

D2HS

For excavators
1 - 5 tonnes

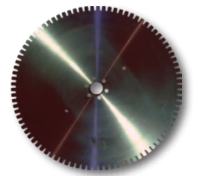


Cutting with Echidna Diamond Rocksaws

concrete - rock - wood - asphalt



- ⚙ High-speed up to 3000rpm
- ⚙ also cuts reinforced concrete and asphalt
- ⚙ blades as small as 300mm diameter and as large as 1000mm
- ⚙ safer and better performance than dedicated road cutters
- ⚙ multiple blades for cutting trenches



Diamond Blades
400 - 1000mm



Excavators
1 - 5 tonne



D2HS/33
D2HS/40, D2HS/50



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Cutting with Echidna Diamond Rocksaws



D2HS /25

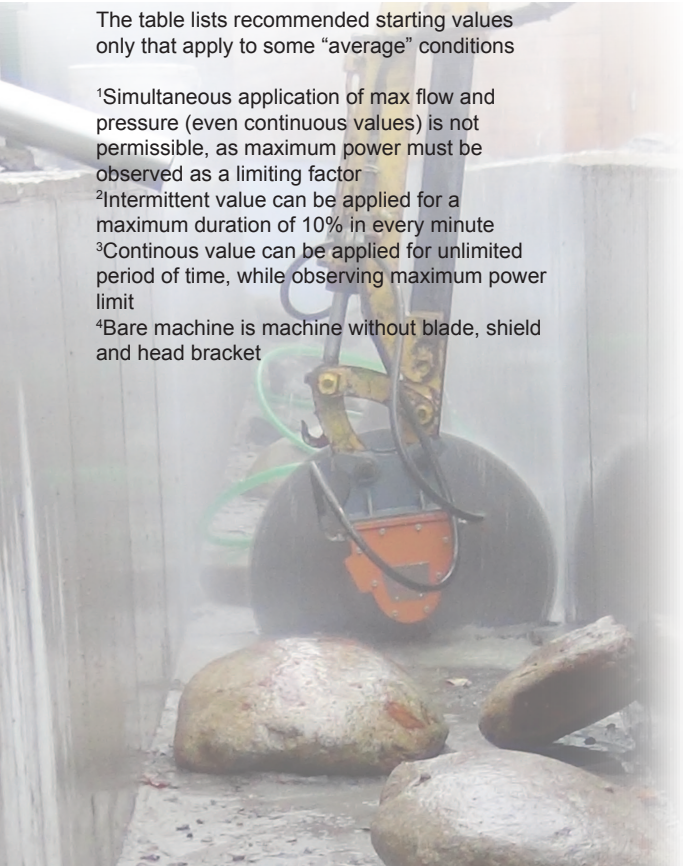
The table lists recommended starting values only that apply to some "average" conditions

¹Simultaneous application of max flow and pressure (even continuous values) is not permissible, as maximum power must be observed as a limiting factor

²Intermittent value can be applied for a maximum duration of 10% in every minute

³Continuous value can be applied for unlimited period of time, while observing maximum power limit

⁴Bare machine is machine without blade, shield and head bracket



Model >>			D2HS/25
Excavator Range	Max	tonnes	8
	Recommended		1 - 2
Blade diameter		mm	400 - 600
Power	cont ¹	kW	30
Pressure	max. int ²	MPa	30
	max. cont ³		21
	min. required		15
Flow	max. cont ³	l/min	105
Torque	max. cont ¹	Nm	135
Mass	bare machine ⁴	kg	57
Cutting depth loss		mm	75
minimum trench width		mm	290
rapid automatic brake			yes
reversible blade rotation			yes
case drain required			yes

Blade dia/ mm	sandstone/ limestone		concrete		basalt/granite		bitumen/asphalt		wood	
	min	max	min	max	min	max	min	max	min	max
D2HS/25 - Flow (RPM)										
400	36 (1440)	54 (2160)	42 (1680)	54 (2160)	42 (1680)	54 (2160)	54 (2160)	72 (2880)	48 (1920)	60 (2400)
500	29 (1160)	43 (1720)	33 (1320)	43 (1720)	33 (1320)	43 (1720)	43 (1720)	57 (2280)	38 (1520)	48 (1920)
600	24 (960)	36 (1440)	28 (1120)	36 (1440)	28 (1120)	36 (1440)	36 (1440)	48 (1920)	32 (1280)	40 (1600)
700	20 (800)	31 (1240)	24 (960)	31 (1240)	24 (960)	31 (1240)	31 (1240)	41 (1640)	27 (1080)	34 (1360)
800	18 (720)	27 (1080)	21 (840)	27 (1080)	21 (840)	27 (1080)	27 (1080)	36 (1440)	24 (960)	30 (1200)



Cutting with Echidna Diamond Rocksaws



D2HS /32

The table lists recommended starting values only that apply to some "average" conditions

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³Continuous value can be applied for unlimited period of time, while observing maximum power limit

⁴Bare machine is machine without blade, shield and head bracket

Model >>			D2HS/32
Excavator Range	Max	tonnes	8
	Recommended		2 - 3
Blade Range		mm	400-800
Power	max. cont ¹	kW	43
Pressure	max. int ²	MPa	30
	max. cont ³		21
	min. required		15
Flow	max. cont ²	l/min	115
Torque	max. cont ¹	Nm	110
Mass	bare machine ⁴	kg	57
Cutting depth loss		mm	75
minimum trench width		mm	240
rapid automatic brake			yes
reversible blade rotation			yes
case drain required			yes

Blade dia/ mm	sandstone/ limestone		concrete		basalt/granite		bitumen/asphalt		wood	
	min	max	min	max	min	max	min	max	min	max
D2HS/32 - Flow (RPM)										
400	46 (1438)	69 (2156)	53 (1656)	69 (2156)	69 (2156)	69 (2156)	69 (2156)	92 (2875)	61 (1906)	76 (2375)
500	37 (1156)	55 (1715)	43 (1344)	55 (1715)	55 (1715)	55 (1715)	55 (1715)	73 (2281)	49 (1531)	61 (1906)
600	31 (969)	46 (1438)	36 (1125)	46 (1438)	46 (1438)	46 (1438)	46 (1438)	61 (1906)	41 (1281)	51 (1594)
700	26 (813)	39 (1219)	31 (969)	39 (1219)	39 (1219)	39 (1219)	39 (1219)	52 (1625)	35 (1094)	44 (1375)
800	23 (719)	34 (1063)	27 (844)	34 (1063)	34 (1063)	34 (1063)	34 (1063)	46 (1438)	31 (969)	38 (1188)
900	20 (625)	31 (969)	24 (750)	31 (969)	31 (969)	31 (969)	31 (969)	41 (1281)	27 (844)	34 (1063)
1000	18 (563)	28 (875)	21 (656)	28 (875)	28 (875)	28 (875)	28 (875)	37 (1156)	24 (750)	31 (969)



Cutting with Echidna Diamond Rocksaws



D2HS /40

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²Intermittent value can be applied for a maximum duration of 10% in every minute

³Continuous value can be applied for unlimited period of time, while observing maximum power limit

⁴Bare machine is machine without blade, shield and head bracket

Model >>			D2HS/40
Excavator Range	Max	tonnes	8
	Recommended		2 - 4
Blade Range		mm	400-1000
Power	max. cont ¹	kW	52
Pressure	max. int ²	MPa	30
	max. cont ³		21
	min. required		15
Flow	max. cont ²	l/min	144
Torque	max. cont ¹	Nm	133
Mass	bare machine ⁴	kg	57
Cutting depth loss		mm	75
minimum trench width		mm	240
rapid automatic brake			yes
reversible blade rotation			yes
case drain required			no

Blade dia/ mm	sandstone/ limestone		concrete		basalt/granite		bitumen/asphalt		wood	
	min	max	min	max	min	max	min	max	min	max
D2HS/40 - Flow (RPM)										
400	57 (1425)	86 (2150)	67 (1675)	86 (2150)	67 (1675)	86 (2150)	86 (2150)	115 (2875)	76 (1900)	95 (2375)
500	46 (1150)	69 (1725)	53 (1325)	69 (1725)	53 (1325)	69 (1725)	69 (1725)	92 (2300)	61 (1525)	76 (1900)
600	38 (950)	57 (1425)	45 (1125)	57 (1425)	45 (1125)	57 (1425)	57 (1425)	76 (1900)	51 (1275)	64 (1600)
700	33 (825)	49 (1225)	38 (950)	49 (1225)	38 (950)	49 (1225)	49 (1225)	65 (1625)	44 (1100)	55 (1375)
800	29 (725)	43 (1075)	33 (825)	43 (1075)	33 (825)	43 (1075)	43 (1075)	57 (1425)	38 (950)	48 (1200)
900	25 (625)	38 (950)	30 (750)	38 (950)	30 (750)	38 (950)	38 (950)	51 (1275)	34 (850)	42 (1050)
1000	23 (575)	34 (850)	27 (675)	34 (850)	27 (675)	34 (850)	34 (850)	46 (1150)	31 (775)	38 (950)



Cutting with Echidna Diamond Rocksaws



D2HS /50

The table lists recommended starting values only that apply to some "average" conditions

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³Continuous value can be applied for unlimited period of time, while observing maximum power limit

⁴Bare machine is machine without blade, shield and head bracket

Model >>			D2HS/50
Excavator Range	Max	tonnes	8
	Recommended		2 - 5
Blade range		mm	400-1000
Power	max. cont ¹	kW	62
Pressure	max. int ²	MPa	30
	max. cont ³		21
	min. required		15
Flow	max. cont ²	l/min	180
Torque	max. cont ¹	Nm	167
Mass	bare machine ⁴	kg	57
Cutting depth loss		mm	75
minimum trench width		mm	240
rapid automatic brake			yes
reversible blade rotation			yes
case drain required			no

Blade dia / mm	sandstone/limestone		concrete		basalt/granite		bitumen/asphalt		wood	
	min	max	min	max	min	max	min	max	min	max
D2HS/50 - Flow (RPM)										
400	72 (1440)	107 (2140)	84 (1680)	107 (2140)	84 (1680)	107 (2140)	107 (2140)	143 (2860)	95 (1900)	119 (2380)
500	57 (1140)	86 (1720)	67 (1340)	86 (1720)	67 (1340)	86 (1720)	86 (1720)	115 (2300)	76 (1520)	95 (1900)
600	48 (960)	72 (1440)	56 (1120)	72 (1440)	56 (1120)	72 (1440)	72 (1440)	95 (1900)	64 (1280)	80 (1600)
700	41 (820)	61 (1220)	48 (960)	61 (1220)	48 (960)	61 (1220)	61 (1220)	82 (1640)	55 (1100)	68 (1360)
800	36 (720)	42 (840)	42 (840)	42 (840)	42 (840)	42 (840)	42 (840)	72 (1440)	48 (960)	60 (1200)
900	48 (960)	48 (960)	37 (740)	48 (960)	37 (740)	48 (960)	48 (960)	64 (1280)	42 (840)	53 (1060)
1000	29 (580)	43 (860)	33 (660)	43 (860)	33 (660)	43 (860)	43 (860)	57 (1140)	38 (760)	48 (960)





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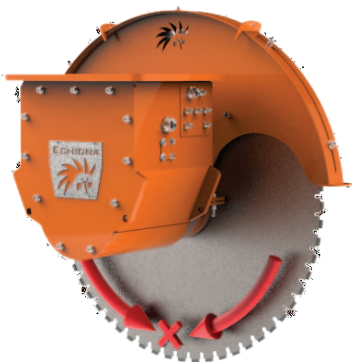
concrete - rock - wood - asphalt

Features

Echidna Diamond Rocksaws are built with features to ensure safety, long life and high productivity.

Fast acting automatic brake

Echidna rocksaws have an inbuilt hydraulic braking system. It engages automatically when hydraulic pressure drops below a certain pre-set level. This means it operates even in emergency situations such as loss of oil from a broken hose. The brake system has no mechanical parts. This means no wear, no abrasive dust and no maintenance. It also locks the blade during transport.



The protective shield on Echidna Diamond Saws is made up of two independent assemblies.

The inner shield rotates by 360° (full circle) around the blade. It is constructed so that its outer rim sits flush with the outer face of the cutting blade.

The outer guard swivels around the inner shield independently by approx. ± 45°.

With this arrangement it is possible to open the shield angle to cover most of the blade in situations where surrounding property must be well guarded from the cut debris.

The outer guard provides full protection from both sides of the cutting blade. The outer guard can be removed when cutting along a boundary wall is required.

Double Swivelling Shield



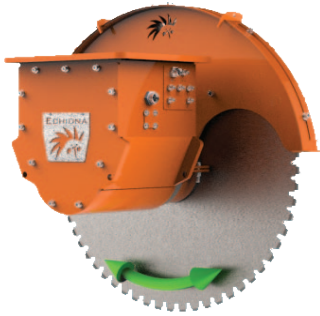
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Cutting with Echidna Diamond Rocksaws

Features & Accessories



Reversible Blade Rotation



All Echidna diamond saws except of D1J come with reversible blade rotation. When connected to an auger another two directional circuit, the direction of blade rotation can be changed at any time.

This allows control of the direction in which cut debris is thrown.

The choice of rotation direction is absolutely essential for horizontal cutting, as one must cut against the direction of blade spin.

External motor protection

The construction of the front bearing hub and the sealing arrangement of all Echidna diamond saws provides protection against any dirt entering the bearing space, and even allows the saw to be used fully submerged in water.

The bearing hub is robust enough to support multiple blades, with spacers, for slab and trench cutting

Cooling System for High Speed Cutting

High speed cutting, such as is required for cutting of steel- reinforced concrete or asphalt, generates heat. This substantially shortens the life of the blade.

Echidna has developed a water jet system incorporated into the safety shield, that allows for large flows of water when needed and provides an adjustment of the water jet direction to send the water to exactly where it is needed.



Other Features

- ⚙ rotating stand
- ⚙ compact size
- ⚙ short body length
- ⚙ no case drain required for some models
- ⚙ single and multiple blade cutting
- ⚙ high quality blades and cutting stones
- ⚙ built-in water nozzle
- ⚙ optional motor speed sensor
- ⚙ hydraulic test points



Cutting with Echidna Diamond Rocksaws



Features & Accessories

Accessories

Echidna's range of accessories increases productivity, precision and functionality of the rocksaws.

Multidirectional Cutting Heads

The Echidna multidirectional cutting heads are for situations when cutting is needed at an angle other than vertical, i.e. perpendicular to the excavator linkage pins. Echidna has developed a range of cutting heads that rotate and slide about and along one or more axes. This is particularly needed in tunnelling, demolition and quarrying works.



Automatic Cutting Optimiser

Echidna has released one of the most significant developments in the field of mobile rock cutting, concrete cutting and demolition works: a Cutting Optimiser for rock saws such as those used with

excavator. It offers these advantages:

- ⚙️ reduces operator fatigue
- ⚙️ improves the daily productivity easily by a factor of 3
- ⚙️ compared to even the best of human operators.
- ⚙️ increases rocksaw blade life by applying optimum pressure for cutting

This hydraulic servo control system takes over from the operator in controlling the feed rate of the rocksaw, be it a diamond or carbide saw.

The device automatically detects the presence of an active tool (eg a rock saw) on the excavator.

When there is no rocksaw present, the excavator functions like without the rocksaw. When a rocksaw is activated, i.e. cutting blade is made to spin, the operator brings the blade slowly into contact with the rock, concrete or other material to be cut and the servo unit automatically detects the rock and takes over the control of the rocksaw movement.

No more exhausting operator hours concentrating on fine control of the joy stick. The operator simply engages the appropriate joy stick into "full throttle" position and the Optimiser does his work. When the joy stick is released the Optimiser automatically and instantly disengages.



Cutting with Echidna Diamond Rocksaws

Features & Accessories



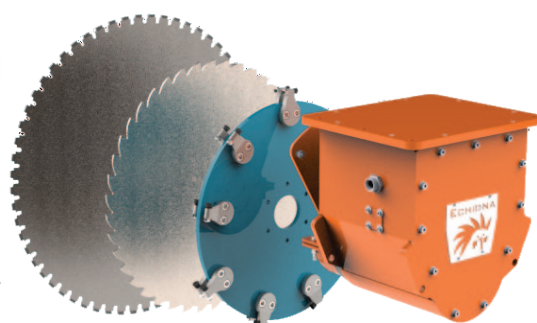
Wood cutting and Stump Grinding Attachment

The high speed and the robust bearing assemblies of all Echidna saws from sizes D1 to D6 are constructed to withstand large axial and radial loads which are needed for stump grinding and wood cutting. Echidna offers stump grinding attachments that can be mounted on a saw instead of the diamond blade. The diamond saw can thus be converted in minutes to an efficient stump grinder with all the advantages of an excavator mounted tool, ie reach, flexibility, power etc.

Adjustable Offset Extension

Twin blade saws are often used a solution when two parallel cuts are needed. The disadvantage of a twin blade saw is in the impossibility to easily adjust the width between the two blades.

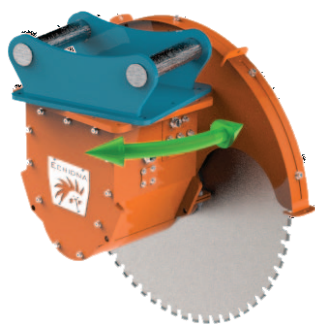
Echidna has developed an adjustable offset extension whereby only single blade is used and the saw is hydraulically offset to any position to make the second cut.



Rotating Head Bracket

A swiveling head bracket that allows the saw to be repositioned from left to right cut and vice versa, without the need to disconnect it from the excavator.

A manual version is an optional extra for Echidna Diamond Rocksaws in the D1, D2 and D3 series that is particularly useful in excavations where access is tight. For machine sizes D4 and higher this function is motorised for safety reasons.



Other Accessories

- ⚙️ Cooling water automatic on-off valve
- ⚙️ Fixed and adjustable head brackets to suit all excavator sizes.
- ⚙️ Extension for offset cutting.

