratory plates (&gt; 3 kW)
- vibratory ramblers
- dozers (steel tracked)
- loaders (steel tracked &lt; 55 kW)
- combustion-engine driven counterbalanced lift trucks
- compacting screed paver-finishers
- hand-held internal combustion-engine concrete-breakers and picks (15 &lt;m&lt;30)
- lawnmowers, lawn trimmers/lawn-edge trimmers.

Definitive figures will depend on amendment of the Directive following the report required in Article 20.