# Hand-Arm Vibration Exposure Guide

Version 6, 2015















This guide contains examples of hand-arm vibration exposures measured using VJT consumables to carry out real world tasks.







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#### Who is this guide for?

This guide is intended to help power tool operators, supervisors, safety managers and planners to assess vibration exposures effectively and efficiently.

#### Why has VJ Technology provided this guide?

Power tool operators can be injured by the vibration from their machines and employers must, by law, assess and manage these risks. The Health and Safety Executive expects the risk to be assessed using information appropriate to the tool as it will be used.

Information from some sources may not be appropriate for particular tasks, may be based on free-run tests rather than real usage, or may be based on outdated single-axis measurements which under-estimate the machine vibration.

VJ Technology developed this guide to provide contractors with realistic vibration exposure examples. Management training, toolbox talks and expert guidance are also available if required.



#### What is in this guide?

This guide contains examples of the amount of work that can be done with VJ Technology consumables carrying out common tasks, based on real-use tests of the machines and consumables.

The information is provided using the task-based 'productivity' system developed by the UK Contractors Group, the points system developed by the Health and Safety Executive, and the more general trigger time system.

The guide also provides a brief description of Hand-Arm Vibration Syndrome and gives some practical advice on reducing the risk.



# What is hand-arm vibration?

Hand-arm vibration is vibration transmitted from work processes into workers' hands and arms from hand-held power tools or handguided equipment.



#### When is it dangerous?

Regular and frequent exposure to hand-arm vibration can lead to permanent health effects collectively known as hand-arm vibration syndrome (HAVS), and specific diseases such as carpal tunnel syndrome and Vibration White Finger (VWF).

#### What are the early symptoms?

Symptoms may include:

- Tingling and numbness in the fingers;
- Not being able to feel things properly;
- Loss of strength in the hands;
- Fingers going white (blanching) and becoming red and painful on recovery, particularly in the cold and wet, and probably only in the tips at first.

# How can the tool operator reduce the risk?

- Make sure the tool and the consumable are in good condition.
- Make sure you use the right tool for the job.
- Avoid gripping the machine too hard or using too much pressure.
- Keep warm and dry at work. Wear gloves and extra clothing when it is cold.
- If you smoke, cut down before and while you are at work. Smoking affects blood flow.
- Exercise and massage your fingers during breaks.
- Try to reduce the time you use a machine in one go, perhaps by doing other tasks in between.
- Make sure you can recognise the symptoms of HAVS.

#### How much vibration is too much?

The Control of Vibration at Work Regulations 2005 sets two exposure levels, the daily vibration Exposure Action Value (the EAV) and the daily vibration Exposure Limit Value (the ELV).

If the the daily Exposure Action Value (EAV) is likely to be exceeded, exposure control measures and health surveillance must always be in place. These measures may also be required for lower exposures.

The Exposure Limit Value is the legal daily limit and must never be exceeded.

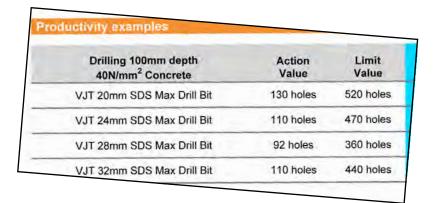




Pictures above courtesy of The Health and Safety Executive







The 'productivity' data for each tool, consumable and task gives examples of the work that can be done before reaching the daily Exposure Action Value (EAV) and the daily Exposure Limit Value (ELV).

Be aware that the values are daily exposures for this machine only.

For example, if a machine operator was halfway to the Action Level after using one machine, they would already be halfway to the Action Level when they started using another machine.

If several different machines are used during the working day then it may be easier to manage exposures using the HSE points system, explained below.

#### What is the trigger time?

The trigger time is the actual time that the machine is being used, it should not be confused with the overall time it takes to complete a job. Estimating the trigger time can be difficult, especially for short duration or rapidly repeated tasks such as drilling holes.



### What is the 'HSE points' system?

it ie	HSE Points
oles	0.8 per hole
oles	0.9 per hole
noles	1.1 per hole
holes	1 per hole

The HSE Points system gives each task a certain number of 'points' based on both the vibration magnitude and the time taken. The EAV is equivalent to 100 HSE points. The ELV is equivalent to 400 HSE points. The advantage of this system is that exposures for different tasks using different machines can simply be added together to give a total daily exposure.

For example:

Example Tasks Chasing 3 metres into medium/hard concrete with a Stihl TS400 using the VJT general purpose CL300 diamond blade at 3 points per metre	HSE Points 9
Drilling 10 holes at 16mm diameter and around 100mm deep into the same concrete with a Makita HR3000C using a VJT SDS+ hammer drill bit at 2 points per hole	20
Total points	29

The total exposure is 29 Points, a little under a third of the way to the 100-point Action Value.





### What is the VJT Test Laboratory?

The VJT Test Laboratory is a manufacturer-independent test facility. The Lab is managed by Mr Martin O'Boyle, one of the UK's leading experts in the field of hand-arm vibration exposure.

The Lab was established in 2007 to provide tool users with independent, unbiased and realistic information on vibration exposure.

The VJT Test Laboratory regularly collaborates with the Health and Safety Laboratory, the scientific arm of the Health and Safety Executive.

The testing performed by the Test Lab is carried out in partnership with VJ Technology customers that use power tools in their day to day work.

#### What if my tool/task is not included?

If your task is similar, your experience may help you decide if an example shown is likely to be similar. If your task is different, or if you are not sure, please contact VJ Technology to arrange for an expert from the Test Laboratory to call you back. We aim to provide you with suitable guidance using performance and vibration exposure values from our own tests and from other trusted sources.

If reliable information is not available for your situation and there is a significant health risk, we are fully equipped to make the necessary measurements for you. These tests could be carried out either on-site or at our laboratory.

### **Important notes:**

- Tasks should be planned to keep vibration exposures as low as practically possible.
- Productivity values can be influenced by many factors (tool maintenance, base material, operating behaviour, etc.) so the productivity examples provided are for guidance only.
- Tests were conducted with the consumables supplied by VJ Technology except where indicated. The consumable can affect both the vibration exposure and the speed of operation so the information in this booklet does not apply to consumables from other suppliers.
- All tests were conducted with machines and consumables that were used correctly and in good condition.
   Poor condition machines and consumables can substantially increase the operator's vibration exposure,
   reducing the amount of work they would normally carry out. Machines should be inspected regularly to
   ensure that they are in good working order and worn, blunt or damaged consumables should be replaced.
- VJ Technology is in regular contact with the Health and Safety Executive and other relevant organisations and will update the information provided in line with developments in best practice. The information in this booklet is provided in good faith to help manage vibration exposures and may be revised without notification.

#### **Technical information**

- All productivity tests were conducted according to the 'real use' standard BS EN ISO 5349-1:2001 with the accelerometers generally positioned adjacent to the forefinger and thumb as specified in the BS EN 60745 series of standards for testing electrical power tools.
- All machines were operated at full power unless the manufacturer recommended a lower setting for the application tested. Any other machine controls were set according to the manufacturer's instructions.
- The 40N/mm<sup>2</sup> concrete used was typically cast using high flint content marine aggregate and without rebar.
- All results contained in this booklet are based on manufacturer-independent tests conducted by the VJ Technology Test Laboratory except where indicated.
- Machine weight and noise pressure values, where given, are as reported by the machine manufacturer information supplied with that particular tool at the time it was tested. Standards for reporting tool weight and noise emission are regularly revised so this information should be treated with caution.
- The trigger times reported in this booklet were calculated using the worst case measurement from the manufacturer-independent tests shown on each page, unless:
  - the manufacturer's declared value in the machine handbook was clearly based on a tri-axial measurement from a reasonably realistic test, and
  - the manufacturer's declared value was greater than the worst case value measured during our manufacturer-independent tests shown on that page.
- The vibration value, used to calculate general trigger times, is marked with the appropriate test standard:
  - "EN 60745" where the manufacturer declared value was considered reasonably representative.
  - "ISO 5349" where manufacturer-independent test data obtained by VJ Technology was used.
- The current consensus from UK experts is that powder or gas actuated direct fixing tools (nailguns)
  typically expose users to individual shocks, not vibration. It is possible that the use of these tools may
  cause health effects, but it is more appropriate to assess the risk using ergonomics. Measuring and
  reporting vibration data on direct fixing tools is not appropriate. For further advice on assessment of direct
  fixing tools please contact VJ Technology.
- The information provided in this booklet is for guidance only and is correct to the best of our knowledge. However the user must satisfy themselves of the validity of the data for their application. VJ Technology will not be held responsible for any non-compliance that may occur from the use of this information.

If you require more information about vibration testing please contact VJ Technology on 01233 652550.



Example
Hand-Arm
Vibration
Exposures

VJT SDS+ Drill Bits		VJT Points and Chisels	
Typically drilling 100mm depth into 40N/mm <sup>2</sup> concrete	4	Breaking 40N/mm <sup>2</sup> concrete  De Walt D25901 K Demolition Hammer Hilti TE706-AVR Breaker	38 39
Bosch GBH 18V-EC Battery Hammer Drill Bosch GBH 2-23RE Rotary Hammer Drill	1 2	Hilti TE700-AVR Breaker Hilti TE76P-ATC Combihammer	40
Bosch GBH 2-23REA Rotary Hammer Drill	3	Hilti TE1000 Breaker	41
Bosch GBH 24 V Battery Hammer Drill	4	Time TE 1000 Breaker	71
Bosch GBH 36 V-Li Battery Drill	5	VJT Diamond Core and Grindin	ng
Bosch GBH 36 V-Li Compact Battery Drill	6	Drilling/grinding 40N/mm <sup>2</sup> concrete	
De Walt D25112K Rotary Hammer Drill	7	Hilti DD130 - Stand Mounted Core Drill	42
De Walt D25123K Rotary Hammer Drill	8	Makita PC1100 Planer	43
DeWalt DC234KL Battery Hammer Drill	9	Wakita PC1100 Planer	43
Hilti TE16 Rotary Hammer Drill	10	VJT Abrasive Discs	
Hilti TE25 Rotary Hammer Drill	11	Examples include grinding concrete and	Ì
Hilti TE2-A Battery Hammer Drill	12	steel and cutting rebar	
Hilti TE2-M Rotary Hammer Drill	13	_	
Hilti TE30C-AVR Rotary Hammer Drill	14	115mm (4") Discs	
Hilti TE40-AVR Combihammer	15	Bosch GWS 6-115 Angle Grinder	44
Hilti TE6-A Battery Hammer Drill	16	Hilti AG 115-7D Angle Grinder	45
Hilti TE6-A36 AVR Battery Hammer Drill	17	125mm (5") Discs	
Hilti TE6-C Rotary Hammer Drill Makita BHR261T Battery Hammer Drill	18 19	Bosch GWS 10-125 Angle Grinder	46
Makita DHR243 Battery Hammer Drill	20	DeWalt DC415KL Battery Angle Grinder	47
Makita DHR243/EXT Battery Hammer Drill	21	Hilti AG 125-A22 Battery Angle Grinder	48
Makita DHR264 Battery Hammer Drill	22	Hilti DEG 125-D Angle Grinder	49
Makita HR2460 Rotary Hammer Drill	23	Makita 9558NB Angle Grinder	50
Makita HR2470 Rotary Hammer Drill	24	Makita GA5021C Angle Grinder	51
Makita HR2611FT Rotary Hammer Drill	25	230mm (9") Discs	
Makita HR3000C Combihammer	26	Bosch GWS 22-230 LVI Angle Grinder	52
Makita HR3210FCT Rotary Hammer Drill	27	DeWalt D28415 Angle Grinder	53
Metabo BHE 26 Rotary Hammer Drill	28	DeWalt D28492 Angle Grinder	54
Spit 328 24V Battery Hammer Drill	29	Hilti DAG 230-D Angle Grinder	55
VIT CDC May Drill Dita		Hilti DCG 230-D Angle Grinder	56
VJT SDS Max Drill Bits		Makita GA9040S Angle Grinder	57
Typically drilling 100mm depth into		300mm (12") Discs	
40N/mm <sup>2</sup> concrete		Stihl TS400 Petrol Saw	58
Bosch GBH 5-40 DCE Combihammer	30	Stihl TS410 Petrol Saw	59
De Walt D25602K Combihammer	31	356mm (14") Discs	
Hilti TE56-ATC Combihammer	32	Makita 2414NB Circular Saw	60
Hilti TE60-ATC AVR Combinammer	33		
Hilti TE76P-ATC Combihammer	34		
Hilti TE80-ATC AVR Combihammer	35		
Makita HR4011C Combihammer	36		
Makita HR4511C Combihammer	37		



VJT Diamond Cutting Discs		VJT Circular Saw Blades	
Examples include chasing into brickwork, 7N/mm² block and 40N/mm² concrete		Examples include cutting wood, plasterboard and metal Evolution EVO180 Circular Saw	90
115mm (4") Discs		Hilti WSC 255-KE Circular Saw Hilti WSC 265-KE Circular Saw	91 92
Bosch GWS 6-115 Angle Grinder	61	Hitti WSC85 Circular Saw	93
Hilti AG 115-7D Angle Grinder	62	Makita 5903R Circular Saw	94
125mm (5") Discs		Makita LC1230 Circular Saw	95
Bosch GWS 10-125 Angle Grinder	63	V IT Potory Drill /	
DeWalt DC415KL Battery Angle Grinder	64	VJT Rotary Drill /	
Hilti AG 125-A22 Battery Angle Grinder	65	Driver Consumables	
Hiti DC-SE20 Wall Chaser	66	Examples include drilling and fastening	
Hilti DEG 125-D Angle Grinder	67	masonry, metal and wood	
Makita 9558NB Angle Grinder	68 69	Bosch GSB 20-2 Rotary Hammer Drill	96
Makita GA5021C/EXT Angle Grinder	69	Hilti SF151-A Battery Hammer Drill	97
230mm (9") Discs		Hilti SP180-A Battery Hammer Drill	98
Bosch GWS 22-230 LVI Angle Grinder	70	Hilti SR16 Rotary Drill/Driver	100 101
DeWalt D28415 Angle Grinder	72 70	Hilti UH 240-A Battery Hammer Drill Hitachi D10VF Rotary Hammer Drill	101
DeWalt D28492 Angle Grinder	73 74	Makita DHP456 Battery Hammer drill	102
Hilti DAG/EXT 230-D Angle Grinder Hilti DC 230-S Angle Grinder	74 75	Makita HP2070 Rotary Hammer Drill	104
Hilti DCG 230-D Angle Grinder	75 76	Makita TD0101F Impact Driver	105
Makita GA9040S Angle Grinder	77	·	
300mm (12") Discs		VJT Impact Drive Fixings	
Stihl TS400 Petrol Saw	79	Examples include installing into	
Stihl TS410 Petrol Saw	80	concrete	
Still 18110 1 Still Saw	00	Hilti SIW144-A Battery Impact Wrench	106
VJT Bandsaw Blades		Makita BTW251 Battery Impact Wrench	107
Cutting robor coeff tube and steel angle		Makita TW0350 Impact Wrench	108
Cutting rebar, scaff tube and steel angle Makita BPB180	81	VJT Drywall Screws	
Wanta Di Dioo	01	•	
VJT Jigsaw Blades		Fixing plasterboard to metal and timber stud	
Examples include cutting plywood,		Bosch GSR 6-25 TE Drywall screwdriver	109
chipboard and steel		Makita 6825R Drywall Screwdriver	110
Bosch GST 135-BCE Jigsaw	82	Makita 6844 Autofeed screwdriver	111
Bosch GST 2000 Jigsaw	83	Spit 216 Drywall screwdriver	112
Hilti WSJ 750-ET Jigsaw Hilti WSJ 850-ET Jigsaw	84 85	Spit 216 HDi Battery drywall screwdriver	113
Makita 4350FCT Jigsaw	86	VJT Sanding Sheets	
<u>-</u>		Sanding wood	
VJT Sabre Saw Blades		Hilti WFO 280 Sander	114
Examples include cutting plywood,		Hilti WFE 450-E Sander	115
chipboard and steel			
Hilti WSR 1400-PE Sabre Saw	87		
Makita JR3050T Sabre Saw	88		
Makita JR3070CT-AVT Sabre Saw	89		



### Used with a Bosch GBH 18V-EC



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	558 holes	0.7 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	128 holes	514 holes	0.8 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	106 holes	424 holes	0.9 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	85 holes	342 holes	1.2 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	91 dB(A)	17 m/s <sup>2</sup>	0h 10min	0h 41min	9.6





#### Used with a Bosch GBH 2-23RE



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	540 holes	0.8 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	97 holes	380 holes	1.1 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	53 holes	210 holes	1.9 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	49 holes	190 holes	2.1 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	27 holes	100 holes	3.8 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.3 kg	90 dB(A)	16 m/s <sup>2</sup>	0h 11min	0h 46min	8.6





#### Used with a Bosch GBH 2-23REA



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	117 holes	468 holes	0.9 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	76 holes	384 holes	1.3 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	61 holes	243 holes	1.6 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	49 holes	197 holes	2.0 per hole

Tested without dust extraction.

Too Weig			Trigger Time to the Daily Action Value	Trigger Time to the Daily Limit Value	HSE Points per Minute
2.9 k	g 90 dB(A	A) 18 m/s <sup>2</sup>	0h 09min	0h 37min	10.8





#### Used with a Bosch GBH 24V



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	150 holes	620 holes	0.7 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	450 holes	0.9 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	84 holes	330 holes	1.2 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	54 holes	210 holes	1.9 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.8 kg	91 dB(A)	12 m/s <sup>2</sup>	0h 20min	1h 20min	4.8





#### Used with a Bosch GBH 36V-Li



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	521 holes	0.8 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	98 holes	392 holes	1.0 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	73 holes	291 holes	1.4 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	65 holes	259 holes	1.5 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4.4 kg	91 dB(A)	19 m/s <sup>2</sup>	0h 08min	0h 33min	12





### Used with a Bosch GBH 36V-Li Compact



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	180 holes	730 holes	0.6 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	150 holes	630 holes	0.7 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	160 holes	650 holes	0.7 per hole
VJT 12mm SDS+ drill bit Drilling 100mm depth 40N/mm² Concrete	82 holes	320 holes	1.3 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.9 kg	91 dB(A)	12 m/s <sup>2</sup>	0h 20min	1h 20min	4.8





### Used with a DeWalt D25112K



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	550 holes	0.8 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	420 holes	1 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	85 holes	330 holes	1.2 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	79 holes	310 holes	1.3 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	34 holes	130 holes	3 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.55 kg	85 dB(A)	13.9 m/s <sup>2</sup>	0h 15min	1h 00min	





### Used with a DeWalt D25123K



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	210 holes	830 holes	0.48 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	150 holes	620 holes	0.7 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	92 holes	370 holes	1.1 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.9 kg	89 dB(A)	17.8 m/s <sup>2</sup>	0h 9min	0h 37min	11





### Used with a DeWalt DC234KL



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	700 holes	2800 holes	0.15 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	430 holes	1700 holes	0.24 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	420 holes	1600 holes	0.24 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.8 kg	82 dB(A)	8.5 m/s <sup>2</sup>	0h 41min	2h 40min	2.5





#### **Used with a Hilti TE16**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	180 holes	740 holes	0.6 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	580 holes	0.7 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	560 holes	0.8 per hole
VJT 14mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	97 holes	380 holes	1.1 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	67 holes	260 holes	1.5 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	40 holes	160 holes	2.5 per hole
VJT 22mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	28 holes	110 holes	3.7 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4 kg	89 dB(A)	16.5 m/s <sup>2</sup>	0h 11min	0h 44min	9.1





#### **Used with a Hilti TE25**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	69 holes	270 holes	1.5 per hole
VJT 14mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	64 holes	250 holes	1.6 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	49 holes	190 holes	2.1 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	27 holes	100 holes	3.8 per hole
VJT 22mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	28 holes	110 holes	3.6 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.9 kg	90 dB(A)	17.6 m/s <sup>2</sup>	0h 9min	0h 38min	11





### Used with a Hilti TE2-A



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	170 holes	700 holes	0.6 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	180 holes	730 holes	0.6 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	73 holes	290 holes	1.4 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.9 kg	86 dB(A)	14.5 m/s <sup>2</sup>	0h 14min	0h 57min	7.1





#### Used with a Hilti TE2-M



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	160 holes	670 holes	0.6 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	530 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	430 holes	1 per hole
Fischer 18x80mm U/C Bit Undercutting Shotcrete	210 holes	860 holes	0.47 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	89 dB(A)	16 m/s <sup>2</sup>	0h 11min	0h 46min	8.6





### Used with a Hilti TE30C-AVR



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	167 holes	658 holes	0.6 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	132 holes	527 holes	0.8 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	107 holes	429 holes	0.9 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	45 holes	179 holes	2.2 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4.2 kg	99 dB(A)	12 m/s <sup>2</sup>	0h 20min	1h 23min	





### Used with a Hilti TE40-AVR



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	430 holes	1 per hole
VJT 14mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	99 holes	390 holes	1.1 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	410 holes	1 per hole
VJT 18mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	88 holes	350 holes	1.2 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	71 holes	280 holes	1.5 per hole
VJT 22mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	40 holes	160 holes	2.6 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.6 kg	94 dB(A)	15.6 m/s <sup>2</sup>	0h 12min	0h 49min	8.1





### Used with a Hilti TE6-A



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	580 holes	0.7 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	410 holes	1 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	410 holes	1 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.7 kg	83 dB(A)	9.9 m/s <sup>2</sup>	0h 30min	2h 0min	3.3





### Used with a Hilti TE6-A36 AVR



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	334 holes	1337 holes	0.3 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	270 holes	1079 holes	0.4 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	226 holes	902 holes	0.4 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	178 holes	712 holes	0.6 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4 kg	88 dB(A)	9 m/s <sup>2</sup>	0h 37min	2h 28min	2.7





### Used with a Hilti TE6-C



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	150 holes	620 holes	0.7 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	410 holes	1 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	94 holes	370 holes	1.1 per hole
VJT 14mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	66 holes	260 holes	1.6 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	47 holes	180 holes	2.2 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.8 kg	87 dB(A)	14.5 m/s <sup>2</sup>	0h 14min	0h 57min	7





### Used with a Makita BHR261T



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	170 holes	710 holes	0.6 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	430 holes	1 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	530 holes	0.8 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4.8 kg	92 dB(A)	15 m/s <sup>2</sup>	0h 13min	0h 53min	7.5





#### **Used with a Makita DHR243**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	190 holes	790 holes	0.50 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	160 holes	650 holes	0.61 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	120 holes	510 holes	0.78 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	80 holes	340 holes	1.16 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.4 kg	90 dB(A)	13 m/s <sup>2</sup>	0h 17min	1h 11min	5.6





### Used with a Makita DHR243 with on-tool dust extraction



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	220 holes	895 holes	0.45 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	185 holes	750 holes	0.53 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	560 holes	0.71 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	95 holes	390 holes	1.01 per hole

Tested with dust extraction.

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.4 kg	90 dB(A)	13 m/s <sup>2</sup>	0h 17min	1h 11min	5.6





#### **Used with a Makita DHR264**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	180 holes	720 holes	0.55 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	460 holes	0.86 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	440 holes	0.90 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	400 holes	0.99 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4.7 kg	94 dB(A)	15.5 m/s <sup>2</sup>	0h 12min	0h 49min	8





### Used with a Makita HR2460



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	440 holes	0.9 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	93 holes	370 holes	1.1 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	86 holes	340 holes	1.2 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	69 holes	270 holes	1.5 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.5 kg	90 dB(A)	15.5 m/s <sup>2</sup>	0h 12min	0h 49min	8.1





#### **Used with a Makita HR2470**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	550 holes	0.8 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	120 holes	490 holes	0.9 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	470 holes	0.9 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	90 dB(A)	15.5 m/s <sup>2</sup>	0h 12min	0h 49min	





### Used with a Makita HR2611FT



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	185 holes	750 holes	0.53 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	155 holes	625 holes	0.64 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	120 holes	490 holes	0.81 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	410 holes	0.97 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	55 holes	225 holes	1.75 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
3 kg	90 dB(A)	13 m/s <sup>2</sup>	0h 17min	1h 10min	5.7





#### Used with a Makita HR3000C



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	560 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	98 holes	390 holes	1.1 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	62 holes	240 holes	1.7 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	45 holes	170 holes	2.3 per hole
VJT 26mm SDS+ Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	19 holes	74 holes	5.4 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
4.6 kg	89 dB(A)	18.5 m/s <sup>2</sup>	0h 8min	0h 35min	12





#### Used with a Makita HR3210FCT



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	350 holes	1400 holes	0.29 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	260 holes	1000 holes	0.39 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	220 holes	910 holes	0.44 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	430 holes	1 per hole
VJT 20mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	89 holes	350 holes	1.2 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5 kg	89 dB(A)	10.2 m/s <sup>2</sup>	0h 29min	1h 50min	3.5





# **SDS+ Hammer Drill Bits**

#### **Used with a Metabo BHE 26**



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	250 holes	1000 holes	0.39 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	160 holes	650 holes	0.7 per hole
VJT 10mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	540 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	97 holes	380 holes	1.1 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	44 holes	170 holes	2.3 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	87 dB(A)	12 m/s <sup>2</sup>	0h 20min	1h 20min	4.8





# **SDS+ Hammer Drill Bits**

# Used with a Spit 328 24V



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 6mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	570 holes	0.7 per hole
VJT 8mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	140 holes	550 holes	0.8 per hole
VJT 12mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 16mm SDS+ Drill Bit Drilling 100mm depth 40N/mm² Concrete	67 holes	260 holes	1.6 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
3.7 kg	dB(A)	10.4 m/s <sup>2</sup>	0h 27min	1h 50min	3.6





#### Used with a Bosch GBH 5-40DCE



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	54 holes	217 holes	1.8 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	48 holes	192 holes	2.1 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	32 holes	130 holes	3.1 per hole
VJT 32mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	24 holes	95 holes	4.2 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.8 kg	93 dB(A)	13 m/s <sup>2</sup>	0h 17min	1h 11min	5.6





#### Used with a DeWalt D25602K



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	42 holes	170 holes	2.4 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	40 holes	160 holes	2.5 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	36 holes	140 holes	2.8 per hole
VJT 32mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	28 holes	110 holes	3.6 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.9 kg	93 dB(A)	14.6 m/s <sup>2</sup>	0h 14min	0h 56min	7.1





#### **Used with a Hilti TE56-ATC**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 18mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	51 holes	200 holes	2 per hole
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	55 holes	220 holes	1.9 per hole
VJT 22mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	52 holes	200 holes	2 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	47 holes	180 holes	2.2 per hole
VJT 26mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	37 holes	140 holes	2.8 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	38 holes	150 holes	2.7 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.6 kg	92 dB(A)	13.1 m/s <sup>2</sup>	0h 17min	1h 0min	5.8





#### **Used with a Hilti TE60-ATC**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
22mm Cavity Wall Bit Drilling 100mm depth 7N/mm <sup>2</sup> Concrete	400 holes	1600 holes	0.25 per hole
26mm Cavity Wall Bit Drilling 100mm depth 7N/mm <sup>2</sup> Concrete	290 holes	1100 holes	0.34 per hole
26mm Cavity Wall Bit Drilling 100mm depth 40N/mm² Concrete	79 holes	310 holes	1.3 per hole
22mm Cavity Wall Bit Drilling through Common Brick	950 holes	3800 holes	0.11 per hole
26mm Cavity Wall Bit Drilling through Common Brick	690 holes	2700 holes	0.15 per hole

	ool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
	eight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
7.4	4 kg	99 dB(A)	9 m/s <sup>2</sup>	0h 37min	2h 20min	2.7





#### **Used with a Hilti TE76P-ATC**



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	44 holes	170 holes	2.3 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	39 holes	150 holes	2.6 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	27 holes	100 holes	3.8 per hole
VJT 32mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	27 holes	100 holes	3.8 per hole
VJT 38mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	13 holes	52 holes	7.7 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
8.3 kg	91 dB(A)	15.4 m/s <sup>2</sup>	0h 12min	0h 50min	8





#### **Used with a Hilti TE80-ATC**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	66 holes	260 holes	1.6 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	44 holes	170 holes	2.3 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	44 holes	170 holes	2.3 per hole
VJT 32mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	32 holes	120 holes	3.2 per hole
VJT Breaker Point Breaking 40N/mm² Concrete	38 min	2h 30m	2.7 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
10.2 kg	100 dB(A)	12.1 m/s <sup>2</sup>	0h 20min	1h 20min	5





#### Used with a Makita HR4011C



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 18mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	230 holes	940 holes	0.43 per hole
VJT 22mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	160 holes	660 holes	0.6 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	130 holes	520 holes	0.8 per hole
VJT 26mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	100 holes	420 holes	1 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.4 kg	90 dB(A)	8.1 m/s <sup>2</sup>	0h 46min	3h 00min	2.2





#### Used with a Makita HR4511C



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 20mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	130 holes	520 holes	0.8 per hole
VJT 24mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	470 holes	0.9 per hole
VJT 28mm SDS Max Drill Bit Drilling 100mm depth 40N/mm <sup>2</sup> Concrete	92 holes	360 holes	1.1 per hole
VJT 32mm SDS Max Drill Bit Drilling 100mm depth 40N/mm² Concrete	110 holes	440 holes	1 per hole
VJT Breaker Point Breaking 40N/mm² Concrete	40 mins	2h 40m	2.5 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
8.4 kg	94 dB(A)	8.6 m/s <sup>2</sup>	0h 40min	2h 40min	2.5





# **SDS Max Points and Chisels**

#### Used with a DeWalt D25901K



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT Breaker Point Breaking 40N/mm <sup>2</sup> Concrete	23 min	1h 30m	4.3 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
10.9 kg	89 dB(A)	11.2 m/s <sup>2</sup>	0h 23min	1h 30min	4.3





# **SDS Max Points and Chisels**

#### Used with a Hilti TE706-AVR



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT Breaker Point Breaking 40N/mm <sup>2</sup> Concrete	33 min	2h 10m	3.1 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
7.9 kg	87 dB(A)	9.5 m/s <sup>2</sup>	0h 33min	2h 10min	3.1





# **SDS Max Points and Chisels**

#### **Used with a Hilti TE76P-ATC**



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT Breaker Point Breaking 40N/mm <sup>2</sup> Concrete	13 mins	54 mins	7.4 per minute

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
8.3 kg	91 dB(A)	14.8 m/s <sup>2</sup>	0h 13min	0h 54min	7.4





#### Used with a Hilti TE1000-AVR



# Productivity examples

Application	Action Value	Limit Value	HSE Points
Breaker Point Breaking 40N/mm <sup>2</sup> Concrete	20 min	1h 20m	5 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
11.8 kg	87 dB(A)	12.2 m/s <sup>2</sup>	0h 20min	1h 20min	





# **Diamond Core**

#### Used with a Hilti DD130-Stand Mounted Core Drill



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 82mm Diamond Core			
Drilling 40N/mm <sup>2</sup> Concrete	55 min	3h 40m	1.8 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
20.3 kg	102 dB(A)	7.3 m/s <sup>2</sup>	0h 55min	3h 40min	1.8





# **Diamond Grinding Discs**

#### **Used with a Makita PC1100**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 115mm VCDP Diamond Disc	20 min	1h 20min	5 por min
Surface grinding 40N/mm <sup>2</sup> Concrete	20 111111	111 2011111	5 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.3 kg	88 dB(A)	12.1 m/s <sup>2</sup>	0h 20min	1h 20min	5





#### Used with a Bosch GWS 6-115



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 115mm Metal Grind Disc Surface grinding 6mm Durasteel	54 min	3h 30m	1.9 per min
VJT 115mm Metal Grind Disc Surface grinding Mild Steel	46 min	3h 00m	2.2 per min
VJT 115mm Metal Cut Disc Cutting through 12mm Rebar	450 cuts	1800 cuts	0.22 per cut
VJT 115mm Metal Cut Disc Cutting through 1mm Mild Steel	82 metres	320 metres	1.3 per metre
VJT 115mm Metal Cut Disc Cutting through 1.5mm Stainless steel plate	100 metres	410 metres	1 per metre
VJT 115mm Stone Cut Disc Cutting 25mm depth Common Brick	35 metres	130 metres	2.9 per metre
VJT 115mm Stone Cut Disc Cutting 15mm depth 7N/mm <sup>2</sup> Concrete Block	11 metres	44 metres	9.2 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.4 kg	dB(A)	8 m/s <sup>2</sup>	0h 46min	3h 00min	2.2





#### Used with a Hilti AG 115-7D



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 115mm Metal Cut Disc Cutting through 2mm Mild Steel	51 metres	204 metres	1.96 per metre
VJT 115mm Metal Cut Disc Cutting through 12mm Rebar	1480 cuts	5940 cuts	0.07 per cut
VJT 115mm Metal Grind Disc Surface grinding Mild Steel	3h 10m	>8 hrs	0.52 per min
VJT 115mm Stone Grind Disc Surface grinding 40N/mm² Concrete	4h 30m	>8 hrs	0.37 per min

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.0 kg	85 dB(A)	6.5 m/s <sup>2</sup>	1h 11min	4h 44min	1.4





#### Used with a Bosch GWS 10-125



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	1400 cuts	5800 cuts	0.07 per cut
VJT 125mm Metal Cut Disc Cutting through 16mm Rebar	510 cuts	2000 cuts	0.2 per cut
VJT 125mm Metal Cut Disc Cutting through 3mm Mild Steel	23 metres	91 metres	4.5 per metre
VJT 125mm Metal Grind Disc Surface grinding Mild Steel	5h 30m	>8 hrs	0.3 per min
VJT 125mm Stone Grind Disc Surface grinding 40N/mm² Concrete	2h 30m	>8 hrs	0.7 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.7 kg	dB(A)	6.2 m/s <sup>2</sup>	1h 10min	5h 10min	1.3



#### Used with a DeWalt DC415KL



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	2100 cuts	8700 cuts	0.046 per cut
VJT 125mm Metal Cut Disc Cutting through 16mm Rebar	1500 cuts	6100 cuts	0.07 per cut
VJT 125mm Metal Grind Disc Surface grinding Mild Steel	>8 hrs	>8 hrs	0.16 per min
VJT 125mm Stone Grind Disc Surface grinding 40N/mm <sup>2</sup> Concrete	>8 hrs	>8 hrs	0.2 per min

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.5 kg	79 dB(A)	5.8 m/s <sup>2</sup>	1h 20min	5h 50min	1.2





#### Used with a Hilti AG 125-A22



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	890 cuts	3560 cuts	0.11 per cut
VJT 125mm Metal Cut Disc Cutting through 16mm Rebar	710 cuts	2860 cuts	0.14 per cut
VJT 125mm Metal Grind Disc Surface grinding Mild Steel	>8 hrs	>8 hrs	0.15 per min
VJT 125mm Stone Grind Disc Surface grinding 40N/mm² Concrete	5h 20m	>8 hrs	0.30 per min

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.7 kg	83 dB(A)	3.8 m/s <sup>2</sup>	3h 27min	> 8h	0.5





#### Used with a Hilti DEG 125-D



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	520 cuts	2000 cuts	0.2 per cut
VJT 125mm Metal Cut Disc Cutting through 20mm Rebar	390 cuts	1500 cuts	0.26 per cut
VJT 125mm Metal Grind Disc Surface grinding Mild Steel	2h 30m	>8 hrs	0.7 per min

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weigh	t Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.2 kç	89 dB(A)	7 m/s <sup>2</sup>	1h 00min	4h 00min	1.7



#### Used with a Makita 9558NB



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	590 cuts	2300 cuts	0.17
VJT 125mm Metal Cut Disc Cutting through 16mm Rebar	230 cuts	950 cuts	0.43
VJT 125mm Metal Cut Disc Cutting through 20mm Rebar	140 cuts	570 cuts	0.7 per cut
VJT 125mm Metal Grind Disc Surface grinding Mild Steel	2h 20m	>8 hrs	0.7 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.1 kg	86 dB(A)	7 m/s <sup>2</sup>	1h 00min	4h 00min	1.7





#### Used with a Makita GA5021C



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm Metal Cut Disc Cutting through 12mm Rebar	2220 cuts	8885 cuts	0.045 per cut
VJT 125mm Metal Cut Disc Cutting through 16mm Rebar	1610 cuts	6445 cuts	0.062 per cut
VJT 125mm Metal Cut Disc Cutting through 20mm Rebar	285 cuts	1155 cuts	0.35 per cut
VJT 125mm Metal Grind Disc Surface grinding	>8 hrs	>8 hrs	0.16 per min
VJT 125mm Stone Grind Disc Surface grinding	6h 20m	>8 hrs	0.27 per min

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.9 kg	90 dB(A)	8.5 m/s <sup>2</sup>	0h 41min	2h 46min	





#### Used with a Bosch GWS 22-230 LVI



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	140 cuts	590 cuts	0.7 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	84 cuts	330 cuts	1.2 per cut
VJT 230mm Metal Grind Disc Surface grinding Mild Steel	52 min	3h 20min	2 per min
VJT 230mm Stone Grind Disc Surface grinding 40N/mm² Concrete	1h 10min	4h 40min	1.4 per min
VJT 230mm Metal Cut Disc Cutting through 16mm Rebar	270 cuts	1000 cuts	0.37 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.4 kg	92 dB(A)	10.2 m/s <sup>2</sup>	0h 28min	1h 50min	3.5





#### Used with a DeWalt D28415



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	680 cuts	2700 cuts	0.15 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	490 cuts	1900 cuts	0.21 per cut
VJT 230mm Metal Cut Disc Cutting through Steel Scaffold Tube	150 cuts	620 cuts	0.7 per cut
VJT 230mm Metal Grind Disc Surface grinding Mild Steel	5h 0m	>8 hrs	0.34 per min
VJT 230mm Stone Grind Disc Surface grinding 40N/mm² Concrete	5h 30m	>8 hrs	0.31 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.1 kg	91 dB(A)	7.4 m/s <sup>2</sup>	0h 54min	3h 30min	1.9





#### Used with a DeWalt D28492



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	580 cuts	2300 cuts	0.18 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	310 cuts	1200 cuts	0.32 per cut
VJT 230mm Metal Cut Disc Cutting through Steel Scaffold Tube	270 cuts	1000 cuts	0.37 per cut
VJT 230mm Metal Grind Disc Surface grinding Mild Steel	1h 30m	6h 0m	1.2 per minute
VJT 230mm Stone Grind Disc Surface grinding 40N/mm <sup>2</sup> Concrete	1h 40m	7h 0m	1 per minute

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
5.5 kg	92 dB(A)	7.6 m/s <sup>2</sup>	0h 51min	3h 20min	2





#### Used with a Hilti DAG 230-D



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	300 cuts	1230 cuts	0.32 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	200 cuts	830 cuts	0.48 per cut
VJT 230mm Metal Cut Disc Cutting through Steel scaffold tube	210 cuts	860 cuts	0.46 per cut
VJT 230mm Metal Grind Disc Surfacing grinding Mild Steel	1h 10m	4h 50m	1.37 per min
VJT 230mm Stone Grind Disc Surface grinding 40N/mm² Concrete	1h 30m	6h 10m	1.07 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.9 kg	90 dB(A)	7 m/s <sup>2</sup>	1h 01min	4h 04min	1.6





#### Used with a Hilti DCG 230-D



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	680 cuts	2700 cuts	0.15 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	790 cuts	3100 cuts	0.13 per cut
VJT 230mm Metal Grind Disc Surface grinding Mild Steel	2h 0m	>8 hrs	0.9 per min
VJT 230mm Stone Cut Disc Cutting through Kerbstone	200 cuts	820 cuts	0.49 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.4 kg	90 dB(A)	5.3 m/s <sup>2</sup>	1h 40min	6h 50min	1





#### **Used with a Makita GA9040S**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm Metal Cut Disc Cutting through 16mm Rebar	1600 cuts	6700 cuts	0.06 per cut
VJT 230mm Metal Cut Disc Cutting through 20mm Rebar	1100 cuts	4700 cuts	0.09 per cut
VJT 230mm Metal Cut Disc Cutting through 25mm Rebar	430 cuts	1700 cuts	0.24 per cut
VJT 230mm Metal Cut Disc Cutting through 40mm Rebar	61 cuts	240 cuts	0.17 per cut
VJT 230mm Metal Cut Disc Cutting through Steel scaffold tube	340 cuts	1300 cuts	0.29 per cut
VJT 230mm Metal Grind Disc Surface grinding Mild Steel	2h 0m	>8 hrs	0.8 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.6 kg	90 dB(A)	7 m/s <sup>2</sup>	1h 00min	4h 00min	1.7





#### **Used with a Stihl TS400**



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 305mm Metal Cut Disc Cutting through 12mm Rebar	3000 cuts	12000 cuts	0.033 per cut
VJT 305mm Metal Cut Disc Cutting through 16mm Rebar	1800 cuts	7300 cuts	0.06 per cut
VJT 305mm Metal Cut Disc Cutting through 25mm Rebar	690 cuts	2700 cuts	0.15 per cut
VJT 305mm Metal Cut Disc Cutting through Steel pipe (OD 33mm)	500 cuts	2000 cuts	0.2 per cut
VJT 305mm Stone Cut Disc Cutting 20mm depth 40N/mm <sup>2</sup> Concrete	14 metres	56 metres	7.2 per metre
VJT 305mm Stone Cut Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	30 metres	120 metres	3.3 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
9.1 kg	99 dB(A)	5.8 m/s <sup>2</sup>	1h 20min	5h 50min	1.2





#### **Used with a Stihl TS410**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 300mm Metal Cut Disc Cutting through 12mm Rebar	6600 cuts	26000 cuts	0.016 per cut
VJT 300mm Metal Cut Disc Cutting through 16mm Rebar	5200 cuts	21000 cuts	0.019 per cut
VJT 300mm Metal Cut Disc Cutting through 20mm Rebar	3000 cuts	12000 cuts	0.034 per cut
VJT 300mm Metal Cut Disc Cutting through 25mm Rebar	2100 cuts	8400 cuts	0.048 per cut
VJT 300mm Metal Cut Disc Cutting through Steel scaffold tube	2400 cuts	9600 cuts	0.042 per cut
VJT 300mm Stone Cut Disc Cutting 30mm depth 7N/mm <sup>2</sup> Concrete Block	71 metres	280 metres	1.5 per metre
VJT 300mm Stone Cut Disc Cutting 20mm depth 40N/mm <sup>2</sup> Concrete	36 metres	140 metres	2.8 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
9.4 kg	98 dB(A)	3.5 m/s <sup>2</sup>	4h 10min	> 8h	0.4





#### Used with a Makita 2414NB



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 356mm Metal Cut Disc Cutting through 50x50x6mm Steel angle	140 cuts	570 cuts	0.7 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
16.4 kg	86 dB(A)	8.2 m/s <sup>2</sup>	0h 44min	2h 50min	





# 115mm/4.5" Diamond Discs

#### Used with a Bosch GWS 6-115



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 115mm CL115 Diamond Disc Cutting 25mm depth Common Brick	100 metres	430 metres	1 per metre
VJT 115mm CL115 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	54 metres	210 metres	1.9 per metre
VJT 115mm CL115 Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	23 metres	94 metres	4.3 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.4 kg	dB(A)	6.6 m/s <sup>2</sup>	1h 00min	4h 30min	1.5





# 115mm/4.5" Diamond Discs

#### Used with a Hilti AG 115-7D



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 115mm VAP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	61 metres	243 metres	1.64 per metre
VJT 115mm CL115 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	123 metres	492 metres	0.81 per metre
VJT 115mm CL115 Diamond Disc Cutting 25mm depth London Brick	160 metres	640 metres	0.62 per metre

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.0 kg	85 dB(A)	6.5 m/s <sup>2</sup>	1h 11min	4h 44min	1.4





# 125mm/5" Diamond Discs

#### Used with a Bosch GWS 10-125



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm CL125 Diamond Disc Cutting 25mm depth Common Brick	89 metres	350 metres	1.2 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	87 metres	350 metres	1.2 per metre
VJT 125mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete Block	18 metres	74 metres	5.5 per metre

Tool		ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weig		Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.7 k	g dB(A)	9.3 m/s <sup>2</sup>	0h 34min	2h 10min	2.9





### Used with a DeWalt DC415KL



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	110 metres	440 metres	0.9 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth Common Brick	120 metres	500 metres	0.8 per metre

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
3.5 kg	79 dB(A)	5.8 m/s <sup>2</sup>	1h 20min	5h 50min	1.2





### Used with a Hilti AG 125-A22



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	18 metres	71 metres	5.64 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	256 metres	1025 metres	0.39 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth London Brick	144 metres	577 metres	0.69 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.7 kg	83 dB(A)	6.3 m/s <sup>2</sup>	1h 15min	5h 02min	1.3





### Used with a Hilti DC-SE20



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm CL125 Diamond Disc Cutting 25mm depth Common Brick Masonry	110 metres	440 metres	1 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	71 metres	280 metres	1.5 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Thermalite Block	140 metres	590 metres	0.7 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.6 kg	104 dB(A)	6.1 m/s <sup>2</sup>	1h 20min	5h 20min	





#### Used with a Hilti DEG 125-D



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
<b>VJT CL125 Diamond Disc</b>			
Cutting 25mm depth 40N/mm <sup>2</sup> Concrete Block	23 metres	91 metres	4.4 per metre

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.2 kg	89 dB(A)	7 m/s <sup>2</sup>	1h 00min	4h 00min	1.7





### Used with a Makita 9558NB



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 125mm VMP Diamond Disc Cutting 25mm depth Common Brick	72 metres	280 metres	1.4 per metre
VJT CL125 Diamond Disc Cutting 25mm depth Common Brick	69 metres	270 metres	1.5 per metre
VJT ECOVJ Diamond Disc Cutting 25mm depth Common Brick	200 metres	830 metres	0.49 per metre
VJT 125mm VMP Diamond Disc Cutting 25mm depth 7N/mm² Concrete Block	60 metres	240 metres	1.7 per metre
VJT CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	52 metres	200 metres	2 per metre
VJT 125mm ECOVJ Diamond Disc Cutting 25mm depth 7N/mm² Concrete Block	150 metres	630 metres	0.7 per metre
VJT 125mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete Block	12 metres	48 metres	8.5 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.1 kg	86 dB(A)	10.3 m/s <sup>2</sup>	0h 28min	1h 50min	3.6





### Used with a Makita GA5021C



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	170 metres	680 metres	0.59 per metre
VJT 125mm CL125 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	350 metres	1410 metres	0.28 per metre
VJT 125mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	140 metres	565 metres	0.71 per metre
VJT 125mm VMP Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	215 metres	860 metres	0.47 per metre

Tested with Makita 196845-3 dust collecting wheel guard

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.9 kg	90 dB(A)	8.5 m/s <sup>2</sup>	0h 41min	2h 46min	





#### Used with a Bosch GWS 22-230 LVI



## Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	11 metres	44 metres	9.1 per metre
VJT 230mm VMC Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	6 metres	25 metres	16 per metre
VJT 230mm VMC Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	10 metres	38 metres	11 per metre
VJT 230mm CL230 Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	41 metres	160 metres	2.5 per metre
VJT 230mm ECOVJ Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	60 metres	240 metres	1.7 per metre
VJT 230mm CL230 Diamond Disc Cutting through Common (Wiston) red brick	370 bricks	1400 bricks	0.27 per brick
VJT 230mm ECOVJ Diamond Disc Cutting through Common (Wiston) red brick	570 bricks	2200 bricks	0.18 per brick

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.4 kg	92 dB(A)	9.9 m/s <sup>2</sup>	0h 30min	2h 00min	3.3





#### Used with a Bosch GWS 22-230 LVI



## Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm VMC Diamond Disc Cutting through Common (Wiston) red brick	210 bricks	850 bricks	0.47 per brick

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.4 kg	92 dB(A)	9.9 m/s <sup>2</sup>	0h 30min	2h 00min	3.3





### Used with a DeWalt D28415



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm CL230 Diamond Disc Cutting widthways through Common Brick masonry	1200 bricks	5000 bricks	0.08 per brick
VJT 230mm CL230 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	300 metres	1200 metres	0.33 per metre
VJT 230mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	36 metres	140 metres	2.8 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
6.1 kg	91 dB(A)	6.7 m/s <sup>2</sup>	1h 00min	4h 30min	





#### Used with a DeWalt D28492



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm CL230 Diamond Disc Cutting 25mm depth 7N/mm² Concrete Block	97 metres	390 metres	1.1 per metre
VJT 230mm CL230 Diamond Disc Cutting widthways through Common Brick masonry	580 cuts	2300 cuts	0.18 per cut
VJT 230mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	16 metres	66 metres	6.1 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.5 kg	92 dB(A)	9.2 m/s <sup>2</sup>	0h 35min	2h 20min	2.9





### Used with a Hilti DAG 230-D/DC-EX 230



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 230mm VMP Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	60 metres	260 metres	1.50 per metre
VJT 230mm VMP Diamond Disc Cutting through 50mm kerbstone	280 cuts	1150 cuts	0.35 per cut
VJT 230mm CL230 Diamond Disc Cutting 25mm depth 7N/mm <sup>2</sup> Concrete Block	140 metres	580 metres	0.69 per metre
VJT 230mm CL230 Diamond Disc Cutting 25mm depth London Brick	100 metres	400 metres	0.99 per metre

Tested with DC-EX 230 cutting guard.

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
5.9 kg	90 dB(A)	6 m/s <sup>2</sup>	1h 23min	5h 33min	





### Used with a Hilti DC 230-S



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm CL230 Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	10 metres	41 metres	10 per metre
VJT 230mm VMP Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	6 metres	25 metres	16 per metre
VJT 230mm CL230 Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	26 metres	100 metres	3.9 per metre
VJT 230mm VPP Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	40 metres	160 metres	2.5 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.1 kg	92 dB(A)	11.6 m/s <sup>2</sup>	0h 22min	1h 20min	4.5





### Used with a Hilti DCG 230-D



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm CL230 Diamond Disc Cutting 25mm depth 40N/mm <sup>2</sup> Concrete	36 metres	140 metres	2.8 per metre
VJT 230mm CL230 Diamond Disc Cutting through Kerbstone	510 cuts	2000 cuts	0.2 per cut

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
5.4 kg	90 dB(A)	5 m/s <sup>2</sup>	2h 00min	> 8h	0.9





### Used with a Makita GA9040S



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm VMC Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	32 metres	120 metres	3.2 per metre
VJT 230mm VPP Diamond Disc Cutting 50mm depth 7N/mm² Concrete Block	74 metres	290 metres	1.4 per metre
VJT 230mm CL230 Diamond Disc Cutting 50mm depth 7N/mm² Concrete Block	34 metres	130 metres	3 per metre
VJT 230mm ECOVJ Diamond Disc Cutting 50mm depth 7N/mm <sup>2</sup> Concrete Block	56 metres	220 metres	1.8 per metre
VJT 230mm VMC Diamond Disc Cutting through Common Brick	280 bricks	1100 bricks	0.36 per brick
VJT 230mm CL230 Diamond Disc Cutting through Common Brick	540 bricks	2100 bricks	0.19 per brick
VJT 230mm ECOVJ Diamond Disc Cutting through Common Brick	480 bricks	1900 bricks	0.21 per brick

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.6 kg	90 dB(A)	10.1 m/s <sup>2</sup>	0h 29min	1h 50min	3.5





### Used with a Makita GA9040S



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230mm CL230 Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	17 metres	68 metres	5.9 per metre
VJT 230mm VMX Diamond Disc Cutting through 40mm Rebar	39 cuts	150 cuts	2.6 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
5.6 kg	90 dB(A)	6.3 m/s <sup>2</sup>	1h 10min	5h 00min	1.4





### **Used with a Stihl TS400**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 300mm CL300 Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	33 metres	130 metres	3.1 per minute
VJT 300mm VMC Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	53 metres	210 metres	1.9 per minute
VJT 300mm VMX Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	77 metres	300 metres	1.3 per minute
VJT 300mm CL300 Diamond Disc Cutting 100mm depth 7N/mm <sup>2</sup> Concrete Block	110 metres	470 metres	0.9 per minute
VJT 300mm VMC Diamond Disc Cutting 100mm depth 7N/mm <sup>2</sup> Concrete Block	120 metres	510 metres	0.8 per minute
VJT 300mm VMX Diamond Disc Cutting 100mm depth 7N/mm² Concrete Block	120 metres	500 metres	0.8 per minute
VJT 300mm VPP Diamond Disc Cutting 100mm depth 7N/mm <sup>2</sup> Concrete Block	120 metres	500 metres	0.8 per minute

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
9.1 kg	99 dB(A)	5 m/s <sup>2</sup>	2h 00min	> 8h	0.9





### **Used with a Stihl TS410**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 300mm CL300 Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	120 metres	510 metres	0.8 per metre
VJT 300mm VMC Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	130 metres	550 metres	0.8 per metre
VJT 300mm VMX Diamond Disc Cutting 50mm depth 40N/mm <sup>2</sup> Concrete	210 metres	870 metres	0.46 per metre
VJT 300mm CL300 Diamond Disc Cutting 100mm depth 7N/mm <sup>2</sup> Concrete Block	230 metres	930 metres	0.43 per metre
VJT 300mm VPP Diamond Disc Cutting 100mm depth 7N/mm <sup>2</sup> Concrete Block	240 metres	980 metres	0.41 per metre
VJT 300mm VMX Diamond Disc Cutting through 40mm Rebar	110 cuts	450 cuts	0.9 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
9.4 kg	98 dB(A)	3.9 m/s <sup>2</sup>	3h 10min	> 8h	0.6





# **Band Saw Blades**

### **Used with a Makita BPB180**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 7925556-A Band Saw blade Cutting Steel scaffold tube	4900 cuts	19000 cuts	0.021 per cut
VJT 7925556-A Band Saw blade Cutting 50x50x6mm Steel angle	2900 cuts	11000 cuts	0.034 per cut
VJT 7925556-A Band Saw blade Cutting 12mm Rebar	13000 cuts	54000 cuts	0.008 per cut

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
6.4 kg	81 dB(A)	2.5 m/s <sup>2</sup>	> 8h	> 8h	0.21





### Used with a Bosch GST 135-BCE



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT T118AHM Jigsaw Blade Cutting through 6mm Durasteel	180 metres	740 metres	0.6 per metre
VJT T118AHM Jigsaw Blade Cutting through 9.5mm Durasteel	180 metres	740 metres	0.6 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.7 kg	84 dB(A)	4.3 m/s <sup>2</sup>	2h 40min	> 8h	0.7





### **Used with a Bosch GST 2000**



# **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT T118AHM Jigsaw Blade Cutting through 6mm Durasteel	68 metres	270 metres	1.5 per metre
VJT T118AHM Jigsaw Blade Cutting through 9.5mm Durasteel	77 metres	300 metres	1.3 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.4 kg	dB(A)	6.2 m/s <sup>2</sup>	1h 10min	5h 10min	





### Used with a Hilti WSJ 750-ET



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT T101B Jigsaw Blade Cutting through 18mm Plywood	130 metres	520 metres	0.8 per metre
VJT T101B Jigsaw Blade Cutting through 18mm Chipboard	200 metres	810 metres	0.49 per metre
VJT T344D Jigsaw Blade Cutting through 50x100mm (2"x4") timber	500 cuts	1900 cuts	0.21 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	87 dB(A)	10.5 m/s <sup>2</sup>	0h 27min	1h 40min	3.7





### Used with a Hilti WSJ 850-ET



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT T101B Jigsaw Blade Cutting through 4mm Polycarbonate sheet	600 metres	2400 metres	0.17 per metre
VJT T101B Jigsaw Blade Cutting through 12mm MDF	590 metres	2300 metres	0.17 per metre
VJT T344D Jigsaw Blade Cutting through 50x100mm (2"x4") timber	1100 cuts	4400 cuts	0.09 per cut
VJT T141HM Jigsaw Blade Cutting through 55mm Thermalcheck Board	580 metres	2300 metres	0.18 per metre
VJT T141HM Jigsaw Blade Cutting through 12.5mm Plasterboard	740 metres	2900 metres	0.14 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	87 dB(A)	8.2 m/s <sup>2</sup>	0h 44min	2h 50min	2.3





### Used with a Makita 4350FCT



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT T101B Jigsaw Blade Cutting through 18mm Hardwood Ply	360 metres	1400 metres	0.28 per metre
VJT T144DF Jigsaw Blade Cutting through 18mm Hardwood Ply	320 metres	1200 metres	0.31 per metre
VJT T301CDF Jigsaw Blade Cutting through 18mm Hardwood Ply	360 metres	1400 metres	0.28 per metre
VJT T301CDF Jigsaw Blade* Cutting through 18mm Hardwood Ply	110 metres	440 metres	0.9 per metre
VJT T101B Jigsaw Blade Cutting through 18mm Sterling Board	560 metres	2200 metres	0.18 per metre
VJT T101B Jigsaw Blade Cutting through 18mm Sterling Board	220 metres	870 metres	0.46 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.4 kg	84 dB(A)	9.7 m/s <sup>2</sup>	0h 31min	2h 00min	3.2





# **Sabre Saw Blades**

### Used with a Hilti WSR 1400-PE



## Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT S922HF Sabre Saw Blade Cutting through 18mm Plywood	39 metres	150 metres	2.6 metres
VJT S922HF Sabre Saw Blade Cutting through 50x100mm (2"x4") timber	50 cuts	200 cuts	2 per cut
VJT S2345X Sabre Saw Blade Cutting through 18mm Chipboard	85 metres	340 metres	1.2 per metre
VJT S918B Sabre Saw Blade Cutting through Steel scaffold tube	37 cuts	140 cuts	2.8 per cut
VJT S918B Sabre Saw Blade Cutting through Steel pipe (OD 33mm)	77 cuts	300 cuts	1.3 per cut
VJT S918B Sabre Saw Blade Cutting through 80x60x3mm Steel U Channel	31 cuts	120 cuts	3.3 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.5 kg	89 dB(A)	15.1 m/s <sup>2</sup>	0h 13min	0h 52min	7.6





# **Sabre Saw Blades**

#### Used with a Makita JR3050T



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT S918B Sabre Saw Blade Cutting through 50x50x3mm Steel angle	11 cuts	44 cuts	9.1 per cut

	ool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
	eight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
3.2	2 kg	88 dB(A)	24.7 m/s <sup>2</sup>	0h 04min	0h 19min	21





# **Sabre Saw Blades**

### Used with a Makita JR3070CT-AVT



## Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT S918B Sabre Saw Blade			
Cutting through 50x50x3mm Steel	130 cuts	520 cuts	0.8 per cut
angle			

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.2 kg	88 dB(A)	9.3 m/s <sup>2</sup>	0h 34min	2h 10min	2.9





### **Used with a Evolution EVO180**



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 180x20mm Z36 TCT Blade Cutting through 50x50x6mm Steel angle	5300 cuts	21000 cuts	0.019 per cut

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
7 kg	99 dB(A)	2 m/s <sup>2</sup>	> 8h	> 8h	0.14





### Used with a Hilti WSC 255-KE



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 160x20mm Z24 TCT Blade Cutting through 18mm Hardwood ply	2400 metres	9800 metres	0.041 per metre
VJT 160x20mm Z24 TCT Blade Cutting through 50mm (2") timber	1600 metres	6500 metres	0.07 per metre
VJT 160x20mm Z48 TCT Blade Cutting through 18mm Sterling Board	3000 metres	12000 metres	0.033 per metre
VJT 160x20mm Z48 TCT Blade Cutting through 12.5mm Plasterboard	6700 metres	27000 metres	0.015 per metre
VJT 160x20mm Z48 TCT Blade Cutting through 18mm Hardwood ply	2600 metres	10000 metres	0.038 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.3 kg	89 dB(A)	2.9 m/s <sup>2</sup>	6h 00min	> 8h	0.28





### Used with a Hilti WSC 265-KE



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 180x20mm Z12 TCT Blade Cutting through 50mm (2") timber	930 metres	3700 metres	0.11 per metre
VJT 180x20mm Z12 TCT Blade Cutting through 12mm MDF	3300 metres	13000 metres	0.03 per metre
VJT 180x20mm Z24 TCT Blade Cutting through 50mm (2") timber	1000 metres	4200 metres	0.1 per metre
VJT 180x20mm Z24 TCT Blade Cutting through 12mm MDF	4200 metres	17000 metres	0.024 per metre
VJT 180x20mm Z56 TCT Blade Cutting through 50mm (2") timber	850 metres	3400 metres	0.12 per metre
VJT 180x20mm Z56 TCT Blade Cutting through 12mm MDF	3700 metres	15000 metres	0.027 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
4.5 kg	89 dB(A)	3.3 m/s <sup>2</sup>	4h 30min	> 8h	0.37





### **Used with a Hilti WSC85**



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230x30mm Z18 TCT Cutting through 50x100mm (2"x4") timber	2000 metres	8000 metres	0.05 per metre
VJT 230x30mm Z18 TCT Cutting through 18mm Hardwood Ply	6100 metres	24000 metres	0.017 per metre
VJT 230x30mm Z24 TCT Cutting through Softwood	1500 metres	6100 metres	0.07 per metre
VJT 230x30mm Z24 TCT Cutting through 12mm MDF	4300 metres	17000 metres	0.024 per metre
VJT 230x30mm Z24 TCT Cutting through 12.5mm Plasterboard	8700 metres	35000 metres	0.012 per metre
VJT 230x30mm Z24 TCT Cutting through 18mm Hardwood Ply	4400 metres	17000 metres	0.023 per metre
VJT 230x30mm Z40 TCT Cutting through 18mm Hardwood Ply	3800 metres	15000 metres	0.027 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
7 kg	100 dB(A)	2.5 m/s <sup>2</sup>	7h 50min	> 8h	0.22





#### Used with a Makita 5903R



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 230x30mm Z24 TCT Cutting through 18mm Hardwood Ply	4900 metres	19000 metres	0.021 per metre
VJT 230x30mm Z24 TCT Cutting through 18mm Sterling Board	5200 metres	21000 metres	0.019 per metre
VJT 230x30mm Z40 TCT Cutting through 18mm Hardwood Ply	3600 metres	14000 metres	0.028 per metre
VJT 230x30mm Z40 TCT Cutting through 18mm Sterling Board	4400 metres	17000 metres	0.023 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
7 kg	95 dB(A)	2.6 m/s <sup>2</sup>	7h 20min	> 8h	0.23





### Used with a Makita LC1230



# Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 300x30mm Z60 TCT Cutting through 50x50x6mm Steel angle	920 metres	3600 metres	0.11 per metre

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
19 kg	dB(A)	6.8 m/s <sup>2</sup>	1h 00min	4h 20min	1.6





### Used with a Bosch GSB 20-2



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 7mm HSS Drill Bit Drilling through 3mm Mild Steel	1000 holes	4000 holes	0.1 per hole
VJT 10mm HSS Drill Bit Drilling through 3mm Mild Steel	210 holes	860 holes	0.47 per hole
VJT 13mm HSS Drill Bit Drilling through 3mm Mild Steel	43 holes	170 holes	2.4 per hole
VJT 7mm HSS Drill Bit Drilling through 6mm Mild Steel	840 holes	3300 holes	0.12 per hole
VJT 10mm HSS Drill Bit Drilling through 6mm Mild Steel	180 holes	730 holes	0.6 per hole
VJT 13mm HSS Drill Bit Drilling through 6mm Mild Steel	49 holes	190 holes	2.1 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.5 kg	99 dB(A)	19.7 m/s <sup>2</sup>	0h 07min	0h 31min	13





### Used with a Hilti SF151-A



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 8mm Brad Point Drill Bit			
Drilling through 50mm (2") timber	7100	28000	0.015 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.5 kg	77 dB(A)	4.8 m/s <sup>2</sup>	2h 10min	> 8h	8.0





### Used with a Hilti SF180-A



## Productivity examples

·			
Application	Action Value	Limit Value	HSE Points
VJT 2mm HSS Drill Bit Drilling through 6mm Mild Steel	910	3600	0.11 per hole
VJT 8x3mm Twinhead Woodscrew Wood to wood fastening timber	2300 screws	9200 screws	0.044 per screw
VJT 5mm Hammer Drill Bit Drilling 100mm depth 7N/mm <sup>2</sup> Thermalite Block	430 holes	1700 holes	0.24 per hole
VJT 5mm Hammer Drill Bit Drilling through Common Brick	76 holes	300 holes	1.4 per hole
VJT 6mm Brad Point Drill Bit Drilling through 18mm Plywood	15000 holes	60000 holes	0.007 per hole
VJT 6mm Brad Point Drill Bit Drilling through 50mm (2") timber	8800 holes	35000 holes	0.012 per hole
VJT 8mm Brad Point Drill Bit Drilling through 18mm Plywood	8300 holes	33000 holes	0.012 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.7 kg	89 dB(A)	3.6 m/s <sup>2</sup>	3h 40min	> 8h	0.45





### Used with a Hilti SF180-A



## **Productivity examples**

Application	Action Value	Limit Value	HSE Points
<b>VJT 8mm Brad Point Drill Bit</b> Drilling through 70mm Softwood	4200 holes	17000 holes	0.024 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.7 kg	89 dB(A)	3.6 m/s <sup>2</sup>	3h 40min	> 8h	0.45





### Used with a Hilti SR16



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 2mm HSS Drill Bit Drilling through 6mm Mild Steel	2600	10000	0.038 per hole
VJT 5mm HSS Drill Bit Drilling through 6mm Mild Steel	850	3400	0.12 per hole
VJT 13mm HSS Drill Bit Drilling through 10mm Mild Steel with pilot	29	110	3.4 per hole

	ool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
	eight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2	kg	86 dB(A)	16.5 m/s <sup>2</sup>	0h 11min	0h 44min	9.1





#### Used with a Hilti UH240-A



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 12mm Brad Point Drill Bit Drilling through 50mm (2") timber	4400 holes	17000 holes	0.023 per hole
VJT 13mm HSS Drill Bit Drilling through 3mm Aluminium	850 holes	3400 holes	0.12 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
3.8 kg	93 dB(A)	6.6 m/s <sup>2</sup>	1h 00min	4h 30min	1.5





#### Used with a Hitachi D10VF



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 7mm HSS Drill Bit Drilling through 3mm Mild Steel	200 holes	810 holes	0.5 per hole
VJT 10mm HSS Drill Bit Drilling through 3mm Mild Steel	57 holes	220 holes	1.8 per hole
VJT 7mm HSS Drill Bit Drilling through 6mm Mild Steel	150 holes	600 holes	0.7 per hole
VJT 10mm HSS Drill Bit Drilling through 6mm Mild Steel	88 holes	350 holes	1.2 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.8 kg	dB(A)	14.1 m/s <sup>2</sup>	0h 15min	1h 00min	6.7





### **Used with a Makita DHP456**



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 6mm Hammer Drill Bit Drilling 50 mm depth 7N/mm² Concrete Block	275 holes	1105 holes	0.36 per hole
VJT 10x2" Twinfast Woodscrew Wood to wood fastening	10320 screws	41295 screws	0.0095 per screw
FFS 7.5x72 Masonry Screw Fixing 45mm Timber to 40N/mm <sup>2</sup> Concrete	10855 fixings	43435 fixings	0.0092 per fixing
VJT 12mm Brad Point Drill Bit Through drilling 45mm Timber	1745 holes	6980 holes	0.06 per hole

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.8 kg	81 dB(A)	13.5 m/s <sup>2</sup>	0h 16min	1h 05min	6.09





### **Used with a Makita HP2070**



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT 7mm HSS Drill Bit Through drilling 2mm Mild Steel	1080 holes	4325 holes	0.09 per hole
VJT 10mm HSS Drill Bit Through drilling 2mm Mild Steel	235 holes	945 holes	0.42 per hole
VJT 7mm HSS Drill Bit Through drilling 4mm Mild Steel	490 holes	1960 holes	0.20 per hole
VJT 10mm HSS Drill Bit Through drilling 4mm Mild Steel	150 holes	605 holes	0.66 per hole

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.6 kg	99 dB(A)	16 m/s <sup>2</sup>	0h 11min	0h 46min	8.5





### Used with a Makita TD0101F



### Productivity examples

Application	Action Value	Limit Value	HSE Points
<b>7.5x72mm masonry screw</b> Fixing 50mm (2") timber to 40N/mm <sup>2</sup> Concrete	970 fixings	3800 fixings	0.11 per fixing
VJT 10x2" Twinfast Woodscrew Wood to wood fastening	1300 screws	5300 screws	0.08 per screw

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
0.99 kg	90 dB(A)	8.5 m/s <sup>2</sup>	0h 41min	2h 40min	2.4





## **Impact Drive Fixings**

### Used with a Hilti SIW144-A



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Screwbolt 6x60 Fixing to 40N/mm² Concrete 15mm fixture	100 fixings	420 fixings	1 per fixing
VJT Screwbolt 6x60 Removal from 40N/mm² Concrete 15mm fixture	2300 fixings	9400 fixings	0.043 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.6 kg	93 dB(A)	12.2 m/s <sup>2</sup>	0h 20min	1h 20min	5





## **Impact Drive Fixings**

### **Used with a Makita BTW251**



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Screwbolt 12x100mm Fixing to 40N/mm <sup>2</sup> Concrete 15mm fixture	130 fixings	510 fixings	0.8 per fixing
VJT Screwbolt 12x100mm Removal from 40N/mm² Concrete 15mm fixture	600 fixings	2400 fixings	0.17 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.7 kg	90 dB(A)	13.7 m/s <sup>2</sup>	0h 15min	1h 00min	6.3





## **Impact Drive Fixings**

### **Used with a Makita TW0350**



### **Productivity examples**

Application	Action Value	Limit Value	HSE Points
VJT Screwbolt 16x100mm Fixing to 40N/mm <sup>2</sup> Concrete 15mm fixture	210 fixings	840 fixings	0.48 per fixing

Tool	Sound	EN 60745	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib. Level	Daily Action Value	Daily Limit Value	Minute
2.9 kg	93 dB(A)	11.5 m/s <sup>2</sup>	0h 22min	1h 30min	4.5





# **Drywall Screws**

### Used with a Bosch GSR 6-25 TE



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Drywall Screw BZP 3.5x32mm Fixing Plasterboard to timber	12000 fixings	49000 fixings	0.009 per fixing
VJT Drywall Screw BZP 3.5x32mm Fixing Plasterboard to 0.5mm metal stud	7900 fixings	31000 fixings	0.013 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.5 kg	85 dB(A)	2 m/s <sup>2</sup>	> 8h	> 8h	0.14



# **Drywall Screws**

#### Used with a Makita 6825R



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Drywall Screw BZP 3.5x32mm Fixing Plasterboard to timber	9100 fixings	36000 fixings	0.011 per fixing
VJT Drywall Screw BZP 3.5x32mm Fixing Plasterboard to 0.5mm metal stud	5000 fixings	20000 fixings	0.02 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.5 kg	85 dB(A)	2 m/s <sup>2</sup>	> 8h	> 8h	





Used with a Makita 6844



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Drywall Screw BZP 3.5x42mm Fixing Plasterboard to timber	10000 screws	43000 screws	0.01 per screw
VJT Drywall Screw BZP 3.5x42mm Fixing Plasterboard to 0.5mm metal stud	11000 screws	47000 screws	0.009 per screw

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.1 kg	dB(A)	3 m/s <sup>2</sup>	5h 30min	> 8h	0.3





Used with a Spit 216



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Drywall screw BZP 3.5x32mm Fixing Plasterboard to timber	13000 fixings	54000 fixings	0.008 per fixing
VJT Drywall screw BZP 3.5x32mm Fixing Plasterboard to 0.5mm metal stud	9400 fixings	37000 fixings	0.011 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.1 kg	77 dB(A)	1.8 m/s <sup>2</sup>	> 8h	> 8h	0.11





# **Drywall Screws**

### Used with a Spit 216 Hdi



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT Drywall screw BZP 3.5x32mm Fixing Plasterboard to timber	22000 fixings	91000 fixings	0.0044 per fixing
VJT Drywall screw BZP 3.5x32mm Fixing Plasterboard to 0.5mm metal stud	17000 fixings	68000 fixings	0.006 per fixing

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
1.8 kg	77 dB(A)	1.5 m/s <sup>2</sup>	> 8h	> 8h	0.08





## **Sanding Sheets**

#### Used with a Hilti WFO 280



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 93x280mm P60 Sheet Sanding Timber	2hrs 00mins	>8 hrs	0.9 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.8 kg	83 dB(A)	4.9 m/s <sup>2</sup>	2h 00min	> 8h	0.9





## **Sanding Sheets**

### Used with a Hilti WSC 450-E



### Productivity examples

Application	Action Value	Limit Value	HSE Points
VJT 150mm P60 Sheet Sanding timber	28 mins	1hr 50mins	3.5 per min
VJT 150mm P60 Sheet Sanding Hardwood Ply	34 mins	2hrs 10mins	3 per min
VJT 150mm P120 Sheet Sanding Timber	46 mins	3hrs 00mins	2.2 per min

Tool	Sound	ISO 5349	Trigger Time to the	Trigger Time to the	HSE Points per
Weight	Pressure	Vib.Level	Daily Action Value	Daily Limit Value	Minute
2.1 kg	82 dB(A)	10.2 m/s <sup>2</sup>	0h 28min	1h 50min	

















ISO 9001:2008 Cert. No. 1727

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