

## Montana Department of Transportation Bridge Bureau Approved Construction Equipment List

|                                  |                      |
|----------------------------------|----------------------|
| <b>Make:</b>                     | <i>Hamm</i>          |
| <b>Model:</b>                    | <i>HD+ 140i VO</i>   |
| <b>Equipment Type:</b>           | <i>Tandem Roller</i> |
| <b>Contractor Modifications:</b> | <i>None</i>          |

### Interstate Approval Conditions

|                               |                                      |
|-------------------------------|--------------------------------------|
| <i>Approval Type</i>          | <i>Crossing only</i>                 |
| <i>Speed:</i>                 | <i>No Restriction</i>                |
| <i>Weight:</i>                | <i>30,870 lb or less</i>             |
| <i>Traffic:</i>               | <i>Approved with regular traffic</i> |
| <i>Location Restrictions:</i> | <i>No Restriction</i>                |

### Non-Interstate Approval Conditions

|                               |                                      |
|-------------------------------|--------------------------------------|
| <i>Approval Type</i>          | <i>Crossing only</i>                 |
| <i>Speed:</i>                 | <i>No Restriction</i>                |
| <i>Weight:</i>                | <i>30,870 lb or less</i>             |
| <i>Traffic:</i>               | <i>Approved with regular traffic</i> |
| <i>Location Restrictions:</i> | <i>No Restriction</i>                |

**Comments:**

Equipment configuration, weights, and specifications on following pages. Approval does not apply to posted bridges. Other construction equipment is not allowed to operate on or cross bridge at the same time this equipment is on the bridge. Vibratory system must be turned off while on bridge.

Technical data

# HD+ 140i VO



**Tandem rollers Series HD+**

Tandem roller with vibration and oscillation drum

H274

**HIGHLIGHTS**

- > Track offset for comfortable starting and driving away and compacting at curbsides
- > Compaction with oscillation
- > Excellent view of machine and construction site
- > Operating concept Easy Drive
- > Electronic machine management Hammtronic

**TECHNICAL DATA HD+ 140i VO (H274)**

**Weights**

|                                    |                 |                          |
|------------------------------------|-----------------|--------------------------|
| Operating weight with cab          | kg<br>lbs       | 13185<br>29,073          |
| Operating weight with ROPS         | kg<br>lbs       | 12945<br>28,544          |
| Max. operating weight              | kg<br>lbs       | 14000<br>30,870          |
| Static linear load, front/rear     | kg/cm<br>lbs/in | 30,4/30,4<br>170.2/170.2 |
| French classification, value/class |                 | 28,37/VT2                |

**Machine dimensions**

|                            |          |                      |
|----------------------------|----------|----------------------|
| Total length               | mm<br>in | 5300<br>208.7        |
| Total height with cab      | mm<br>in | 2980<br>117.3        |
| Total height with ROPS     | mm<br>in | 3030<br>119.3        |
| Height loading, min.       | mm<br>in | 2140<br>84.3         |
| Center distance            | mm<br>in | 3900<br>153.5        |
| Total width with cab       | mm<br>in | 2260<br>89.0         |
| Maximum working width      | mm<br>in | 2310<br>90.9         |
| Ground clearance, center   | mm<br>in | 340<br>13.4          |
| Curb clearance, left/right | mm<br>in | 900/900<br>35.4/35.4 |
| Turning radius, inside     | mm<br>in | 6200<br>244.1        |

**Drum dimensions**

|                            |          |                        |
|----------------------------|----------|------------------------|
| Drum width, front/rear     | mm<br>in | 2140/2140<br>84.3/84.3 |
| Drum diameter, front/rear  | mm<br>in | 1400/1400<br>55.1/55.1 |
| Drum thickness, front/rear | mm<br>in | 19/20<br>0.7/0.8       |
| Drum type, front           |          | Smooth/non-split       |
| Drum type, rear            |          | Smooth/non-split       |
| Track offset, left/right   | mm<br>in | 170<br>6.7             |

**Diesel engine**

|                             |  |                         |
|-----------------------------|--|-------------------------|
| Manufacturer                |  | DEUTZ                   |
| Model                       |  | TCD 4.1 L4              |
| Cylinders, quantity         |  | 4                       |
| Power ISO 14396, kW/PS/rpm  |  | 115,0/156,4/2300        |
| Power SAE J1349, kW/HP/rpm  |  | 115,0/154,1/2300        |
| Exhaust emission standard   |  | EU Stage V / EPA Tier 4 |
| Exhaust gas after-treatment |  | DOC-DPF-SCR             |

**Travel drive**

|                                      |   |            |
|--------------------------------------|---|------------|
| Regulation, infinitely variable      |   | HAMMTRONIC |
| Gradeability, with/without vibration | % | 39/39      |

**Vibration**

|                                  |           |                             |
|----------------------------------|-----------|-----------------------------|
| Vibration frequency, front, I/II | Hz<br>vpm | 40/50<br>2,400/3,000        |
| Amplitude, front, I/II           | mm<br>in  | 0,9/0,33<br>.035/.013       |
| Centrifugal force, front, I/II   | kN<br>lbs | 158,7/93,2<br>35,708/20,970 |

**Oscillation**

|                             |           |                 |
|-----------------------------|-----------|-----------------|
| Oscillation force, rear     | kN<br>lbs | 170,5<br>38,362 |
| Oscillation frequency, rear | Hz<br>vpm | 36<br>2,160     |
| Tangential amplitude, rear  | mm<br>in  | 1,25<br>.049    |

**Steering**

|                 |   |                      |
|-----------------|---|----------------------|
| Swing angle +/- | ° | 10                   |
| Steering, type  |   | Articulated steering |

**Water-sprinkling system**

|                        |  |          |
|------------------------|--|----------|
| Water sprinkling, type |  | Pressure |
|------------------------|--|----------|

**Tank capacity/filling capacity**

|  |          |               |
|--|----------|---------------|
| Fuel tank, capacity                      | L<br>Gal | 260<br>68.7   |
| AdBlue/SCR reducing agent tank, capacity | L<br>Gal | 20<br>5.3     |
| Water tank, capacity                     | L<br>Gal | 1145<br>302.5 |

**Sound level**

|   |       |     |
|---|-------|-----|
| Sound power level L(WA), guaranteed                 | db(A) | 109 |
| Sound power level L(WA), representative measurement | db(A) | 107 |

**EQUIPMENT**

Heating and air conditioning | Tachograph | Bluetooth interface for Smart Doc | Dashboard cover | Edge pressing and cutting equipment | HAMM Compaction Meter (HCM) | Automatic engine-off function | HAMM Temperature Meter (HTM) | Track offset display | Back-up alarm | Telematics interface | Working light | Rotating beacon | Coming home lighting | Locking device from both sides | Central water outlet

**OPTIONAL EQUIPMENT**