

our solutions

# Hand Arm Vibration

BRANDON Hire

Based on HSE Points System, Exposure Action Values (EAV) and Exposure Limit Values (ELV)

#### Reactec



The HAVmeter is the size and shape of a pager. At the start of each shift, each operative signs out a HAVmeter from a base station with their personalised card which, can be programmed to take into account any existing HAVS problems. Tools fitted with Tool Tags connect magnetically with the HAVmeter and once attached, the HAVmeter provides a vibration exposure reading in real-time. The operative can then use the HAVmeter on as many tools as needed throughout the day and create a cumulative reading of their vibration exposure.

#### **HAVi**



The Havi is simple and effective device that attaches to any powered vibratory tool. The operator keys in the known vibration magnitude (m/s2), and when the tool is operated, the actual exposure to vibration (Trigger Time) and exposure points are displayed. When 100 points are reached (Exposure Action Value) an amber light flashes, and when 400 points (Exposure Limit Value) is reached a red light flashes. The operator records the exposure points for each tool used during a working shift to give their daily exposure total.

#### ToolMinder



Every Brandon Hire branch has immediate access to our Toolminder database containing vibration and noise data, along with details of recommended Personal Protective Equipment (PPE), for virtually every tool and product we hire. Data can be downloaded on request including both manufacturer's data to EN 67405 and independent field test data (as recommended by the HSE) to enable accurate risk assessments to be made.

## **Brandon Hire HAV Champions**

To provide quality support and guidance for its customers, Brandon Hire has created a nationwide network of highly trained HAV Champions. These specialist advisors are able to assist every sector of the UK construction industry by advising on the right technical solutions, providing tool box talks and the knowledge, skills and support that are vital for successfully managing Hand Arm Vibration.

To contact your regional Brandon Hire HAV Champion simply:-

Call your local branch on 0870 514 3391 Email: targetrisk@brandonhire.co.uk Telephone: 01179 718527

#### **Using this information**

**Hand Arm Vibration Symbols** 

- GREEN Low Risk
- AMBER Medium Risk
- RED High Risk
- Noise Value Symbols
- ▲ GREEN PPE Advised
- ▲ AMBER PPE Mandatory
- A RED CAUTION High Quality PPE Vital

### Landscape, Gardening & Site Preparation

CODE	EQUIPMENT	MANUFACTURERS DATA	HSE POINTS PER HOUR	TIME TO HOURS	REACH EAV MINS	TIME TO HOURS	REACH ELV MINS	SOUND PRESSURE
2115 2161	BRUSH CUTTERS Stihl Brushcutter FS130 Stihl Brushcutter FS450	4.5ms2 2.2ms2	41 10	2 10	28 10	9 >24	53	96 (dBA) 🛕 99 (dBA) 🛕
2113 2114	TILLERS AND ROTAVATORS Rotavator Tiller Camon 2000 Cultivator Camon C8	6.9ms2 4.9ms2	95	1	3	4	12	85 (dBA) <b>A</b> 88 (dBA) <b>A</b>
2154 2106 2105 2149 2136 2107 2170 2134	LAWN & TURF CARE Turf Cutter-Birchwood GMCT2 Lawn Scarifier Camon LS17 Lawn Scarifier -Wolfe UV35B Rotary Mower Honda IZY415 Rotary Mower Honda HRG465SDE Motorised Scythe-Tracmaster BCS 615 Billy Goat Vacuum KD512 Powered Sweeper Stihl KW85R Leaf Blower Stihl SH85 2-stroke	4.8ms2 6.2ms2 6.0ms2 5.2ms2 3.0ms2 8.6ms2 6.9ms2 7.6ms2 4.6ms2	46 77 72 54 18 148 95 116 42	2 1 1 5 0 1 0 2	10 18 23 51 33 41 3 52 22	8 5 7 22 2 4 3 9	41 12 33 24 13 42 12 28 27	87 (dBA) 86 (dBA) 84 (dBA) 94 (dBA) 94 (dBA) 91 (dBA) 109 (dBA) 94 (dBA) 94 (dBA) 94 (dBA)
2195 2117	TRIMMERS Cordless Hedgetrimmer-Stihl HAS 85 Hedge trimmer-Stihl HS80	2.2ms2 5.8ms2	10 67	10 1	20 29	>24 5	- 57	83 (dBA) <b>△</b> 94 (dBA) <b>△</b>
2112 0268 2181	CHAIN SAWS & TIMBER TOOLS Chainsaw-Stihl 2 stroke MS361 Tyranosaw Bosch GFZ14-35A Stump Grinder Tracmaster C500	3.6ms2 4.0ms2 3.9ms2	26 32 30	3 3 3	51 8 17	15 12 13	26 30 9	101 (dBA) 91 (dBA) 97 (dBA)
2155 2119 2137	POST HOLE/EARTH AUGERS One-man Auger Stihl BT121 2-stroke Two-man Auger Stihl BT360 2-stroke Hydraulic Earth Auger Compact PHD	2.5ms2 10.0ms2 7.2ms2	13 200 104	8 0 0	0 30 58	>24 2 3	- 00 51	103 (dBA) 99 (dBA) 90 (dBA)
2228	POWER BARROWS  Belle BMD300  Deesign Muck Truck	6.37ms2 5.86ms2	81 69	1 1	14 27	4 5	56 49	97 (dBA) 🛕 94 (dBA) 🛕
1085 1015	COMPACTOR PLATES Wacker VP1135A Belle PCLX320 Wacker WP1540A Belle PCX13/40	4.5ms2 3.25ms2 10.8ms2 2.80ms2	41 21 233 16	2 4 0 6	28 44 27 23	9 18 1 >24	53 56 43 -	88 (dBA) 101 (dBA) 96 (dBA) 103 (dBA)
0227	PETROL CUT-OFF SAWS Stihl TS410 Stihl TS400 Husqvarna K750 Makita DPC 6400	3.9ms2 6.8ms2 4.6ms2 8.0ms2	30 92 42 128	3 1 2 0	17 5 22 47	13 4 9 3	9 20 27 8	98 (dBA) 114 (dBA) 97 (dBA) 102 (dBA)
0532 0509 0526 0501 0503	ELECTRIC BREAKERS  Bosch GSH 16-28 Vib Reduced Breaker Makita HM1810TR H/Duty AVT Breaker Bosch GSH27 Breaker Makita HM1214C AVT Breaker Hilti TE1000 AVR Breaker Hilti TE905 Breaker Hilti 905AVR Breaker Milwaukee Kango 900 Makita HM0871C AVT Demo Hammer Makita HM1202C AVT Breaker	10.0ms2 9.0ms2 13.0ms2 8.0ms2 8.5ms2 8.5ms2 11.0ms2 8.0ms2 8.0ms2 8.0ms2 8.0ms2	200 162 338 128 85 145 145 242 128	0 0 0 0 1 0 0 0	30 37 18 47 11 42 42 25 47	2 1 3 4 2 2 1 3 3	00 28 11 8 44 46 46 39 8	92 (dBA) 84 (dBA) 91 (dBA) 78 (dBA) 87 (dBA) 92 (dBA) 92 (dBA) 105 (dBA) 86 (dBA) 78 (dBA)
0511	HYDRAULIC BREAKERS  Hydraulic Breaker JCB HM25LV  Hydraulic Breaker JCB HM25	3.2ms2 4.0ms2	20 32	4 3	53 8	19 12	32 30	108 (dBA) 🛕 106 (dBA) 🛕
0221 0223 0225	ANGLE GRINDERS  Makita GA5021 - 125mm  Bosch GWS10 - 125mm  Bosch GWS23 - 230mm  Makita GA9020 - 230mm  Makita GA9096 - 230mm  Bosch GSW24-30 - 300mm  Hitachi CM12Y - 300mm	13.5ms2 5.5ms2 5.5ms2 3.0ms2 5.5ms2 7.5ms2	145 50 61 61 18 61 113	0 2 1 1 5 1	42 00 39 39 33 39 53	2 8 6 6 22 6 3	46 00 37 37 13 37 33	90 (dBA) 86 (dBA) 92 (dBA) 89 (dBA) 89 (dBA) 94 (dBA) 106 (dBA)
0201 0203	CIRCULAR SAWS  Bosch GKS65 - 190mm  Makita 5703R - 190mm  Hitachi C7U - 190mm  Makita 5903R - 230mm  Bosch GKS85S - 230mm  Hitachi C9U - 230mm	3.5ms2 3.5ms2 3.0ms2 3.5ms2 <2.5ms2 <2.5ms2	25 25 13 18 25 13	4 4 8 5 4 8	5 5 00 33 5 00	16 16 >24 22 16 >24	20 20 - 13 20 -	90 (dBA) 93 (dBA) 108 (dBA) 95 (dBA) 90 (dBA) 110 (dBA)
0311	CORDLESS DRILLS Makita 8434D 14.4V Bosch GSB18VE2	2.5ms2 2.5ms2	13 13	8 8	00 00	>24 >24	- -	87 (dBA) 🛕 93 (dBA) 🛕

EN 5349: is the standard for measuring tri-axial vibration exposure to workers using vibrating tools at the actual place of work. Results for a particular tool will vary according to different working environments. This data is not suitable for tool comparison unless the exact same working conditions are applied to each test.