

Raptor ELEMENT

The new "ELEMENT" range of magnetic drills, released by Raptor, are leading the way with innovative designs. Raptor machines are manufactured using high quality components, for reliability and performance in the harshest of environments.

Built to last these compact, lightweight and powerful drills are a combination of style, ergonomics, high precision engineering with unique performance enhancing features.



Quality

With an emphasis on quality, the "ELEMENT" range is designed to offer durable, high performing machines. Quality is inbuilt to all aspects of the "ELEMENT" range.



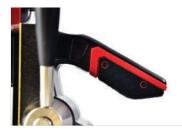
Performance

High quality components are used throughout the entire manufacturing process ensuring a robust and long lasting product.



Design

Raptor's team of designers have developed the "ELEMENT" range to push it to the forefront of the industry for performance, looks and longevity.



Lightweight

Inventive designs and advanced manufacturing has ensured the new "ELEMENT" range are among the lightest machines available in the world.



Cutsmart™

Raptor's unique torque display Cutsmart[™] takes the difficulty out of drilling a hole. Clever electronics and visual display will guide you throughout the cut, optimising the machines performance and protecting your cutters.



Raptor

ELEMENT 30

The new "Element 30" is a combination of power and portability. This machine is one of the lightest magnetic based drills in the world. The "Element 30" is versatile, accurate and portable, incorporating a strong magnetic adhesion to ensure the cuts are precise and clean.



Element 30 Specifications	
Model Number	ELEMENT30/1 / ELEMENT30/3
Motor Specification	110V full load 8 amps 850W / 230V full load 5 amps 850W
No Load RPM	600 RPM
Max hole cutting capacity	Ø32mm x 35mm deep
Overall dimensions	Height: 410mm / Width: 165mm (with Capstan) / Length: 270mm (with guard)
Machine weight	10.8kgs
Magnetic adhesion	8000N
Safety features	Cutsmart™ Technology / Fixed guard / Internal cable / Flush switches

ELEMENT 40

The new "Element 40" is manufactured with a powerful, two speed mechanical gear box, optimising the machines performance throughout its capacity range. Although small in size and weight the "Element 40" revels in heavy-duty industrial and fabrication work in the harshest of environments.



ELEMENT40/1 / ELEMENT40/3
110V full load 12 amps 1200W / 230V full load 6 amps 1200W
Gear One: 600 RPM / Gear Two: 300 RPM
Ø40mm x 50mm deep
Height: 510mm / Width: 185mm (with Capstan) / Length: 275mm (with guard)
13.65kgs
10,000N
Cutsmart™ Technology / Fixed guard / Internal cable / Flush switches / Mechanical clutch

Adder



- Raptor's smallest ever machine only 210mm high!
- Perfect for those tight spaces
- Comes complete with carry case and accessories
- Lightweight only 11kgs
- Internal coolant system



Adder Specifications		
Model number	CM/705/1A / CM/705/3A	
Motor specification	110v full load 10.8amps 1100W	
	230v full load 5.4amps 1100W	
No Load rpm	650 rpm	
Max hole cutting capacity	35mm x 25mm deep	
Overall dimensions	Height 210mm	
	Width 165mm (with capstan)	
	Length 265mm (with cable gland,	
	265mm without)	
Net weight	11.2kgs	
Spindle bore	19.05 (3/4")	
Magnetic adhesion	15000N	
Safety features	Electronic overload / Removable guard	

Element 50



- · Offers forward and reverse functionality for tapping
- Fitted with a unique cutsmart[™] panel which incorporates the primary motor protection and easy to use digital interface
- Variable speed control which also incorporates the secondary motor protection system prolonging the machines life and preventing unwanted wear
- · Carry case and accessories included
- Ergonomic carry handle
- Includes safety glasses and ear plugs
- 2 morse taper arbor
- Internal coolant system

Element 50 Specificat	ion
Model number	Element 50/1T Element 50/3T
Motor specification	110V full load 14.9A 1500W 230V full load 6.9A 1500W
No Load rpm	(I) 100 - 265 RPM (II) 200 - 500 RPM
Max hole cutting capacity	50mm x 50mm deep
Annular Cutters	ø12 - 50mm
Twist Drills	Up to ø13mm
Threading	M3 - M20
Countersinking	Up to ø31mm
Overall dimensions	Height 460mm
	Width 195mm
	Length 400mm
Net weight	15.5kgs 110v 15.2kgs 230v
Spindle bore	2 Morse Taper
Magnetic adhesion	13500N
Safety features	Cutsmart technology/ fixed guard/ magnetic detection/ mechanical clutch/ secondary motor protection

Element 75

- Can be supplied with a swivel base or non-swivel base option
- · Offers forward and reverse functionality for tapping
- Fitted with a unique cutsmart[™] panel which incorporates the primary motor protection and easy to use digital interface
- Variable speed control which also incorporates the secondary motor protection system prolonging the machines life and preventing unwanted wear
- Compact, durable and more portable than other larger machines
- · Ergonomic carry handle
- 3 morse taper arbor
- Internal coolant system

Element 75 Specificat	ion
Model number	Element 75/1T Element 75/3T
Motor specification	110V Full load 18A 1800W 230V Full load 8.6A 1800W
No Load rpm	(I) 70 - 180 RPM (II) 200 - 500 RPM
Max hole cutting capacity	75mm x 75mm deep
Annular Cutters	ø12 - 75mm
Twist Drills	Up to Ø16mm
Threading	M3 - M24
Countersinking	Up to ø40mm
Overall dimensions	Height 545mm
	Width 230mm
	Length 460mm
Net weight	23.1kgs 110v 22.8kgs 230v
Spindle bore	3 morse taper
Magnetic adhesion	18500N
Safety features	Cutsmart technology/ fixed guard/ magnetic detection/ mechanical clutch/ secondary motor protection



- Can be supplied with a swivel base or non-swivel base option
- Offers forward and reverse functionality for tapping
- Fitted with a unique cutsmart[™] panel which incorporates the primary motor protection and easy to use digital interface
- Variable speed control which also incorporates the secondary motor protection system prolonging the machines life and preventing unwanted wear
- Carry case and accessories included
- Ergonomic carry handle
- 3 morse taper arbor
- Internal coolant system

Element 100 Specifica	ation
Model number	Element 100/1T Element 100/3T
Motor specification	110V full load 19.7A 2000W 230V full load 9.5A 2000W
No Load rpm	(I) 45 - 129 RPM (II) 70 - 208 RPM (III) 150 - 434 RPM (IV) 240 - 700 RPM
Max hole cutting capacity	100mm x 100mm deep
Annular Cutters	ø12 - 100mm
Twist Drills	Up to Ø16mm
Threading	M3 - M30
Countersinking	Up to Ø40mm
Overall dimensions	Height 560mm
	Width 230mm
	Length 460mm
Net weight	24.8kgs 110v 24.5kgs 230v
Spindle bore	3 morse taper
Magnetic adhesion	20000N
Safety features	Cutsmart technology/ fixed guard/ magnetic detection/ mechanical clutch/ secondary motor protection

Element 100



Raven Pneumatic Drilling Machine



- Atlas Copco Pneumatic motor, combining safety and reliability
- Mechanically activated permanent magnetic base
- Lightweight and portable
- For use in any environment where an electricity supply is not available
- Designed for use in petro-chemical plants, offshore oil platforms and other hazardous environments
- Drill chuck attachment available



Raven Specifications	
Model number	CM/330/C
No Load rpm	300 rpm
Max hole cutting capacity	52mm dia x 50mm deep
Overall dimensions	Height 560mm
	Width 160mm
	Length 320mm
Net weight	17.2kgs
Air consumption	13 lts/sec - 28CFM @ 6.3 bar min
Spindle bore	19.05 (3/4")
Magnetic adhesion	7000N
Torque at max output	37Nm – 27lbf.t

Eagle Pneumatic Drilling Machine





ATEX approved II 2G T4 II D110°C

- Atlas Copco Pneumatic motor for safety in hazardous areas
- Mechanically activated permanent magnetic base
- For safety, the machine is built with a high zinc alloy body for spark resistance.
 Moving components are manufactured in anti-corrosive materials
- Stainless steel spindle and guard for anti corrosion are manufactured for resistance in harsh environments
- Designed for use in petro-chemical plants, offshore oil platforms and other hazardous environments
- Drill chuck attachment available

Eagle Specifications	
Model number	RD130C
No Load rpm	300 rpm
Max hole cutting capacity	52mm dia x 50mm deep
Overall dimensions	Height 560mm
	Width 160mm
	Length 370mm
Net weight	19.2kgs
Air consumption	13 lts/sec – 28CFM @ 6.3 bar min
Spindle bore	19.05 (3/4")
Magnetic adhesion	7000N
Torque at max output	37Nm – 27lbf.t

Gator Hydraulic Drilling Machine

- Mechanically activated permanent magnetic base
- Complete with drill chuck attachment
- Powerful and secure magnetic hold
- Option available for underwater use
- 3MT version available RD1403MT





Gator Specifications	
Model number	RD140
Hydraulic supply required	140 Bar (2050 psi)
No Load rpm	630 rpm
Max hole cutting capacity	52mm dia x 50mm deep
Overall dimensions	Height 550mm max
	Width 180mm over handles
	Length 315mm over magnetic handles
Net weight	23.00kgs
Spindle bore	19.05 (3/4")
Magnetic adhesion	7000N



Rhino 4 Rail Drilling Machine

- 4 stroke Honda engine
- Worldwide Honda service approval
- Lightweight only 21.2kgs
- Highly portable with low noise level
- Robust and reliable
- Integrated automatic throttle control
- Complies with EU & CARB emission regulations
- 2 year motor conditional warranty
- · LUL and Network Rail approved
- Complete with lightweight carrying case & coolant pump

Rhino 4 Specifications	
Model number	RD074
Motor type	Honda 4 stroke
Displacement	57
Max hole cutting capacity	40mm dia
No load speed	320rpm
Overall dimensions	Height 420mm
	Width 420mm Exc. bottle
	Length 540mm
Net weight	21.2kgs
Spindle bore	19.05 (3/4")
Throttle activation	Automatic feed
Safety features	Clutch fitted













Rhino E (CM/127/1, CM/127/3)





- Lightweight and user friendly operation
- Powerful 1100w motor easier, faster holes
- Variable speed control the right speed for the right job
- Pressure fed coolant bottle puts the lubricant in the right spot
- Quick fix rail clamp for secure and easy attachment
- Twist drill attachments available
- Carrying case included
- Also available in pneumatic and hydraulic version upon request



Rhino E Specifications	
Model number	CM/127/1 / CM/127/3
Motor specification	110V full load 11amps 1100W
	230V full load 5amps 1100W
No Load rpm	350 - 600 rpm
Max hole cutting capacity	40mm dia
Overall dimensions	Height 320mm
	Width 180mm Exc. bottle
	Length 640
Net weight	16.2kgs
Spindle bore	19.05 (3/4")
Safety features	Clutch and electronic overload

Tram Rail Drilling



All our rail machines can be adapted for drilling tram rail. Please state at time of order if your machine is required for this.

Hole Centre Locators



Designed for use on our rail machine, the hole centre locator ensure holes are drilled at the correct spacing. The hole centre locator provides complete accuracy when working at low light levels. Many different types are available, please contact our sales department for a quote.

Quick Release Rail Clamp



Available for all our rail machines is our new quick release rail clamp system. To enable you to remove the rail machine easily from the rail with the movement of the release handle. Will save time when drilling numerous holes.

Multi-form Templates



MADE IN SHEFFIELD

Multi-form templates, a fast, easy and accurate system for setting the height at which a hole is drilled in the rail.

Two rail forms can be set per template allowing the machine to be used on a multitude of rail forms.

Many different types are available from stock please contact our sales department for a quote.

TCT Rail Series Cutter - 25mm Cutting Depth

Designed specifically for the railway industry. Our TCT (Tungsten Carbide Tipped) rail cutter range is designed to cope with the toughest of rails. With unique geometry and swarf eviction it gives you the fastest and best cut every time.

Part No.	Ømm	Part No.	Ømm	Part No.	Ømm
SCRWC18	18	SCRWC25	25	SCRWC32	32
SCRWC19	19	SCRWC26	26	SCRWC33	33
SCRWC20	20	SCRWC27	27	SCRWC34	34
SCRWC21	21	SCRWC28	28	SCRWC35	35
SCRWC22	22	SCRWC29	29	SCRWC36	36
SCRWC23	23	SCRWC30	30		
SCRWC24	24	SCRWC31	31		

Railway TCT cutters.
 50mm DOC available upon request

Designed to cut even the toughest of rail.



Raptor Pilot Pins					
Part No.	Range				
SRA25	18-36mm				

AlCrN Coated TCT Rail series cutter - 25mm Cutting Depth



Our ultra rail cutter series, the 'black widow', gives performance and reliability in even the most extreme conditions. With our Aluminium Chromium Nitride coating the 'black widow' offers greater life and performance on the toughest of rail.

Part No.	Ømm	ı
SCRWC18A	18	S
SCRWC19A	19	S
SCRWC20A	20	S
SCRWC21A	21	S
SCRWC22A	22	S
SCRWC23A	23	S
SCRWC24A	24	S

Part No.	Ømm
SCRWC25A	25
SCRWC26A	26
SCRWC27A	27
SCRWC28A	28
SCRWC29A	29
SCRWC30A	30
SCRWC31A	31

Ømm
32
33
34
35
36



Raptor Pilot Pins				
Part No.	Range			
SRA25	18-36mm			

Twist Drill with Weldon Shank

For small holes when annular cutters cannot be used our weldon shank twist drills are the perfect solution. With through coolant this means that they give longer life than your standard twist drills.

Part No.	Ømm
RRTW060	6
RRTW070	7
RRTW080	8
RRTW090	9
BRTW100	10

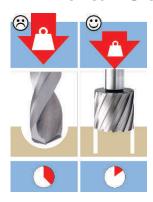
Part No.	Ømm
RRTW110	11
RRTW120	12
RRTW130	13
RRTW135	13.5
0.1 1 11 11	

Other sizes available upon request



Standard Series M42 Drill - 25mm Cutting Depth

Annular Cutters



The types of cutters we produce are called annular cutters.

Annular cutters only cuts the outside diameter of the hole rather than the hole diameter.

It uses less energy and thus becomes more efficient increasing the life of the machine and the cutter when compared to the conventional twist drill.

Which Cutter is Right for You?

Material	Material Hardness	Cutter		
Mild and Free cutting steels	<700N/mm²	RAP or RAPL		
Mild and Free cutting steels	<850N/mm²	SRCV or SRCVL		
Steel angle and joists	<700N/mm²	RAP or RAPL		
Steel angle and joists	<850N/mm²	SRCV or SRCVL		
Plate and sheet steel	<700N/mm²	RAP or RAPL		
Plate and sheet steel	<850N/mm²	SRCV or SRCVL		
Aluminum	<700N/mm²	RAP or RAPL		
Aluminum	<850N/mm²	SRCV or SRCVL		
Brass	<700N/mm²	RAP or RAPL		
Brass	<850N/mm²	SRCV or SRCVL		
Cast iron	<700N/mm²	RAP or RAPL		
Cast iron	<850N/mm²	SRCV or SRCVL		
Stainless Steel	<850N/mm²	SRCV or SRCVL		
Stainless Steel	>850N/mm²	CWC, CWCL, CWCT or CWCX		
Rail track	>850N/mm²	SCRWC		
Tool Steel	>850N/mm²	CWC, CWCL, CWCT or CWCX		
Die steel	>850N/mm²	CWC, CWCL, CWCT or CWCX		

Note: The above chart is only a guide, material hardness is represented as Newton's per mm², most material hardness can be found on the web as well as converters.



RAP, RAPL - Raptor's unique **M2** high speed steel cutter. Designed for low wear and high performance. Perfect for general engineering, construction and fabrication for material with a hardness less than **700N/mm²**.



SRCV, **SRCVL** - Designed with advanced multiple edge geometry our **M42** high speed steel cutter is perfect for general engineering, construction, fabrication, railway and aerospace. For materials with less than **850N/mm²**.



CWC, CWCL, CWCT, CWCX - Our tungsten carbide tipped cutters are designed with the highest quality, super micro-grain carbide tips for long tool life in even the toughest of materials. With a smooth cutting triple tooth geometry, vibration is reduced. For use on material over **850N/mm²**

Specials - Upon request Raptor can produce any size you require, please contact our sales team for more information.

			mad	3					
	M2 Seri	es Raptor	M42 Ser	ies SRCV	TCT Series CWC				
Size mm	25mm Depth	50mm Depth	25mm Depth	50mm Depth	35mm Depth	50mm Depth	75mm Depth	100mm Depth	
11	RAP110								
12	RAP120	RAPL120			CWC12	CWCL12			
13	RAP130	RAPL130	SRCV130	SRCVL130	CWC13	CWCL13			
14	RAP140	RAPL140	SRCV140	SRCVL140	CWC14	CWCL14			
15	RAP150	RAPL150	SRCV150	SRCVL150	CWC15	CWCL15			
16	RAP160	RAPL160	SRCV160	SRCVL160	CWC16	CWCL16			
17	RAP170	RAPL170	SRCV170	SRCVL170	CWC17	CWCL17	CWCT10	OMOVAO	
18 19	RAP180 RAP190	RAPL180 RAPL190	SRCV180 SRCV190	SRCVL180 SRCVL190	CWC18 CWC19	CWCL18 CWCL19	CWCT18 CWCT19	CWCX18 CWCX19	
20	RAP190 RAP200	RAPL190	SRCV190 SRCV200	SRCVL190	CWC19	CWCL19	CWCT19	CWCX19	
21	RAP200	RAPL200	SRCV200	SRCVL200	CWC20	CWCL20	CWCT20	CWCX20	
22	RAP220	RAPL220	SRCV220	SRCVL220	CWC22	CWCL22	CWCT22	CWCX21	
23	RAP230	RAPL230	SRCV230	SRCVL230	CWC23	CWCL23	CWCT23	CWCX23	
24	RAP240	RAPL240	SRCV240	SRCVL240	CWC24	CWCL24	CWCT24	CWCX24	
25	RAP250	RAPL250	SRCV250	SRCVL250	CWC25	CWCL25	CWCT25	CWCX25	
26	RAP260	RAPL260	SRCV260	SRCVL260	CWC26	CWCL26	CWCT26	CWCX26	
27	RAP270	RAPL270	SRCV270	SRCVL270	CWC27	CWCL27	CWCT27	CWCX27	
28	RAP280	RAPL280	SRCV280	SRCVL280	CWC28	CWCL28	CWCT28	CWCX28	
29	RAP290	RAPL290	SRCV290	SRCVL290	CWC29	CWCL29	CWCT29	CWCX29	
30	RAP300	RAPL300	SRCV300	SRCVL300	CWC30	CWCL30	CWCT30	CWCX30	
31	RAP310	RAPL310	SRCV310	SRCVL310	CWC31	CWCL31	CWCT31	CWCX31	
32	RAP320	RAPL320	SRCV320	SRCVL320	CWC32	CWCL32	CWCT32	CWCX32	
33	RAP330	RAPL330	SRCV330	SRCVL330	CWC33	CWCL33	CWCT33	CWCX33	
34	RAP340	RAPL340	SRCV340	SRCVL340	CWC34	CWCL34	CWCT34	CWCX34	
35	RAP350	RAPL350	SRCV350	SRCVL350	CWC35	CWCL35	CWCT35	CWCX35	
36	RAP360	RAPL360	SRCV360	SRCVL360	CWC36	CWCL36	CWCT36	CWCX36	
37	RAP370	RAPL370	SRCV370		CWC37	CWCL37	CWCT37	CWCX37	
38	RAP380	RAPL380	SRCV380		CWC38	CWCL38	CWCT38	CWCX38	
39	RAP390	RAPL390	SRCV390		CWC39	CWCL39	CWCT39	CWCX39	
40	RAP400	RAPL400	SRCV400		CWC40	CWCL40	CWCT40	CWCX40	
41	RAP410	RAPL410			CWC41	CWCL41	CWCT41	CWCX41	
42 43	RAP420	RAPL420			CWC42	CWCL42	CWCT42 CWCT43	CWCX42 CWCX43	
44	RAP430	RAPL430			CWC44	CWCL44			
45	RAP440 RAP450	RAPL440 RAPL450			CWC44 CWC45	CWCL44 CWCL45	CWCT44 CWCT45	CWCX44 CWCX45	
46	RAP460	RAPL460			CWC45	CWCL45	CWCT46	CWCX46	
47	RAP470	RAPL470			CWC47	CWCL47	CWCT47	CWCX47	
48	RAP480	RAPL480			CWC48	CWCL48	CWCT48	CWCX48	
49	RAP490	RAPL490			CWC49	CWCL49	CWCT49	CWCX49	
50	RAP500	RAPL500			CWC50	CWCL50	CWCT50	CWCX50	
51	RAP510	RAPL510			CWC51	CWCL51	CWCT51	CWCX51	
52	RAP520	RAPL520			CWC52	CWCL52	CWCT52	CWCX52	
53		RAPL530				CWCL53	CWCT53	CWCX53	
54		RAPL540				CWCL54	CWCT54	CWCX54	
55		RAPL550				CWCL55	CWCT55	CWCX55	
56		RAPL560				CWCL56	CWCT56	CWCX56	
57		RAPL570				CWCL57	CWCT57	CWCX57	
58		RAPL580				CWCL58	CWCT58	CWCX58	
59		RAPL590				CWCL59	CWCT59	CWCX59	
60		RAPL600				CWCL60	CWCT60	CWCX60	
61		RAPL610				CWCL61	CWCT61	CWCX61	
62		RAPL620				CWCL62	CWCT62	CWCX62	
63		RAPL630				CWCL63	CWCT63	CWCX63	
64		RAPL640				CWCL64	CWCT64	CWCX64	
65		RAPL650				CWCL65	CWCT65	CWCX65	
						00200	2.70100	3.10,100	

Other sizes available								CWCL								
	RAP		RAPL		SRCV		SRCVL		cwc		12-13mm	SRA106	сwст		cwcx	
Pilots	11-12mm	SRA3057	12mm	RA3013	13-40mm	SRA25	13-36mm	SRA50	12-17mm	SRA90	14-17mm	SRA50	18-65mm	RA231	18-65mm	RA3092
FIIOIS	13-52mm	SRA25	13-65mm	SRA50					18-52mm	RA3089	18-65mm	RA356				

Raptor Hole Saws

- · Made with quality solid carbide tips to get maximum performance and reliability
- · High quality centre drill with spring for fast waste material ejection
- Designed for use with any portable drill with a 10mm chuck
- · Reduced drilling time when compared to standard twist drills
- Maximum cutting depth of 15mm in pistol drill / 25mm in magnetic drill



Part No	Ømm	Depth mm
RHS1625	16	25
RHS1725	17	25
RHS1825	18	25
RHS1925	19	25
RHS2025	20	25
RHS2125	21	25
RHS2225	22	25
RHS2325	23	25
RHS2425	24	25
RHS2525	25	25
RHS2625	26	25
RHS2725	27	25
RHS2825	28	25
RHS2925	29	25
RHS3025	30	25
RHS3125	31	25
RHS3225	32	25
RHS3325	33	25
RHS3425	34	25
RHS3525	35	25
RHS3625	36	25
RHS3725	37	25
RHS3825	38	25
RHS3925	39	25
RHS4025	40	25
RHS4125	41	25
RHS4225	42	25
RHS4325	43	25

RD40093	Grub screw for RHS
RD40094	Spring for RHS
RD40095	Centre drill for RHS

Part No	Ømm	Depth mm
RHS4425	44	25
RHS4525	45	25
RHS4625	46	25
RHS4725	47	25
RHS4825	48	25
RHS4925	49	25
RHS5025	50	25
RHS5125	51	25
RHS5225	52	25
RHS5325	53	25
RHS5425	54	25
RHS5525	55	25
RHS5625	56	25
RHS5725	57	25
RHS5825	58	25
RHS5925	59	25
RHS6025	60	25
RHS6125	61	25
RHS6225	62	25
RHS6325	63	25
RHS6425	64	25
RHS6525	65	25
RHS7025	70	25
RHS7525	75	25
RHS8025	80	25
RHS8525	85	25
RHS9025	90	25
RHS9525	95	25
RHS10025	100	25

Mini Cutters

Cut clean, burr-free holes in seconds with Raptor Mini-Cutters, the professional solution to hole making in sheet metal, pipes and plastics.

Mini-Cutters produce holes by removing a "disc" of metal and have precision ground teeth and flutes to rapidly remove waste material making them fast, smooth and highly accurate.

Over 3 times faster than twist drills

- Mini-Cutter Kits
 - $\label{eq:minimum} \mbox{Mini-Cutter kits are supplied in a handy plastic case complete with arbor, pilot and hexagon key.}$
- Imperial Ki

(RK601) with 7 cutters in 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4" diameter sizes and arbor for 1/2" drill chuck.

- Imperial Kit
 - (RK602) as above but with arbor for 3/8" drill chuck.
- Metric Kit

(RK603) with 7 cutters in 8mm, 10mm, 12mm, 14mm, 16mm, 18mm and 20mm diameter sizes and arbor for 1/2" drill chuck.

 Metric Kit (RK604) as above but with arbor for 3/8" drill chuck.

New geometry for harder materials

Precision ground teeth for clean, accurate entry into sheet metal



Annular cutting action requiring low thrust with less burring on exit

Metric Mini-Cutters

For Holes In Materials Up To 8mm Thick. Arbors Fit 3/8" And 1/2" Drill Chucks

Part No.	Ømm	Part No.	Ømm
RCM060	6mm	*RCM140	14mm
*RCM080	8mm	RCM150	15mm
RCM090	9mm	*RCM160	16mm
*RCM100	10mm	RCM170	17mm
RCM110	11mm	*RCM180	18mm
*RCM120	12mm	RCM190	19mm
RCM130	13mm	*RCM200	20mm

^{*}Imperial sizes available on request

For Holes In Materials Up To 12mm Thick. Arbors Fit 1/2" Drill Chucks			
Part No.	Ømm	Part No.	Ømm
RCM210	21mm	RCM240	24mm
RCM220	22mm	RCM250	25mm
RCM230	23mm	* Kit Sizes	

Part No.	Ømm
RA116	Arbor for 1/2"
RA117	Arbor for 3/8" chuck
RA327	Pilot for RA116/RA117
RA328	Dished Stop Washer
RA329	Plain Stop Washer
RA464	Grub Screw
RA3008	Compression Spring

Part No.	Ømm
RD427	Hex Wrench 1/8" A/F
RA118	Arbor-1/2" chuck
	21+Dia
RA3063	Pilot for RA118





90° HSS Countersinks

- Manufactured from extremely tough high speed steel
- Suitable for all types of portable drills with 3/4" shank
- 3 cutting edges, smooth chamfering, high surface finish

Part No.	Range
CK30	Countersinks holes up to 30mm dia.
CK40	Countersinks holes up to 40mm dia.
CK55	Countersinks holes up to 55mm dia.



90° Piloted TCT Countersinks

- Manufactured from extremely tough high speed steel
- TCT tipped for greater tool life and harder materials
- Suitable for all types of portable drills with 3/4" shank
- 3 cutting edges, smooth chamfering, high surface finish
- Manufactured with pilot bore for greater stability and accuracy

Part No.	Range
RPCC201	Countersinks holes up to 42mm dia.
	Countersinks kit includes pilots for 14mm, 18mm & 22mm holes



Extension Arbors

When extended reach is necessary Raptor offer extension arbors of various lengths.

For use when the face of the hole to be cut is lower than the surface on which the machine is standing.



Extension arbors are manufactured with 3/4" (19.05mm) shank fittings which are accepted in almost all magnetic drill stands.

Part No.	Extension (mm)
RD2091	25mm
RD2090	50mm
RD2092	75mm
RD2102	100mm
RD2103	150mm
RD2104	200mm
RD2105	250mm

Morse Taper Arbors

Part No.	Morse Taper	Shank	D.O.C.
CA120	2	19.05mm	50mm
CA130	3	19.05mm	50mm
CA1375	3	19.05mm	75mm
CA13100	3	19.05mm	100mm
CA330	3	32mm	50mm
CA3375	3	32mm	75mm
CA3310	3	32mm	100mm
CA140	4	19.05mm	50mm
CA1475	4	19.05mm	75mm
CA340	4	32mm	50mm
CA3475	4	32mm	75mm
CA1575	5	19.05mm	75mm
CA3510	5	32mm	100mm
CA1510	5	19.05mm	100mm

- All Morse taper adaptors come with coolant adaptors
- Other fittings and adaptors are available on request
- Suitable for any machine with Morse taper fitting



The Raptor Twist Drill Adaptor is designed for use with stub length drills from 4mm to 12mm diameter.

It fits securely into the bore of the arbor ensuring maximum concentricity.

Secured in place with 2 grub screws this item is easily fixed and very simple to use.

It gives the magnetic drill a far greater degree of versatility at an economical cost.

Part No.	Size (mm)
RD2003/040	4
RD2003/050	5
RD2003/060	6
RD2003/070	7
RD2003/080	8
RD2003/090	9
RD2003/100	10
RD2003/110	11
RD2003/120	12

All items are subject to stock availability.



Swarf Stick



The Raptor swarf stick helps to keep your work place tidy. This handheld lightweight tool helps attract ferrous metal chippings and swarf to the stick which can then be easily removed.

This handheld lightweight toolsimply push in the handle and place the tool over the ferrous metal chippings and swarf and it will attract them to itself, holding them until you withdraw the handle to remove the magnetic force.

Part number - CT/010/100

Pipe Adaptor Kit

With the addition of a simple adaptor kit, Raptor machines can be used for cutting holes in most pipes.

Two plates simply attach to the magnet base providing a positive non-slip position which assures central hole location.

The pipe adaptor kit is suitable for all pipes with a diameter of 60mm upwards.

For Element 30, Element 40 and Cobra only.

Part number - RD2311



Adaptors



Want to use a genuine Raptor cutter but can't because you have a machine with a quick fit system?

Raptor supply adaptors which convert standard 3/4" (19.05mm) conventional cutters into the desired quick fitting system.

Part No.	Conversion
CQA01	Fein Quick-In shank
CQA02	One-touch shank
CQA03	Nitto Threaded Adaptor



The Vacuum Pad is the ideal accessory for use when drilling any non-ferrous material. Simply attach your Raptor magnetic drill to the steel plate provided and drill away.

The vacuum Pad has a powerful holding power, 368kgs at centre position (no vacuum pump required).

Air supply required approx 4 cubic feet per minute and a minimum pressure of 70psi

Part Number: DB121





Raptor Cutting Fluid has been specifically formulated to extend cutter life and improve cutting performance. You simply pull out the nozzle and apply the fluid directly into the reservoir on the Raptor machine or directly into the machine coolant bottle.

Cutting Lubricant

Volume (Itrs)
1
5
205

Cutting Paste

Part No.	
RD2094	Cutting Paste

Slick-Stock™ Lubricant is softer than other stick lubricants for easy application, providing superior adhesion to the tool, assuring through coverage. Use with ferrous and non-ferrous materials.

Part No.	Volume (oz)
RD40068	1.68
RD40065	16

Bio-degradable Cutting Oil

Part No.	Volume (Itrs)
RD2098	1
RD2096	5

Raptor











Raptor



RAPTOR Top Ten Tips

for getting the best out of your cutters.

- Ensure that the work surface is perfectly flat and free from debris.
- Reduced magnetic performance will result if the magnet is not in full area contact with the work piece, caused by damage to the magnet face, debris between the magnet and work surface, or uneven work surface.
- Failure to achieve full area contact may result in machine instability, resulting in reduced cutter life, or premature cutter failure.
- Ensure that the work material will provide an adequate magnetic bond.
- Reduced magnetic performance will result on material less than 25mm thick.
- Some protective coatings or paints will also impair magnet performance.
- Magnetic properties of materials, and the methods by which the materials are produced, varies significantly, cast, forged, rolled etc.
- Inadequate magnetic bonding may result in machine instability, resulting in reduced cutter life, premature cutter failure, or the machine separating from the work surface.
- Only use RAPTOR approved pilot pins.
- The precision relationship between RAPTOR cutter and pilot ensures accurate and consistent positioning over the required hole location.
- Failure to maintain the correct relationship may result in positional errors, reduced cutter life, or premature cutter failure.
- · Only use approved RAPTOR cutting oil.
- RAPTOR cutting oil is formulated to reduce friction at the cutting edge, improve cutting debris evacuation.
- Failure to use approved, or, inadequate oil supply, may result in reduced cutter life or premature cutter failure.
- Maintain a constant feed rate.
- It is imperative to maintain constant feed rate to ensure consistent evacuation of cutting debris.
- Failure to maintain constant feed pressure may result in debris entrapment between cutting teeth and work surface, or debris compacting in the cutter flutes, which may result in reduced cutter life or premature cutter failure.
- Don't apply excessive pressure and slow the motor down.
- Only apply sufficient pressure to ensure optimum motor speed and free cutting of the work piece.
- Failure to maintain correct cutting speed may result in extended operating cycle time, reduced cutter life, or premature cutter failure.
- Re-sharpen the cutter before wear becomes significant.
- It is important to maintaining the correct geometric profile on the cutting edges to ensure efficient and consistent hole cutting performance.
- Failure to ensure the correct profile maintenance may result in extended operating cycle time, reduced cutter life, or premature cutter failure.
- Use the smallest centre punch mark possible to indicate hole centres.
- Centre punch marks should only be used to indicate required hole position, and should be as small as
 possible.
- Excessive centre punch size, or positional errors may result in reduced cutter life or premature cutter failure.
- Ensure slug ejection before attempting to cut additional holes.
- When cutting sequential holes, it is imperative to ensure that slugs produced from previous holes are removed.
- Failure to comply with any of the items listed above may prevent ejection and result in premature cutter failure.
- Have the drilling machine serviced regularly by a RAPTOR approved agent.
- To maximise the benefits of the of the precision RAPTOR cutter geometry, it is imperative that the drilling machine must be adjusted to eliminate any excessive, or uncoordinated lateral, or rotary movement.
- Failure to adequately maintain the drilling machine may result in reduced cutter life or premature cutter failure.

