MVKELLY CIVIL ENGINEERING

MV Kelly Small Plant Items – Noise & Vibration Output Table

MV Kelly Plant Item	Make	Model	Noise output dB(A)	Vibration Magnitude m/s2	Vibration Points per Hour	Time to reach EAV (100 points) 2.5 m/s 2 A(8)	Time to reach ELV (400 points) 5.0 m/s 2A(8)	Over exposure Risk Rating H	M	L
Hydraulic Breakers	Atlas Copco	Hydraulic pack & LH190 E breaker (25kg)	106	5.0	50	2hr	8hr		M	
		Hydraulic pack & LH230 E breaker (28kg)	107	4.6	42	2hr 21m	9hr 27m		M	
		Hydraulic pack & LH280 E breaker (32.5kg)	107	4.6	42	2hr 21m	9hr 27m		M	
		Hydraulic pack & LH400 E breaker (39kg)	106	5.4	58	1hr 42m	6hr 51m		M	
	JCB	Hydraulic pack & HM25 breaker (26kg)	107	4.0	32	3hr 7m	12hr 30m		M	
		Hydraulic pack & HM25LV breaker (27kg)	107	1.6	5	19hr 31m	24hr			L
		Hydraulic pack & T-Pick breaker (15kg)	107	7.5	113	53m	3hr 33m	H		
	Altrad- Belle	Hydraulic pack & BHB 25S breaker (28kg)	107	11.1	246	24m	1hr 37m	H		
		Hydraulic pack & BHB 27XS breaker (28kg)	107	8.2	134	44m	2hr 58m	H		
		Hydraulic pack & BHB 25XS breaker (28kg)	107	6.5	85	1hr 11m	4hr 44m		M	
	Wacker Neuson	BH55RW 2 stroke breaker	109	11.3	255	23 m	1hr 33m	H		
110v Breakers	Dewalt	D25899KL 10kg SDS MAX Demo Hammer	89	13.5	255	16m	1hr 5m	H		
	Bosch (110v)	GBH2-26 SDS Plus Drill / Breaker	104	18.0	648	9m	37m	H		
Wacker Plates	Wacker Neuson	WP1540A	97	10.8	233	25m	1hr 42m	H		
	Wacker Neuson	WP1340	95	4.5	50	2hr	8hr		M	
	Wacker Neuson	WP1335 (14")	95	4.5	50	2hr	8hr		M	
	Wacker Neuson	VP1030 12"	97	4.5	50	2hr	8hr		M	
	Wacker Neuson	WP1040	98	4.5	50	2hr	8hr		M	
	Wacker Neuson	WP1339	95	4.5	50	2hr	8hr		M	
	Altrad- Belle	PCX13/39	105	3.2	20	4hr 52m	19hr 31m		M	
	Altrad- Belle	PCX13/40	105	3.2	20	4hr 52m	19hr 31m		M	
	Wacker Neuson	F/R plate DPU2540	86	3.2	20	4hr 52m	19hr 31m		M	
	Altrad- Belle	F/R plate RPX 35/40-D	108	3.1	19	5hr 12m	20hr 48m		M	
Cut-off Saws	Stihl	TS410 – 12”	91	3.9	30	3hr 17m	13hr 8m		M	
	Stihl	TS420 - 14"	98	3.9	30	3hr 17m	13hr 8m		M	
	Stihl	TS800 - 16"	101	6.5	85	1hr 11m	4hr 44m		M	
	Husqvarna	K760 - Oilguard	97	4.6	42	2hr 21m	9hr 27m		M	
Angle Grinders	Makita (110v)	GA5030R 125mm (5") 720w	96	10.0	200	30m	2hr	H		
	Makita 18v	DGA463	90	8.0	128	46m	3.07	H		
Circular Saws	Makita (110v)	5903R 235mm (9") Circular Saw	106	3.0	18	5hr 33m	22hr 13m		M	
	Makita (110v)	HS0600 270mm (10") Circular Saw	105	2.5	13	8hr	24hr			L
Floor Saws	Clipper	C451	105	2.8	16	6hr 22m	24hr		M	
	Husqvarna	FS400LN	102	5.8	67	1hr 29	5hr 56m		M	
Poker Unit	Altrad- Belle	Petrol Vibrating Poker (45mm) & Drive Unit	95	7.1	101	59m	3hr 58m	H		
Drills	Makita (110v)	HR2630 SDS PLUS Drill / Breaker	94	15.5	481	12m	49m	H		
	Makita (110v)	8406 Diamond Core Drill	105	9.5	181	33m	2hr 12m	H		
Powerfloat	MBW	36" Powerfloat c/w pan	105	4.8	46	2hr 10m	8.40m		M	
	MBW	48" Powerfloat c/w pan	105	4.1	34	2hr 58m	11hr 53m		M	
Magiscreed	Wacker Neuson	(P35A) Magi screed 8ft beam	95	8.4	141	42m	2hr 50m	H		

Control Measures to prevent Overexposure

This table works on a points system in line with recommended tool usage by the HSE.

Time to reach (EAV) exposure action value (100pts)
Time to reach (ELV) exposure limit value (400pts)

Your duties are to reduce the risks from vibration to the lowest level reasonably practicable and to reduce exposure to as low as is reasonably practicable if it is above the EAV. You must not however allow exposures to exceed the ELV.

HSE guidance recommends that when 100pts (EAV) are reached for an individual in an 8hr shift that other control measures should be put in place to reduce the chance of vibration overexposure such as worker rotation or a different option that removes the risk altogether such as using a breaker connected to the excavator. There is also a maximum exposure limit of 400 points for an individual per 8hr shift that **must not** be exceeded (ELV).

Each individual piece of equipment has been allocated points per hour used in the table opposite equivalent to the vibration magnitude rating for ease of understanding.

Example: Atlas Copco Hydraulic pack & LH190 E breaker (25kg) use is 50 points per hour. This means that if the breaker is used for 2hrs that day the operator would accumulate 100 pts and in doing so reach the EAV level, if used 3hrs that day 150pts and so on.

If using more than 1 piece of equipment you must add the points gained together.

Example: If an Atlas Copco Hydraulic pack & LH190 E breaker (25kg) was used for 1hr and a Stihl TS420 - 14" petrol saw for 3hrs the points would add up to 140pts as per below:

Item	Points per Hour	Hours used	Total Points
Atlas Copco Hydraulic pack & LH190 E breaker	50	1	50
Stihl TS420 - 14" petrol saw	30	3	90
		Total points accrued	140

The above table is for MV Kelly plant items only, hired-in plant will arrive with information on the Noise (dB(A) & vibration output (m/s 2 A(8)). Please contact the plant department if the information is missing on delivery.

All the above items of MV Kelly plant require hearing protection for the user and anyone working in the vicinity of the work where noise levels reach 85 decibels or above with an SNR (Single Number Rating) protection of 30.

Examples of SNR Protection: Kelly equipment.

SNR 30

SNR 28

The SNR protection can be found on the packaging; please check you have the correct SNR protection before using the MV

Noise level dB(A)	Select a protector with an SNR of ...
85-90	20 or less
90-95	20-30
95-100	25-35
100-105	30 or more

HSE Guidance Table

April 2025