



Certified Company

JEI Solutions

.....

Built for Industry

MAGBEAST®

Premium Portable
Magnetic Drilling
Systems

turbo™

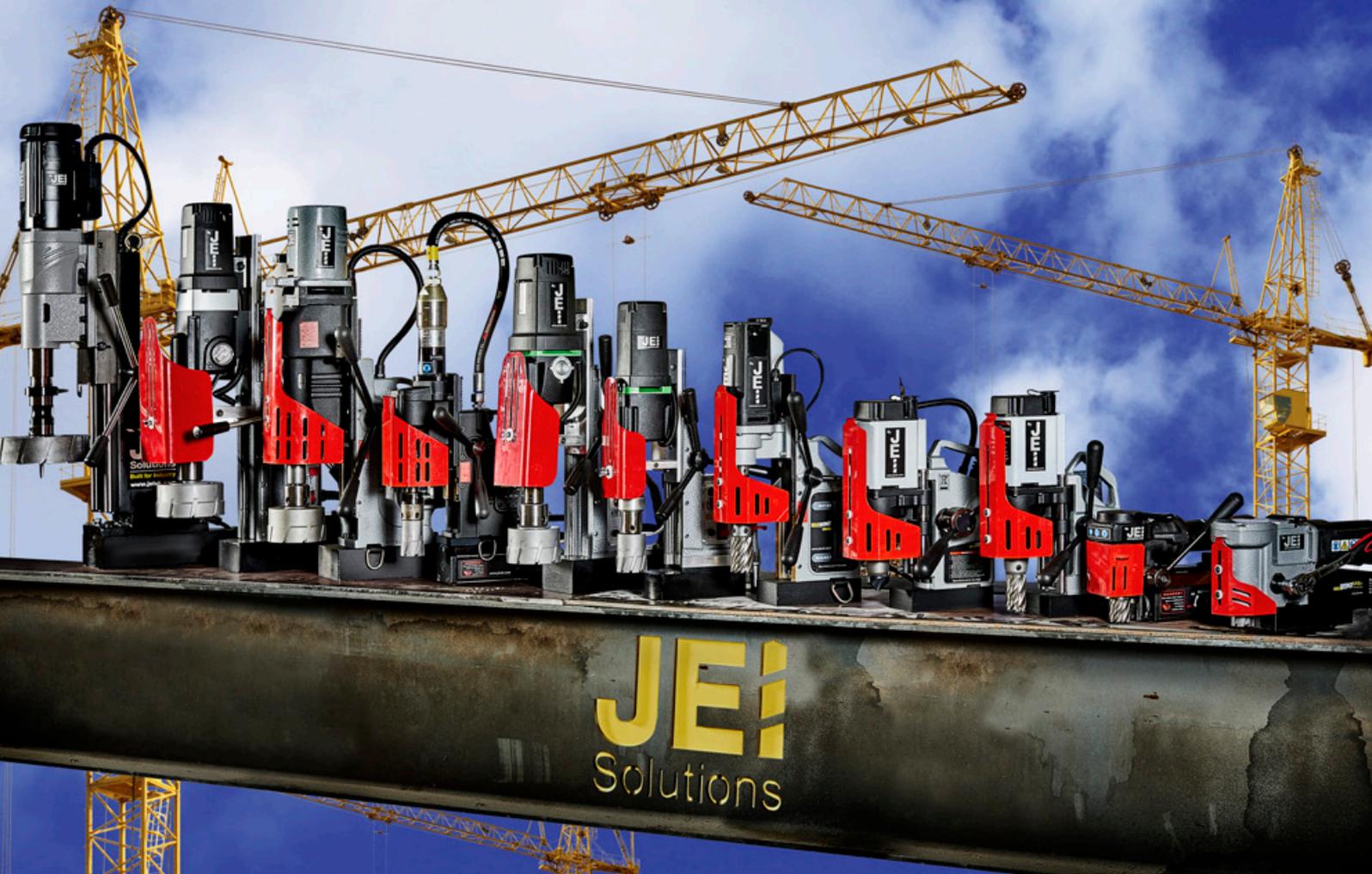
High Performance
Annular
Broaching Cutters

STEELBEAST®

Distinctive Metal
Fabricating Equipment

AIRBEAST™

Portable Pneumatic
Drilling Systems



JEI Solutions



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JEI Drilling & Cutting Solutions is a British company, manufacturing premium solutions for steel since 1993.

We are primarily recognised as the manufacturer of MagBeast® portable magnetic drilling machine and Turbo™ annular broaching cutters.

A Solutions Leader

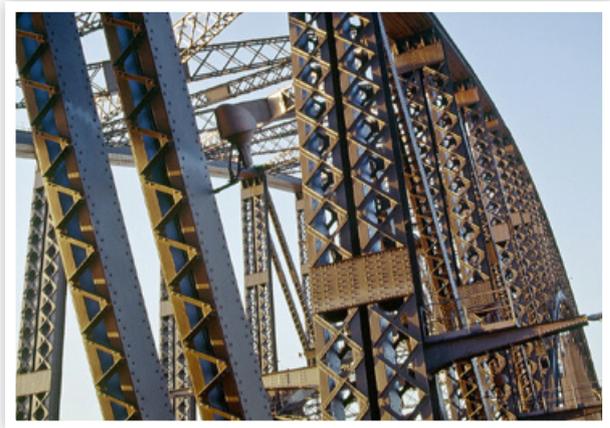
By recognising the changing and ever-demanding challenges of industry, we are constantly developing our portfolio of products and solutions to cater for all types of hole making applications. Whether a customer is challenged with difficult material, is working within a restricted environment or has a demand which is out of the ordinary, we strive to find a process that fits the project. This is often achieved from a combination of our existing products or we will innovate and develop new ideas with the aim of providing the ideal solution.

Our range is further enhanced by the SteelBeast® series of steel fabrication equipment. Designed to prepare steel for further processes, including weld preparation (beveling), deburring and radius edging.

JEI's products are available in over 30 countries and expanding worldwide, supported by a network of international distribution partners who serve a diverse range of industry sectors including:

- Steel Fabrication.
- Building Construction.
- Bridge Building and Repair.
- Rail Industry.
- Offshore Oil and Gas Construction.
- Mining.
- Ship Building.
- Defence Systems.
- Power Regeneration Plants.
- Precision Engineering.

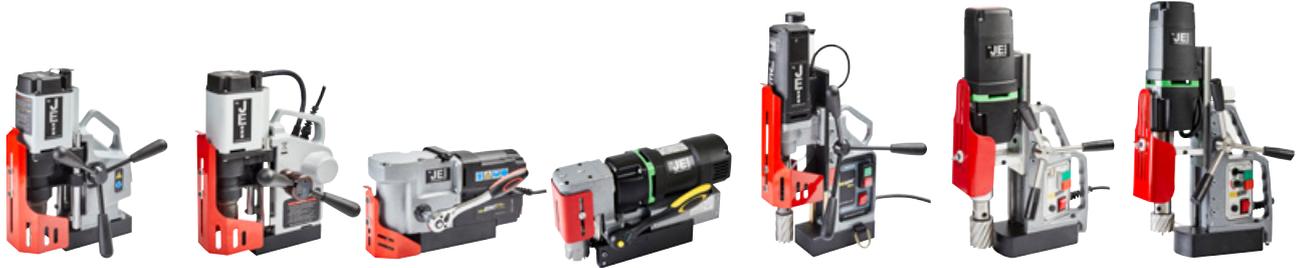
JEI's customers are also supported by highly knowledgeable and experienced sales, technical and service personnel.



Drilling Machine Solutions

JEI Magnetic Drilling Solutions at a glance

MiniBeast DRILL-19041 (110V) DRILL-19042 (240V) Page 6	MiniBeast Auto DRILL-19041A (110V) DRILL-19042A (240V) Page 8	MiniBeast LP35+ DRILL-LP35P (110V) DRILL-LP35P/2 (240V) Page 9	LP45 DRILL-LP45/1 (110V) DRILL-LP45/2 (240V) Page 10	HM40 DRILL-HM40/1 (110V) DRILL-HM40/2 (240V) Page 11	HM50 DRILL-HM50/1 (110V) DRILL-HM50/2 (240V) Page 12	HM50T DRILL-HM50T/1 (110V) DRILL-HM50T/2 (240V) Page 13
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Weight	10 kg	13 kg	9.5 kg	11kg	12.7 kg	14 kg	14 kg
Cutter Capacity (diameter)	10–35 mm	10–35 mm	10–35 mm	10-45 mm	10–40 mm	10–50 mm	10–50 mm
Max Cutter Length	55 mm	55 mm	35 mm	55 mm	100 mm	100 mm	100 mm
Twist Drill (min-max)	6-12 mm*	6-12 mm*	6-12 mm	6-12 mm*	3-13 mm	3-23 mm	3-23 mm
Countersink	30 mm	30 mm	30 mm	30 mm	40 mm	40 mm	40 mm
Tapping	n/a	n/a	n/a	n/a	n/a	n/a	M20
Reaming Capacity	n/a	n/a	n/a	n/a	n/a	22 mm	22 mm
Motor Power (Watts)	1010 W	1010 W	920 W	1100 W	1100 W	1150 W	110 V = 1150 W 240 V = 1250 W
Min/Max Height	307 / 377 mm	307 / 377 mm	176 mm fixed	180 mm fixed	385 / 505 mm	380 / 560 mm	380 / 560 mm
Total Travel (Stroke)	70 mm	70 mm	39 mm	63 mm	120 mm	180 mm	180 mm
No. of Geared Speeds	1	1	1	1	1	2	2 Variable
Motor Speed (no load) RPM	520	520	520	500	720	465/720	180-430/ 100-250
Magnet Power (on 25 mm plate)	980 kg	980 kg	910 kg	1200kg	1066 kg	1250 kg	1250 kg
Magnetic Base Dimensions L x W	160 x 80 mm	160 x 80 mm	165 x 80 mm	183 x 85 mm	168 x 84 mm	180 x 90 mm	180 x 90 mm
Spindle	19 mm weldon	2 MT	2 MT				
Voltage	110 V or 240 V						
Noise Level	< 90dB						

*With optional twist drill, see page 41

HM100
DRILL-HM100/1 (110V)
DRILL-HM100/2 (240V)
Page 14

HM100T
DRILL-HM100T/1 (110V)
DRILL-HM100T/2 (240V)
Page 15

MagBeast 4
DRILL-MB4 (110V)
DRILL-MB4/2 (240V)
Page 16

HM140T
DRILL-HM140T/1 (110V)
DRILL-HM140T/2 (240V)
Page 17

MagBeast 5
DRILL-MB5/1C (110V)
DRILL-MB5/2C (240V)
Page 18

AirBeast 35A
DRILL-AIR35/ATEX
Page 19

AirBeast 45A
DRILL-AIR45/ATEX
Page 20

AirBeast 200A
DRILL-AIR200/ATEX
Page 21



23 kg	23 kg	31 kg	39 kg	53 kg	17 kg	26.5 kg	130 kg
10–100 mm	10–100 mm	10–110 mm	10–140 mm	10–200 mm	10–35 mm	10–45 mm	10–200 mm
150 mm	150 mm	150 mm	150 mm	200 mm	30 mm	50 mm	150 mm
3-32 mm	3-32 mm	3–47 mm	3-50 mm	3–52 mm	n/a	3–23 mm	3–45 mm
55 mm	55 mm	60 mm	80 mm	110 mm	35 mm	45 mm	110 mm
n/a	M30	n/a	M44	M52	n/a	n/a	M48
39 mm	39 mm	39 mm	47 mm	52 mm	n/a	22 mm	52 mm
1700 W	1800 W	1650 W	2300 W	3000 W	800 W	800 W	3650 W
440 / 700 mm	440 / 700 mm	570 / 800 mm	570 / 850 mm	730 / 965 mm	670 / 750 mm	540 / 680 mm	991 / 1391 mm
250 mm	250 mm	230 mm	320 mm	300 mm	39 mm	150 mm	400 mm
4	2 Variable	4	4 Variable	2 Variable	1	2	2
215/330/460/680	60-140 / 200-470	140/215/240/390	30-80/50-120 130-350/210-550	20-50/50-110	420	330/500	35/140
2050 kg	2050 kg	2242 kg	2675 kg	2300 kg	660 kg	765 kg	2 x 1530 kg
212 x 102 mm	212 x 102 mm	240 x 120 mm	260 x 120 mm	295 x 140 mm	160 x 80 mm	143 x 80 mm	Double magnets - see page 21
3 MT	3 MT	4 MT	4 MT	5 MT	19 mm weldon	2 MT	5 MT
110 V or 240 V	110 V or 240 V	110 V or 240 V	110 V or 240 V	110 V or 240 V	Pneumatic	Pneumatic	Pneumatic
< 90dB	< 90dB	< 90dB	< 90dB	< 90dB	< 90dB	< 90dB	< 90dB

Drilling Machine Solutions

MiniBeast™ Part no' DRILL-19041 ⚡ 110 V
Part no' DRILL-19042 ⚡ 240 V



Compact and powerful, ideal for site or workshop use.



Internal coolant



Self-adjusting slide system



Compact design



Twist drill provides 12 mm capacity (see page 41)



Features / Benefits:

- JEI's flagship machine now with a new 1010 W – motor providing an updated capacity of 35 mm.
- Lightweight – only 10 kg.
- Internal coolant reservoir – ensuring maximum cutter life.
- Self correcting slide rails – for maintenance free operation.
- Hidden motor cable – for added protection.
- Now with new fixed guard providing the operator with safety assurance.

Machine Includes:

- 3 x spoke handles.
- Safety strap.
- Safety guard.
- 4 mm Allen key.
- Plastic carrying case.
- Operators manual.

Optional Machine Package



Description	Voltage	Part no.
MiniBeast Package Kit consisting of		
1 x MiniBeast Drill. (110 V or 240 V)	110 V	MINIBEAST-SET1
1 x 5pc Turbo Steel Cutter set (14, 16, 18, 20, 22mm x 1" Depth & Pin)		
1 x 500ml Turbo Tough Drill and Tap Spray	240 V	MINIBEAST-SET2

SPECIFICATIONS

MODEL	MINIBEAST
Spindle	19 mm
Weight	10 kg
Max Stroke	70 mm
Cutter Capacity	35 mm Ø x 2" depth of cut
Twist Drill Capacity	12 mm Ø with optional Turbo twist drills (see page 41)
Countersink Capacity	30 mm
Motor	1010 W
RPM	1 Fixed Speed no load 520 RPM loaded 350 RPM
Height min/max	307 / 377 mm
Length x Width	260 x 166 mm
Magnetic Base L x W	160 x 80 mm
Magnet Deadlift	980 kg on 1" Plate (9600 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-19041 240 V - DRILL-19042
Shipping Weight	13.3 kg
Shipping Dimensions	490 x 380 x 190 mm

Presenting 3 new MiniBeast innovations, designed for challenging applications.

NEW

MiniBeast Thin™

Capable of safely cutting thin materials and painted surfaces from as little as 3 mm thick.

SPECIFICATIONS	
MODEL	MINIBEAST-THIN STEEL
Weight	11.7 kg
Max Stroke	70 mm
Cutter Capacity	35 mm Ø x 2" Depth
Twist Drill Capacity	12 mm with optional set - see page 41
Height min/max	305 / 380 mm
Length x Width	290 x 166 mm
Magnetic Base L x W	220 x 100 mm
Magnet Deadlift	900 kg on 1" Plate (9000 N)
Min. Material Thickness	3 mm
Voltage/ Part no	110 V - DRILL-MBTS/1 240 V - DRILL-MBTS/2

Machine Supplied in Plastic Carrying Case



Suitable for drilling painted steel



Magnetises to thin steel plate



Suitable for drilling ultra thin steel

MiniBeast Curve™

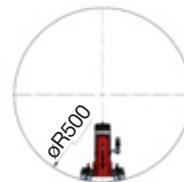
For drilling pipes, convex and concave surfaces.

SPECIFICATIONS	
MODEL	MINIBEAST-CURVE
Weight	15 kg
Max Stroke	55 mm
Cutter Capacity	35 mm Ø x 35 mm Depth
Height min/max	315 / 390 mm
Length x Width	300 x 245 mm
Magnetic Base L x W	250 x 230 mm
Magnet Deadlift	600 kg on 1" Plate (6000 N)
Min. Material Thickness	10 mm
Min. Pipe Dia (outside)	300 mm Ø
Min. Pipe Dia (Inside)	1000 mm Ø
Min Radius (inside)	R 500
Voltage/ Part no	110V - DRILL-MBCP/1 240V - DRILL-MBCP/2

Machine Supplied in Metal Carry Case



Outside radius



Inside radius

MiniBeast Safe-Base™

With a separate permanent magnet, requiring no electric power.

Designed to protect the machine from falling off the surface in the event of a power cut.

SPECIFICATIONS	
MODEL	MINIBEAST-SAFE-BASE
Weight	15 kg
Max Stroke	70 mm
Cutter Capacity	35 mm Ø x 35 mm Depth
Height min/max	320 / 390 mm
Length x Width	325 x 185 mm
Magnetic Base L x W	245 x 215 mm
Magnet Deadlift	600 kg on 1" Plate (6000 N)
Min. Material Thickness	10 mm
Voltage/ Part no	110 V - DRILL-MBSB/1 240 V - DRILL-MBSB/2

Machine Supplied in Metal Carry Case



Self-correcting side rails



Internal coolant reservoir

Drilling Machine Solutions

MiniBeast Auto

Part no' DRILL-19041A ⚡110 V
Part no' DRILL-19042A ⚡240 V



The world's smallest automatic magnetic drilling machine.
Ideal for high production cutting more holes, less time! Quicker holes plus improved machine cycle life.



Internal coolant



Self automated spoke handles



Simple electronic controls



Automatic counterboring



Automatic twist drilling



With all the features of the MiniBeast

- Compact size and weight - ideal for site work.
- Internal coolant reservoir - ensuring maximum cutter life.
- Self correcting slide rails - for maintenance free operation.
- Lightweight - only 13 kg.

Plus much more

- Easier operation - lets the machine control the task.
- Increased productivity - one operator can control several machines at one time.
- Improved tool life - let the machine do the cutting. More holes per tool with better hole results.
- Protects against misuse of machine and wearing parts - no manual overloading of the motor.
- Longer overall life of the machine.

Machine Includes:

- 2 x spoke handles.
- Safety strap.
- Safety guard.
- 4 mm Allen key.
- Metal carrying case.
- Operators manual.

For optimum automatic cutting results, use with JEI Turbo Tough TCT cutters
(See page 26-27)



SPECIFICATIONS

MODEL	MINIBEAST AUTO
Spindle	19 mm
Weight	13 kg
Max Stroke	70 mm
Cutter Capacity	35 mm Ø x 2" depth of cut
Twist Drill Capacity	12 mm Ø with optional Turbo twist drills (see page 41)
Countersink Capacity	30 mm
Motor	1010 W
RPM	1 Fixed Speed no load 520 RPM loaded 350 RPM
Height min/max	307 / 377 mm
Length x Width	285 x 221 mm
Magnetic Base L x W	160 x 80 mm
Magnet Deadlift	980 kg on 1" Plate (9600 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-19041A 240 V - DRILL-19042A
Shipping Weight	19.10 kg
Shipping Dimensions	360 x 350 x 260 mm

MiniBeast LP35+

Part no' DRILL-LP35P/1 ⚡ 110 V
Part no' DRILL-LP35P/2 ⚡ 240 V



New ultra-low profile magnetic drilling machine.

Features / Benefits:

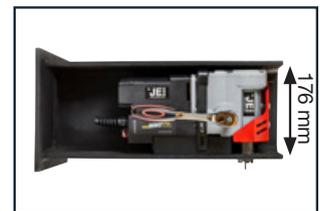
- Ultra-low fixed working height only 176 mm.
- Extremely low weight of just 9.5kg.
- Compact design perfectly suited to space restricted areas.
- Maximum drilling diameter of 35 mm with annular cutters.
- Will accept standard length (35 mm) tungsten carbide annular cutters. Ideal for structural site work!
- Positive quill drive for close tolerance holes.
- Accepts short series twist drills with 19.05 mm (3/4") weldon shank (ask for details).
- Integrated safety guard.
- Detachable feed ratchet handle can be fixed from either left or right side.
- Lifting handle for easy transportation.

Machine Includes:

- 1 x ratchet handle.
- Safety strap.
- Safety guard.
- 4 mm Allen key.
- Plastic carrying case.
- Operators manual.



Compact design makes suitable for onsite & bridge work drilling applications.



Only 176 mm height

HSS Turbo Steel Cutter



20 MM DEPTH

35 MM DIAMETER

HSS Turbo Twist Drill



42 MM DEPTH

12 MM DIAMETER

TCT Turbo Tough Cutter



32 MM DEPTH

35 MM DIAMETER

SPECIFICATIONS

MODEL	MINIBEAST LP35+
Spindle	19 mm
Weight	9.5 kg
Max Drilling	35 mm
Max. Drilling Depth	20mm with HSS Turbo Steel annular cutter. 32mm with Turbo Tough TCT annular cutter.
Twist Drill Capacity	12mm with Turbo Twist Drills (ask for details)
Countersink Capacity	30 mm
Motor	920 W
RPM	1 Fixed Speed no load 520 RPM loaded 350 RPM
Height (Fixed)	176 mm
Length x Width	380 x 147 mm
Magnetic Base L x W	165 x 80 mm
Magnet Deadlift	910 kg on 1" Plate (8900 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-LP35P/1 240 V - DRILL-LP35P/2
Shipping Weight	12.4 kg
Shipping Dimensions	490 x 380 x 190 mm

Optional machine package



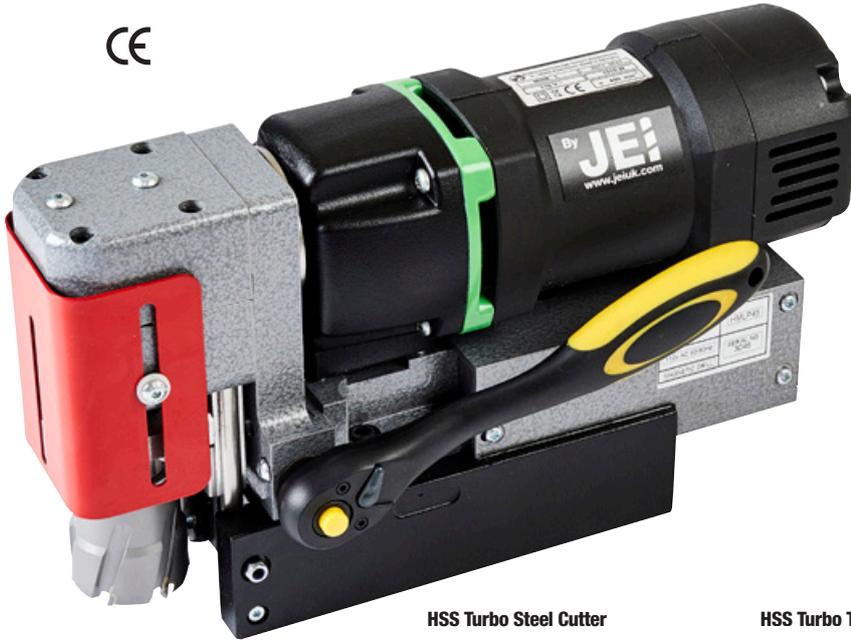
Description	Voltage	Part no.
LP35+ Package Kit consisting of		
1 x LP35+ Drill (110 V or 240 V)	110 V	LP35P-SET1
1 x 5pc Turbo Tough TCT Cutter set (14, 16, 18, 20, 22 mm x 1" Depth + 2 Pins)		
1 x 500ml Turbo Endurance Spray Paste	240 V	LP35P-SET2

Drilling Machine Solutions

LP45 Part no' DRILL-LP45/1 ⚡ 110 V
Part no' DRILL-LP45/2 ⚡ 240 V



Designed to fit into the most height restrictive areas.
Ideal for bridge maintenance work & repairs, platform drilling, steel construction.



Features / Benefits:

- Compact design – only 180 mm high.
- Big capacity – will handle up to 45 mm diameter holes through 55 mm plate.
- Convenient ratchet handle can be used in either a left or right hand position.
- 12 mm twist drill capacity.
- Maintenance free – no adjustable slides, no exposed motor cord.

Machine Includes:

- Ratchet handle.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- 2.5 mm and 5 mm Allen key.
- Plastic carrying case.
- Operators manual.

HSS Turbo Steel Cutter



HSS Turbo Twist Drill



TCT Turbo Tough Cutter



Compact only 180 mm height



Convenient carry handle



Ratchet handle for left or right sided operation

SPECIFICATIONS

MODEL	LP45
Spindle	19 mm
Weight	11 kg
Max Stroke	63 mm
Cutter Capacity	45 mm Ø x 2" depth of cut
Twist Drill Capacity	12 mm Ø with optional Turbo Twist drills (see page 41)
Countersink Capacity	30 mm
Motor	1100 W
RPM	1 Fixed Speed no load 500 RPM loaded 290 RPM
Height	180 mm
Length x Width	310 x 120 mm
Magnetic Base L x W	183 x 85 mm
Magnet Deadlift	1200 kg on 1" Plate (11700 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-LP45/1 240 V - DRILL-LP45/2
Shipping Weight	15 kg
Shipping Dimensions	360 x 350 x 260 mm

HM40 Part no' DRILL-HM40 ⚡ 110 V
Part no' DRILL-HM40/2 ⚡ 240 V



Lightweight and powerful for maximum performance.

Features / Benefits:

- Powerful 1100 watt motor delivering 40 mm cutting capacity.
- Easily adapts for a 13 mm chuck for use on twist drill applications.
- External coolant system for extended tool life.



Machine Includes:

- 3 x spoke handles.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- 2.5 mm, 3 mm, 4 mm Allen keys.
- 8 mm spanner.
- Metal carry case.
- Operators manual.



13 mm twist drill capacity (Part no JEICA-13 mm) see page 41



Use with up to 100 mm cutting depth Turbo Tough TCT cutters with detachable pin



Supplied with external coolant system

SPECIFICATIONS	
MODEL	HM40
Spindle	19 mm
Weight	12.7 kg
Max Stroke	120 mm
Cutter Capacity	40 mm Ø x 4" depth of cut
Twist Drill Capacity	13 mm Ø with optional attachment (part no. JEICA-13 mm)
Countersink Capacity	40 mm
Motor	1100 W
RPM	1 Fixed Speed no load 720 RPM loaded 440 RPM
Height min/max	385 / 505 mm
Length x Width	280 x 190 mm
Magnetic Base L x W	168 x 83 mm
Magnet Deadlift	1066 kg on 1" Plate (10500 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM40 240 V - DRILL-HM40/2
Shipping Weight	19.10 kg
Shipping Dimensions	470 x 370 x 140 mm

Optional machine package



Need to cut a hole in non-magnetic material?
Use JEI's Vac Pad
See page 46

Description	Voltage	Part no.
HM40 Package Kit consisting of		
1 x HM40 Drill (110 V or 240 V)	110 V	HM40-SET1
1 x 5pc Turbo Steel Cutter set (14, 16, 18, 20, 22 mm x 1" Depth + Pin)		
1 x 13 mm Chuck & Adaptor	240 V	HM40-SET2



Drilling Machine Solutions

HM50 Part no' DRILL-HM50 ⚡ 110 V
Part no' DRILL-HM50/2 ⚡ 240 V



A durable, dependable heavy duty 2 morse taper drilling machine.



Maintenance free
twin slide rails –
no worn brass rails



Extra long drill travel –
ideal for 100 mm long
cutters



50 mm diameter
cutter capacity



23 mm 2 morse
taper drill capacity



13 mm twist drill chuck
option See page 41



Features heavy duty,
durable case



Available with a full
360° swivel base
Model no. HM50S
• Ideal for drilling holes
close together without
moving machine
• Special project work



Features / Benefits:

- Heavy duty 1150 W motor - enables larger cutting capacity.
- Weighs only 14 kg with a 50 mm cutter capacity - unrivalled weight to cutting capacity ratio.
- 180 mm total drill travel - facility to use extra-long cutters.
- Maintenance friendly twin slide rails - no wearing parts and adjustment free operation.
- Spoke handles can be fitted on left or right side for operator convenience (applies to all HM50 models).

Machine Includes:

- 3 × spoke handles.
- 2 MT industrial arbor with coolant ring, to suit 19 mm shank cutters.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- Drill drift.
- 2.5 mm and 5 mm Allen key.
- Plastic carrying case.
- Operators manual.

SPECIFICATIONS

MODEL	HM50	HM50S
Spindle	MT2	MT2
Weight	14 kg	14 kg
Max Stroke	180 mm	180 mm
Cutter Capacity	50 mm Ø x 4" depth of cut	50 mm Ø x 4" depth of cut
Twist Drill Capacity	13 mm with 2MT Chuck 23 mm with 2MT Twist Drill	13 mm with 2MT Chuck 23 mm with 2MT Twist Drill
Countersink Capacity	40 mm	40 mm
Reaming Capacity	22 mm (19 mm shank)	22 mm (19 mm shank)
Motor	1150 W	1150 W
RPM	2 Fixed Speeds no load 465 / 720 RPM loaded 250 / 450 RPM	2 Fixed Speeds no load 465 / 720 RPM loaded 250 / 450 RPM
Swivel Base	n/a	360 Degree
Height min/max	380 / 560 mm	380 / 570 mm
Length x Width	280 x 170 mm	280 x 170 mm
Magnetic Base L x W	90 x 180 mm	90 x 180 mm
Magnet Deadlift	1250 kg on 1" Plate (12000 N)	1250 kg on 1" Plate (12000 N)
Noise Level	< 90dB	< 90dB
Vibration Level	< 2.5 m/s ²	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM50 240 V - DRILL-HM50/2	110 V - DRILL-HM50S 240 V - DRILL-HM50S/2
Shipping Weight	18.15 kg	22 kg
Shipping Dimensions	490 x 380 x 200 mm	490 x 380 x 200 mm

HM50T Part no' DRILL-HM50T ⚡ 110 V
Part no' DRILL-HM50T/2 ⚡ 240 V



A heavy duty 2 morse taper drilling machine, featuring variable speed and reverse function.

Features / Benefits:

- Variable speed, high torque motor. Ideal for countersinking and reaming.
- Reverse speed motor ideal for threading (tapping) holes.
- Lightweight. Only 13 kg yet can cut up to 50 mm diameter.
- Maintenance friendly twin slide rails.
- No wearing parts and adjustment free operation.



Available with a full 360° Swivel Base option (Model HM50TS)

Machine Includes:

- 3 x spoke handles.
- 2 MT industrial arbor with coolant ring, to suit 19 mm shank cutters.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- Drill drift.
- 2.5 mm and 5 mm Allen key.
- Plastic carrying case.
- Operators manual.



Variable speed & forward/reverse simple control panel



Maintenance free twin slide rails—no worn brass rails



Extra long drill travel—ideal for 100 mm long cutters



Ideal for reaming—See options page 38



23 mm morse taper drill capacity



13 mm twist drill chuck option See page 41



Ideal for countersinking—See options page 37



Ideal for tapping—See options Pages 39, 42, 43

SPECIFICATIONS

MODEL	HM50T	HM50TS
Spindle	MT2	MT2
Weight	14 kg	14 kg
Max Stroke	180 mm	150 mm
Cutter Capacity	50 mm Ø x 4" depth of cut	50 mm Ø x 4" depth of cut
Twist Drill Capacity	13 mm with 2MT Chuck 23 mm with 2MT Twist Drill	13 mm with 2MT Chuck 23 mm with 2MT Twist Drill
Countersink Capacity	40 mm	40 mm
Tapping Capacity	M20	M20
Reaming Capacity	22 mm (19 mm shank)	22 mm (19 mm shank)
Motor	1150 W (110 V) 1250 W (240 V)	1150 W (110 V) 1250 W (240 V)
RPM	2 Variable Speeds 180–430, 100–250 RPM	2 Variable Speeds 180–430, 100–250 RPM
Swivel Base	n/a	360 Degree
Height min/max	380 / 560 mm	380 / 570 mm
Length x Width	280 x 170 mm	280 x 170 mm
Magnetic Base L x W	90 x 180 mm	90 x 180 mm
Magnet Deadlift	1250 kg on 1" Plate (12000 N)	1250 kg on 1" Plate (12000 N)
Noise Level	< 90dB	< 90dB
Vibration Level	< 2.5 m/s ²	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM50T 240 V - DRILL-HM50T/2	110 V - DRILL-HM50TS 240 V - DRILL-HM50TS/2
Shipping Weight	19 kg	22 kg
Shipping Dimensions	490 x 380 x 200 mm	490 x 380 x 200 mm



Drilling Machine Solutions

HM100 Part no' DRILL-HM100 ⚡ 110 V
Part no' DRILL-HM100/2 ⚡ 240 V



A durable, heavy duty, 3 morse taper drilling machine.



Features / Benefits

- Heavy duty 1700 W motor. Enables large cutting capacity.
- Weighs only 23 kg and 100 mm cutter capacity.
- Unrivalled weight to cutting capacity ratio.
- 4 speed gearbox. Ideal for a wide selection of cutting operations.
- 250 mm total drill travel. Facility to use 150 mm (6") long cutters.
- Maintenance friendly twin slide rails.
- No wearing parts and adjustment free operation.

Machine Includes:

- 3 × spoke handles.
- 3 MT industrial arbor with coolant ring, to suit 19 mm shank cutters.
- Cutter adaptor, 19 mm to 1-1/4" shank.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- Drill drift.
- 2.5 mm and 5 mm Allen key.
- Plastic carrying case.
- Operators manual.



100 mm cutter capacity



19 mm twist drill capacity with chuck - see page 41



55 mm countersinking capability. See page 37 for range of tools



Twin slide rails – maintenance free operation



32 mm 3MT drill capability



Includes robust carry case

SPECIFICATIONS

MODEL	HM100	HM100S
Spindle	MT3	MT3
Arbor Bore	19 mm	19 mm
Weight	20 kg	20 kg
Max Stroke	250 mm	250 mm
Cutter Capacity	100 mm Ø x 6" depth of cut	100 mm Ø x 6" depth of cut
Twist Drill Capacity	19 mm with 3MT Chuck 32 mm with 3MT Twist Drill	19 mm with 3MT Chuck 32 mm with 3MT Twist Drill
Countersink Capacity	55 mm	55 mm
Reaming Capacity	39 mm	39 mm
Motor	1700 W	1700 W
RPM	4 Fixed Speeds no load 215/330/460/680 RPM loaded 110/175/245/385 RPM	4 Fixed Speeds no load 215/330/460/680 RPM loaded 110/175/245/385 RPM
Swivel Base	n/a	360 Degree
Height min/max	480 / 700 mm	480 / 700 mm
Length x Width	345 x 190 mm	345 x 190 mm
Magnetic Base L x W	212 x 102 mm	212 x 102 mm
Magnet Deadlift	2050 kg on 1" Plate (20100 N)	2050 kg on 1" Plate (20100 N)
Noise Level	< 90dB	< 90dB
Vibration Level	< 2.5 m/s ²	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM100 240 V - DRILL-HM100/2	110 V - DRILL-HM100S 240 V - DRILL-HM100S/2
Shipping Weight	29 kg	32 kg
Shipping Dimensions	571 x 450 x 250 mm	571 x 450 x 250 mm

HM100T Part no' DRILL-HM100T ⚡ 110 V
Part no' DRILL-HM100T/2 ⚡ 240 V



The complete 3MT model, capable of cutting, reaming, counterboring and tapping holes.



Full range of tapping options available for blind and through holes up to M30. See pages 39, 42, 43.



360° swivel base option available for enhanced drilling precision and increased versatility Model no. HM100TS

Machine Includes:

- 3 x spoke handles.
- 3 MT industrial arbor with coolant ring, to suit 19 mm shank cutters.
- Cutter adaptor, 19 mm to 1-1/4" shank.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- Drill drift.
- 2.5 mm and 5 mm Allen key.
- Plastic carrying case.
- Operators manual.



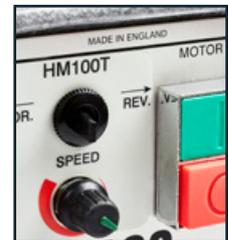
CE



Twin slide rails-no wearing parts adjustment free operation



Robust carry case



Simple and efficient electronic controls

SPECIFICATIONS		
MODEL	HM100T	HM100TS
Spindle	MT3	MT3
Arbor Bore	19 mm	19 mm
Weight	23 kg	23 kg
Max Stroke	250 mm	250 mm
Cutter Capacity	100 mm Ø x 6" depth of cut	100 mm Ø x 6" depth of cut
Twist Drill Capacity	19 mm with 3MT Chuck 32 mm with 3MT Twist Drill	19 mm with 3MT Chuck 32 mm with 3MT Twist Drill
Countersink Capacity	55 mm	55 mm
Tapping Capacity	M30	M30
Reaming Capacity	39 mm	39 mm
Motor	1800 W	1800 W
RPM	2 Variable Speeds (torque control) 60-140 / 200-470	2 Variable Speeds (torque control) 60-140 / 200-470
Swivel Base	n/a	360 Degree
Height min/max	440 / 700 mm	480 / 700 mm
Length x Width	345 x 190 mm	345 x 190 mm
Magnetic Base L x W	212 x 102 mm	212 x 102 mm
Magnet Deadlift	2050 kg on 1" Plate (20100 N)	2050 kg on 1" Plate (20100 N)
Noise Level	< 90dB	< 90dB
Vibration Level	< 2.5 m/s ²	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM100T 240 V - DRILL-HM100T/2	110 V - DRILL-HM100TS 240 V - DRILL-HM100TS/2
Shipping Weight	28.65 kg	32 kg
Shipping Dimensions	571 x 450 x 250 mm	571 x 450 x 250 mm



Countersinking 55 mm capacity



Cutters up to 100 mm see adaptor, page 45



Reaming capacity 39 mm



Solid drills up to 32 mm 3MT



Drilling Machine Solutions

MagBeast 4 Part no' DRILL-MB4/1 ⚡ 110 V Part no' DRILL-MB4/2 ⚡ 240 V



A powerful 4 morse taper, heavy duty magnetic drill.



One piece slide and gearbox provides extra stability to the cut



Coolant system feeds the spindle and cutter internally



Pipe drilling attachment option
See page 46



Cutter capacity
110 mm Ø



Countersinking
up to 60 mm Ø



Solid twist drills
up to 47 mm Ø



LED overload protection warns the operator if excessive force is applied – protects the motor against damage



Features / Benefits:

- Heavy duty robust design.
- Impressive 4 speed gearbox - increasing flexibility of use.
- Overload protection with LED indicator.
- Integrated gearbox housing with slide.
- Semi-automatic gib backlash adjustment.
- Service friendly.

Machine Includes:

- 3 × spoke handles.
- 4 MT industrial arbor with coolant ring, to suit 19 mm shank cutters.
- Cutter adaptor, 19 mm to 1-1/4" shank.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- 5 mm T-handle.
- Drill drift.
- 8 mm spanner.
- 6 mm, 4 mm & 2.5 mm Allen keys.
- Metal carrying case.
- Operators manual.

SPECIFICATIONS

MODEL	MAGBEAST 4
Spindle	MT4
Arbor Bore	19 mm
Weight	31 kg
Max Stroke	230 mm
Cutter Capacity	110 mm Ø
Twist Drill Capacity	19 mm with 4MT Chuck 47 mm with 4MT Twist Drill
Countersink Capacity	60 mm
Reaming Capacity	47 mm
Motor	1650 W
RPM	4 Fixed Speeds no load 140/215/240/390 RPM loaded 85/135/160/250 RPM
Height min/max	570 / 800 mm
Length x Width	410 x 260 mm
Magnetic Base L x W	240 x 120 mm
Magnet Deadlift	2242 kg on 1" Plate (22000 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-MB4/1 240 V - DRILL-MB4/2
Shipping Weight	45.75 kg
Shipping Dimensions	620 x 530 x 200 mm

HM140T

Part no' DRILL-HM140T ⚡ 110 V
Part no' DRILL-HM140T/2 ⚡ 240 V



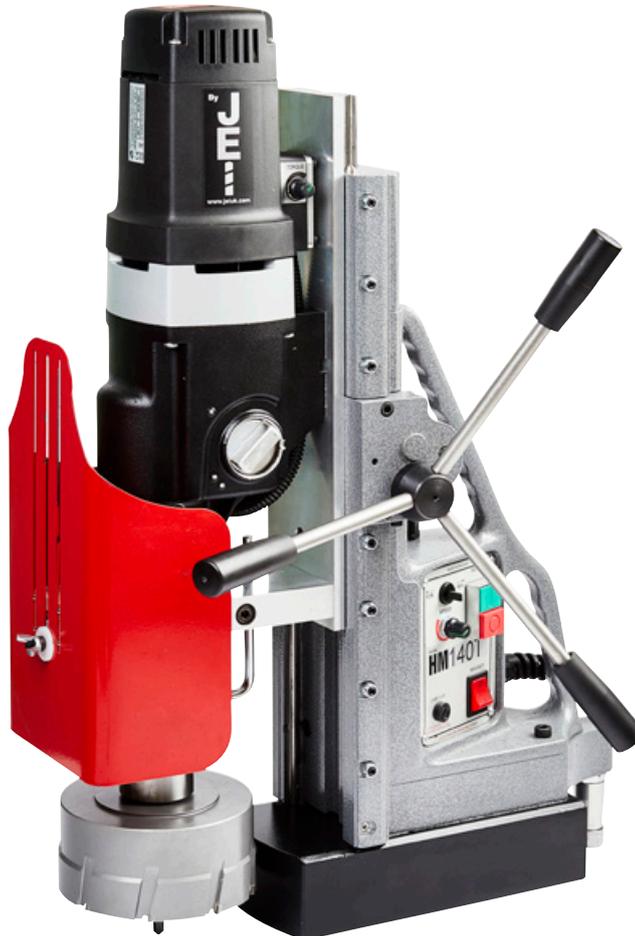
A 4MT powerhouse capable of many applications.

Features / Benefits:

- Heavy duty 2300 W, variable speed motor enables large cutting capacity.
- Built in forward/reverse operation. Ability to tap pre-drilled holes up to M44.
- Built in soft start motor switch, provides protection to motor when switching operation.
- Weighs only 39 kg with 140 mm cutting capacity. Unrivalled weight to cutting capacity ratio.
- Maintenance friendly twin slide rails. No wearing parts and adjustment free operation.
- Industrial oil filled gearbox with heavy duty gear changes.

Machine Includes:

- 3 x spoke handles.
- Cutter adaptor, 32mm to 19mm shank.
- 4MT industrial arbor, with coolant ring, to suit 1-1/4" shank cutters.
- Safety chain.
- Safety guard.
- Coolant bottle assembly.
- Drill drift.
- 2.5 mm and 7.5 mm Allen key.
- Plastic carrying case.
- Operators manual.



Simple electronic operating controls



Twin slide rails-adjustment and maintenance free operation



Includes heavy duty plastic case

SPECIFICATIONS

MODEL	HM140T
Spindle	MT4
Arbor Bore	1-1/4"
Weight	35 kg
Max Stroke	320 mm
Cutter Capacity	140 mm Ø
Twist Drill Capacity	19 mm with 4MT Chuck 50 mm with 4MT Twist Drill
Countersink Capacity	80 mm
Tapping Capacity	M44
Reaming Capacity	47 mm
Motor	2300 W
RPM	4 Variable Speeds 30-80/50-120/130-350/ 210-550 RPM
Height min/max	570 / 850 mm
Length x Width	440 x 245 mm
Magnetic Base L x W	120 x 260 mm
Magnet Deadlift	2675 kg on 1" Plate (26000 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-HM140T 240 V - DRILL-HM140T/2
Shipping Weight	50 kg
Shipping Dimensions	650 x 500 x 300 mm



Tapping capacity M44
See pages 42-43 for solutions



Transportable case on wheels



Need to drill a non-magnetic surface?
See page 46 for JEI's Vac Pads



140 mm Ø cutter capacity

MagBeast 5

Part no' DRILL-MB5C/1 ⚡ 110 V
Part no' DRILL-MB5C/2 ⚡ 240 V



The world's largest capacity portable magnetic drill, designed to solve the most challenging of applications.



Incredible 200 mm Ø cutting capacity. See Turbo Tough cutter range pages 26-27



Creates a threaded hole up to M52. See pages 42-43 for range of tapping attachments.



Solid drills up to 52 mm 5MT



Re-manufactured to your specialist requirements – contact us for further information

Features / Benefits:

- Commanding 3000 W, high torque motor. Delivers maximum power to produce up to 200 mm Ø holes.
- Reversible with variable speed. Ability to tap holes up to M52.
- 435 mm of drill travel. Can be adapted for many special projects.
- Optional single phase 110 V or 240 V operation. Can be used on any site environment.
- Twin slide rails. Ensuring maintenance free operation and minimum hole tolerance.
- Soft start motor switch. Protects motor and tool during start up operation.
- Overload and clutch control. Cuts out motor under excessive load, protecting tool, gearbox and motor against incidental damage.

Machine Includes:

- 3 × spoke handles.
- 5MT industrial arbor, with coolant ring to suit 1-1/4" shank cutters.
- Safety chain.
- Safety guard.
- 5 L pressurised coolant system.
- 5 mm T Handle.
- 4-5 morse taper sleeve.
- 3-5 morse taper sleeve.
- 300 mm Magnetic clean up brush.
- Steel carrying case.
- Operators manual.

SPECIFICATIONS

MODEL	MAGBEAST 5MT
Spindle	MT5
Arbor Bore	1-1/4"
Weight	53 kg
Max Stroke	300 mm
Cutter Capacity	200 mm Ø
Twist Drill Capacity	52 mm Ø
Countersink Capacity	110 mm Ø
Tapping Capacity	M52
Reaming Capacity	52 mm Ø
Motor	3000 W
RPM	Variable Speeds (Torque control) 20-50 / 50-110 RPM
Height min/max	730 / 965 mm
Length x Width	520 x 320 mm
Magnetic Base L x W	295 x 140 mm
Magnet Deadlift	2300 kg on 1" Plate (22500 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Voltage/ Part no	110 V - DRILL-MB5C/1 240 V - DRILL-MB5C/2
Shipping Weight	70 kg
Shipping Dimensions	790 x 490 x 240 mm

Success on special projects



Nuclear decommissioning



Wind turbine industry

AirBeast 35A

Part no' DRILL-AIR35/ATEX



A pneumatic drill specifically designed for space restricted and hazardous environments.

Features / Benefits:

- Pneumatic drive and permanent magnetic base eliminates the need for electric power.
- Compact - only 185 mm high.
- Lightweight.
- Great safety features.
- Strong permanent magnetic base.
- Ideal for hazardous environments such as oil drilling platforms, mining, shipbuilding or petrochemical industries.

Now conforms to ATEX II 2 G/D c 11C T6/T4 Standard For Equipment Used in Hazardous Environments



Machine Includes:

- 1 x spoke handle and hub.
- Safety chain.
- 4 mm and 5 mm Allen keys.
- Pressurised coolant bottle.
- Steel carrying case.
- Operators manual.



35 mm Ø x 1" Turbo Steel cutter capacity



Suitable for tougher materials. Use JEI's Turbo Rail cutters (25 mm depth) see pages 32-33



Supplied with pressurised coolant system



Handle can be used on left or right side for close access areas



Fits in the most height restrictive areas



Safety conscious separate magnet and motor switch gear – prevents accidental start up



Convenient carry handle

SPECIFICATIONS

MODEL	AIRBEAST 35 ATEX
Spindle	19 mm
Weight	17 kg
Air consumption	1400 l/min
Max Stroke	39 mm
Cutter Capacity	35 mm Ø x 1" depth of cut HSS Turbo Steel cutters 35 mm Ø x 1" depth of cut using JEI Turbo Tough
Motor	800 W
RPM	1 Fixed Speed no load 420 RPM loaded 240 RPM
Height fixed	185 mm
Length x Width	480 x 168 mm
Magnetic Base L x W	143 x 80 mm
Magnet Deadlift	660 kg on 1" Plate (6500 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Part no	DRILL-AIR35/ATEX
Shipping Weight	23.4 kg
Shipping Dimensions	510 x 320 x 160 mm
Fitting	GZ 3/8@ B5PT

Pneumatic Drilling

AirBeast 45A Part no' DRILL-AIR45 / ATEX



A pioneering 2 morse taper pneumatic drilling machine.



Safety conscious separate magnet and motor switch gear – prevents accidental start up



45 mm Ø cutter capacity



23 mm, 2MT solid drill capacity



Conforms to ATEX II 2 G/D x 11C T6/T4 Standard For Equipment Used in Hazardous Environments

Features / Benefits:

- Pneumatic drive and permanent magnetic base eliminates the need for electric power.
- 2 morse taper twist drill capacity.
- Strong permanent magnetic base.
- Ergonomic design to suit offshore industry.
- Ideal for hazardous environments such as oil drilling platforms, mining, shipbuilding or petrochemical industries.

Machine Includes:

- 3 × spoke handles and hub.
- 2 morse taper arbor (19 mm shank) with coolant ring.
- Drill drift.
- Safety chain.
- 4 mm and 5 mm Allen keys.
- External coolant bottle assembly.
- Steel carrying case.
- Operators manual.

SPECIFICATIONS

MODEL	AIRBEAST 45 ATEX
Spindle	2MT (19 mm shank)
Weight	26.5 kg
Air consumption	1400 l/min
Max Stroke	150 mm
Cutter Capacity	45 mm Ø x 2" depth of cut
Motor	800 W
RPM	2 Fixed Speeds no load 500 / 330 RPM loaded 290 / 190 RPM
Twist Drill Capacity	23mm with 2MT Twist Drill
Height min/max	670 x 750 mm
Length x Width	424 x 268 mm
Magnetic Base L x W	143 x 80 mm
Magnet Deadlift	765kg on 1" Plate (7500N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Part no	DRILL-AIR45/ATEX
Shipping Weight	32 kg
Shipping Dimensions	720 x 490 x 180 mm
Connection	CEJN 410 DN 10.4 R 3/8@ BSPT fitting for quick-coupling



AirBeast 200A

Part no' DRILL-AIR200/ATEX



Designed to meet the most challenging hole making applications in the most hazardous of environments.

Features / Benefits:

- ATEX Class II approved - for use in the most hazardous of environments.
- 200 mm diameter cutter capacity.
- M48 tapping capacity.
- Impressive 2 speed gear box with forward and reverse increasing flexibility of use.
- 400 mm drill travel - for demanding drilling applications.
- Rugged one piece slide and gear box - for extra stability.
- Double permanent magnetic base - suitable for clamping to pipe and radius surfaces.

Conforms to ATEX II 2 G/D c 11C T6/T4 Standard For Equipment Used in Hazardous Environments



200 mm Ø cutter capacity



45 mm Ø solid drill capacity



M48 tapping capacity

Machine Includes:

- 3 × spoke handles and hub.
- 5 morse taper arbor (1-1/4" shank) with coolant ring.
- 3 feed levers.
- 5 L pressurised coolant system.
- Safety guard.
- Safety chain.
- Drill drift.
- 4 mm, 5 mm, 6 mm, 8 mm, 10 mm, 13 mm Allen keys.
- 13 mm flat wrench.
- Operators manual.



Powerful double permanent magnets need no supply from mains. Self-locking device prevents accidental movement of handle and deactivation of magnet.



Double magnetic base can be converted to concave and convex workpieces.



Can be fixed on pipes min, 950 mm diameter.

SPECIFICATIONS

MODEL	AIRBEAST 200 ATEX
Spindle	5MT (1-1/4" shank)
Weight	130 kg
Air consumption	3500 l/min (125 CFM)
Pressure	6.5 bar
Max Stroke	400 mm
Cutter Capacity	200 mm Ø x 4" depth of cut
Motor	3650 W
RPM	2 Fixed Speeds no load 140/35 RPM loaded 80/20 RPM
Twist Drill Capacity	45 mm
Tapping Capacity	M48
Height min/max	991 / 1391 mm
Length x Width	764 x 485 mm
Magnetic Base L x W	250 x 110 mm
Magnet Deadlift	2 x 1530 kg on 25 mm Plate (2 x 15000 N)
Noise Level	< 90dB
Vibration Level	< 2.5 m/s ²
Part no	DRILL-AIR200A
Shipping Weight	150.00 kg
Shipping Dimensions	510 x 320 x 160 mm



Rail Drilling Machines

Rail Electric

Part no' DRILL-RAIL/E ⚡ 110 V
Part no' DRILL-RAIL/E2 ⚡ 240 V



Powerful yet compact, lightweight machine specifically designed for drilling in rail tracks.



Features / Benefits:

- Fast positioning, quick clamp and instant unlocking mechanisms make it a safety conscious, user-friendly device.
- Supplied with a positioning (locating) plate to ensure accurate drilling.
- Rail templates (formers) available which are suitable for any rail profile.

SPECIFICATIONS

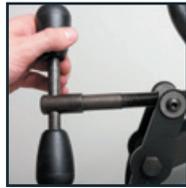
MODEL	RAIL ELECTRIC
Weight	15.3kg
Drilling Capacity	16 mm Ø
Cutter Capacity - max	36 mm Ø
Depth of cut	30 mm
Stroke	40 mm
Motor	1200 W
RPM	250 RPM
Arbor bore	19 mm Weldon shank
Voltage / Part No'	110V Part No' DRILL-RAIL/E 240V Part No' DRILL-RAIL/E2



Featuring clamp and Turbo rail cutter



Simple handle to clamp drill to rail



Quick release system to disengage clamp



For more rail cutters, see pages 32 & 33

Rail Petrol

Part no' DRILL-RAIL/P



Equipped with a Honda 4 stroke engine, powered for rail track drilling.



Features / Benefits:

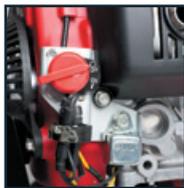
- Fast positioning, quick clamp and instant unlocking mechanisms make it a safety conscious, user-friendly device.
- Supplied with a positioning (locating) plate to ensure accurate drilling.
- Rail templates (formers) available which are suitable for any rail profile.

SPECIFICATIONS

MODEL	RAIL PETROL
Power Supply	Honda Engine GXH50
Engine	2HP (1.5 kW)
Max. Torque	3.04 nm at 4500 RPM
Weight	18.5 kg
Cutter Capacity	36 mm Ø
Depth of cut	30 mm
Twist Drill Capacity	16 mm Ø
Stroke	40 mm
Arbor Speed	Min 150 RPM Max 225 RPM
Arbor Bore	19 mm Weldon shank
Part No'	DRILL-RAIL/P



For best results use Turbo Rail+ pages 32-33



Powerful 4 stroke engine



Petrol gauge



Guide to *turbo*™ Annular Cutters



turbo Cutter Type

Material Type

Material Type	STEEL (<900 (N/mm²))	ENDURANCE (<1000 (N/mm²))	TOUGH (<1200 (N/mm²))	RAIL (<1200 (N/mm²))	RAIL+ (<1600 (N/mm²))	ENDURANCE+ (<1600 (N/mm²))
Structural Steel Mild Steel Aluminium	✓	✓	✓			✓
Cast Iron Stainless Steel			✓			✓
Rail Track				✓	✓	
Hardox Weldox Armour Plate Abro Plate					✓	✓

turbo™ cutter part numbers made easy

(ETC = Turbo Endurance+, X = 3" depth of cut, 24 mm diameter)

ETCX24

TYPE	DEPTH OF CUT	CUTTER DIAMETER
"C" prefix = Turbo Steel/HSS (M2-AL)	S = 1"	Noted numerically at the end of the cutter part number.
"TC" prefix = Turbo Tough / TCT	L = 2"	
"EC" prefix = Turbo Endurance/Coated	X = 3"	
"ETC" prefix = Turbo Endurance+ / Super Coated	XL = 4"	
"RCS" prefix = Turbo Rail	XXL = 6"	
"RCSE" prefix = Turbo Rail+ / Super Coated	XXXL = 8"	

Cutting Tool Solutions

turbo™ STEEL



Turbo Steel is a high quality, fully CNC ground M2-AL cutter, designed to provide the very optimum performance of a HSS Cutter.

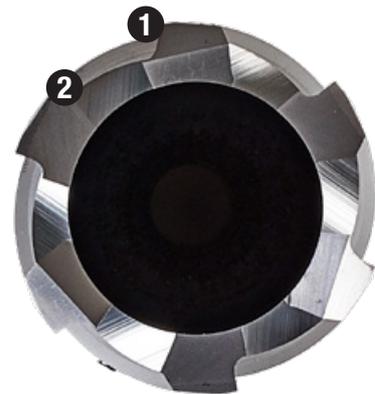
Manufactured from M2-AL material, resulting in an increased cutting edge hardness of 66.6-67.5 ROC, with the ability to cut material with a hardness up to 900 N/mm.

CUTTER TYPE	M2-AL (HSS)
SIZE RANGE	10 mm – 115 mmØ
CUTTING DEPTHS	1", 2", longer lengths on request
MAX. TENSILE STRENGTH	<900RM (N/ mm²)
IDEAL FOR	Most mild, aluminium and structural steel



Dual cutting tooth benefits

- JEI Turbo Steel features a 2 step geometry.
- Each alternate tooth involves a different stage of the hole cutting process.
- Increasing cutting power.
- Reducing resistance.
- Produces a finer nest of chips to provide an improved swarf removal.
- Increased tool life - more holes per cutter.
- Reduced tool wear - produces a quality burr free hole.



Turbo Steel has proved to be one of the most cost effective broaching cutter solution on the market.



Positive slug ejection



Turbo Steel, a cost effective cutter solution



Turbo Steel also available as a countersink tool see page 37.

turbo™ STEEL Part Numbers

Can't see the size you require?
JEI's team can manufacture to
your specific requirements
Contact your distributor for details

Metric Sizes



Cutter Dia Ø	1" D.O.C. Part No.	2" D.O.C. Part No.
10 mm	JEICS10	JEICL10
11 mm	JEICS11	JEICL11
12 mm	JEICS12	JEICL12
13 mm	JEICS13	JEICL13
14 mm	JEICS14	JEICL14
15 mm	JEICS15	JEICL15
16 mm	JEICS16	JEICL16
17 mm	JEICS17	JEICL17
17.5 mm	JEICS17.5	JEICL17.5
18 mm	JEICS18	JEICL18
19 mm	JEICS19	JEICL19
20 mm	JEICS20	JEICL20
21 mm	JEICS21	JEICL21
22 mm	JEICS22	JEICL22
23 mm	JEICS23	JEICL23
24 mm	JEICS24	JEICL24
25 mm	JEICS25	JEICL25
26 mm	JEICS26	JEICL26
27 mm	JEICS27	JEICL27
28 mm	JEICS28	JEICL28
29 mm	JEICS29	JEICL29
30 mm	JEICS30	JEICL30
31 mm	JEICS31	JEICL31
32 mm	JEICS32	JEICL32
33 mm	JEICS33	JEICL33
34 mm	JEICS34	JEICL34
35 mm	JEICS35	JEICL35
36 mm	JEICS36	JEICL36
37 mm	JEICS37	JEICL37
38 mm	JEICS38	JEICL38
39 mm	JEICS39	JEICL39
40 mm	JEICS40	JEICL40
41 mm	JEICS41	JEICL41
42 mm	JEICS42	JEICL42
43 mm	JEICS43	JEICL43
44 mm	JEICS44	JEICL44
45 mm	JEICS45	JEICL45
46 mm	JEICS46	JEICL46
47 mm	JEICS47	JEICL47
48 mm	JEICS48	JEICL48
49 mm	JEICS49	JEICL49
50 mm	JEICS50	JEICL50
51 mm	JEICS51	JEICL51
52 mm	JEICS52	JEICL52
53 mm	JEICS53	JEICL53
54 mm	JEICS54	JEICL54
55 mm	JEICS55	JEICL55
56 mm	JEICS56	JEICL56
57 mm	JEICS57	JEICL57
58 mm	JEICS58	JEICL58
59 mm	JEICS59	JEICL59
60 mm	JEICS60	JEICL60
61 mm	JEICS61	JEICL61
62 mm	JEICS62	JEICL62
63 mm	JEICS63	JEICL63
64 mm	JEICS64	JEICL64
65 mm	JEICS65	JEICL65

Cutter Dia Ø	1" D.O.C. Part No.	2" D.O.C. Part No.
66 mm	JEICS66	JEICL66
67 mm	JEICS67	JEICL67
68 mm	JEICS68	JEICL68
69 mm	JEICS69	JEICL69
70 mm	JEICS70	JEICL70
71 mm	JEICS71	JEICL71
72 mm	JEICS72	JEICL72
73 mm	JEICS73	JEICL73
74 mm	JEICS74	JEICL74
75 mm	JEICS75	JEICL75
76 mm	JEICS76	JEICL76
77 mm	JEICS77	JEICL77
78 mm	JEICS78	JEICL78
79 mm	JEICS79	JEICL79
80 mm	JEICS80	JEICL80
81 mm	JEICS81	JEICL81
82 mm	JEICS82	JEICL82
83 mm	JEICS83	JEICL83
84 mm	JEICS84	JEICL84
85 mm	JEICS85	JEICL85
86 mm	JEICS86	JEICL86
87 mm	JEICS87	JEICL87
88 mm	JEICS88	JEICL88
89 mm	JEICS89	JEICL89
90 mm	JEICS90	JEICL90
91 mm	JEICS91	JEICL91
92 mm	JEICS92	JEICL92
93 mm	JEICS93	JEICL93
94 mm	JEICS94	JEICL94
95 mm	JEICS95	JEICL95
96 mm	JEICS96	JEICL96
97 mm	JEICS97	JEICL97
98 mm	JEICS98	JEICL98
99 mm	JEICS99	JEICL99
100 mm	JEICS100	JEICL100

Pilot Pins

Cutter Diameter Range	Use Pilot Part No	Use Pilot Part No
10 mm-65 mm	JEIPILOT1	JEIPILOT2
66 mm +	JEIPILOT1/8MMW	JEIPILOT2/8MMW

Imperial Sizes



Cutter Dia Ø	1" D.O.C. Part No.	2" D.O.C. Part No.
7/16"	CS4375	CL437
1/2"	CS5000	CL500
9/16"	CS5625	CL562
5/8"	CS6250	CL625
11/16"	CS6875	CL687
3/4"	CS7500	CL750
13/16"	CS8125	CL812
7/8"	CS8750	CL875
15/16"	CS9375	CL937
1"	CS1000	CL100
1-1/16"	CS1062	CL106
1-1/8"	CS1125	CL112
1-3/16"	CS1187	CL118
1-1/4"	CS1250	CL125
1-5/16"	CS1312	CL131
1-3/8"	CS1375	CL137
1-7/16"	CS1437	CL143
1-1/2"	CS1500	CL150
1-9/16"	CS1562	CL156
1-5/8"	CS1625	CL162
1-11/16"	CS1687	CL168
1-3/4"	CS1750	CL175
1-13/16"	CS1812	CL181
1-7/8"	CS1875	CL187
1-15/16"	CS1937	CL193
2"	CS2000	CL200
2-1/16"	CS2062	CL206
2-1/8"	CS2125	CL212
2-3/16"	CS2187	CL218
2-1/4"	CS2250	CL225
2-5/16"	CS2312	CL231
2-3/8"	CS2375	CL237
2-7/16"	CS2437	CL243
2-1/2"	CS2500	CL250
2-9/16"	CS2562	CL256

Pilot Pins

Cutter Diameter Range	Use Pilot Part No	Use Pilot Part No
7/16"-2-9/16"	JEIPILOT1	JEIPILOT2



For tapping sizes, see page 39.

Cutter Sets available. See page 34.

Cutting Tool Solutions

turbo™ TOUGH



Turbo Tough - Tungsten Carbide Tipped Cutter (TCT)

The Turbo Tough cutter is designed and manufactured to the highest of standards, to ensure maximum cutting performance on a variety of materials, from structural steel to Cast Iron.

It's cutting teeth manufactured from micro grain carbide combined with a cobalt binding agent to ensure a super strong structure and provide exceptional tool life.

With today's growing market place demanding maximum hole making productivity thus reducing project downtime, Turbo Tough TCT Cutter offers the steel fabricator a cost effective, premium option.

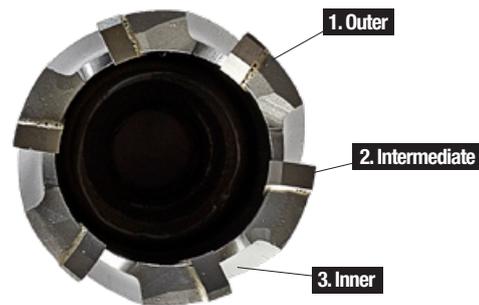
CUTTER TYPE	TCT
SIZE RANGE	12 mm – 200 mmØ
CUTTING DEPTHS	35 mm, 55 mm, 80 mm, 110 mm, 150 mm, 200 mm
MAX. TENSILE STRENGTH	<1200RM (N/ mm ²)
IDEAL FOR	Mild & structural steels, cast iron, stainless



Triple Tooth Cutting Geometry

Each tooth provides a different cutting function, providing great results;

- Reduced cutting resistance = less power required.
- Even tooth load = vibration free cut.
- Smooth cutting action = increased cutting efficiency.



200mm Depth Turbo Tough with HM140T Machine

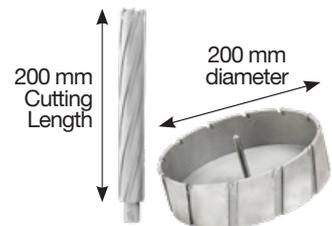


200mm Ø Turbo Tough TCT with Magbeast 5



Shown with HM140T

Turbo Tough also available as a countersink tool. See page 37.

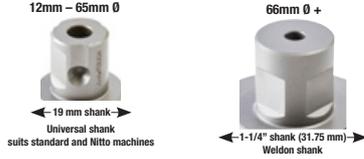


Huge range of sizes available

turbo™ TOUGH Part Numbers

Can't see the size you require?
JEI's team can manufacture to
your specific requirements
Contact your distributor for details

Metric Sizes



Cutter Sets available.
See page 34



Cutter Dia Ø	35 mm DOC Part No.	55 mm DOC Part No.	80 mm DOC Part No.	110 mm DOC Part No.	150 mm DOC Part No.	200 mm DOC Part No.
12 mm	JEITCS12	JEITCL12	-	-	-	-
13 mm	JEITCS13	JEITCL13	-	-	-	-
14 mm	JEITCS14	JEITCL14	-	-	-	-
15 mm	JEITCS15	JEITCL15	-	-	-	-
16 mm	JEITCS16	JEITCL16	-	-	-	-
17 mm	JEITCS17	JEITCL17	-	-	-	-
18 mm	JEITCS18	JEITCL18	JEITCX18	JEITCXL18	JEITCXXL18	-
19 mm	JEITCS19	JEITCL19	JEITCX19	JEITCXL19	JEITCXXL19	-
20 mm	JEITCS20	JEITCL20	JEITCX20	JEITCXL20	JEITCXXL20	-
21 mm	JEITCS21	JEITCL21	JEITCX21	JEITCXL21	JEITCXXL21	-
22 mm	JEITCS22	JEITCL22	JEITCX22	JEITCXL22	JEITCXXL22	JEITCXXXL22
23 mm	JEITCS23	JEITCL23	JEITCX23	JEITCXL23	JEITCXXL23	JEITCXXXL23
24 mm	JEITCS24	JEITCL24	JEITCX24	JEITCXL24	JEITCXXL24	JEITCXXXL24
25 mm	JEITCS25	JEITCL25	JEITCX25	JEITCXL25	JEITCXXL25	JEITCXXXL25
26 mm	JEITCS26	JEITCL26	JEITCX26	JEITCXL26	JEITCXXL26	JEITCXXXL26
27 mm	JEITCS27	JEITCL27	JEITCX27	JEITCXL27	JEITCXXL27	JEITCXXXL27
28 mm	JEITCS28	JEITCL28	JEITCX28	JEITCXL28	JEITCXXL28	JEITCXXXL28
29 mm	JEITCS29	JEITCL29	JEITCX29	JEITCXL29	JEITCXXL29	JEITCXXXL29
30 mm	JEITCS30	JEITCL30	JEITCX30	JEITCXL30	JEITCXXL30	JEITCXXXL30
31 mm	JEITCS31	JEITCL31	JEITCX31	JEITCXL31	JEITCXXL31	JEITCXXXL31
32 mm	JEITCS32	JEITCL32	JEITCX32	JEITCXL32	JEITCXXL32	JEITCXXXL32
33 mm	JEITCS33	JEITCL33	JEITCX33	JEITCXL33	JEITCXXL33	JEITCXXXL33
34 mm	JEITCS34	JEITCL34	JEITCX34	JEITCXL34	JEITCXXL34	JEITCXXXL34
35 mm	JEITCS35	JEITCL35	JEITCX35	JEITCXL35	JEITCXXL35	JEITCXXXL35
36 mm	JEITCS36	JEITCL36	JEITCX36	JEITCXL36	JEITCXXL36	JEITCXXXL36
37 mm	JEITCS37	JEITCL37	JEITCX37	JEITCXL37	JEITCXXL37	JEITCXXXL37
38 mm	JEITCS38	JEITCL38	JEITCX38	JEITCXL38	JEITCXXL38	JEITCXXXL38
39 mm	JEITCS39	JEITCL39	JEITCX39	JEITCXL39	JEITCXXL39	JEITCXXXL39
40 mm	JEITCS40	JEITCL40	JEITCX40	JEITCXL40	JEITCXXL40	JEITCXXXL40
41 mm	JEITCS41	JEITCL41	JEITCX41	JEITCXL41	JEITCXXL41	JEITCXXXL41
42 mm	JEITCS42	JEITCL42	JEITCX42	JEITCXL42	JEITCXXL42	JEITCXXXL42
43 mm	JEITCS43	JEITCL43	JEITCX43	JEITCXL43	JEITCXXL43	JEITCXXXL43
44 mm	JEITCS44	JEITCL44	JEITCX44	JEITCXL44	JEITCXXL44	JEITCXXXL44
45 mm	JEITCS45	JEITCL45	JEITCX45	JEITCXL45	JEITCXXL45	JEITCXXXL45
46 mm	JEITCS46	JEITCL46	JEITCX46	JEITCXL46	JEITCXXL46	JEITCXXXL46
47 mm	JEITCS47	JEITCL47	JEITCX47	JEITCXL47	JEITCXXL47	JEITCXXXL47
48 mm	JEITCS48	JEITCL48	JEITCX48	JEITCXL48	JEITCXXL48	JEITCXXXL48
49 mm	JEITCS49	JEITCL49	JEITCX49	JEITCXL49	JEITCXXL49	JEITCXXXL49
50 mm	JEITCS50	JEITCL50	JEITCX50	JEITCXL50	JEITCXXL50	JEITCXXXL50
51 mm	JEITCS51	JEITCL51	JEITCX51	JEITCXL51	JEITCXXL51	-
52 mm	JEITCS52	JEITCL52	JEITCX52	JEITCXL52	JEITCXXL52	-
53 mm	JEITCS53	JEITCL53	JEITCX53	JEITCXL53	JEITCXXL53	-
54 mm	JEITCS54	JEITCL54	JEITCX54	JEITCXL54	JEITCXXL54	-
55 mm	JEITCS55	JEITCL55	JEITCX55	JEITCXL55	JEITCXXL55	-
56 mm	JEITCS56	JEITCL56	JEITCX56	JEITCXL56	JEITCXXL56	-
57 mm	JEITCS57	JEITCL57	JEITCX57	JEITCXL57	JEITCXXL57	-
58 mm	JEITCS58	JEITCL58	JEITCX58	JEITCXL58	JEITCXXL58	-
59 mm	JEITCS59	JEITCL59	JEITCX59	JEITCXL59	JEITCXXL59	-
60 mm	JEITCS60	JEITCL60	JEITCX60	JEITCXL60	JEITCXXL60	-
61 mm	JEITCS61	JEITCL61	JEITCX61	JEITCXL61	JEITCXXL61	-
62 mm	JEITCS62	JEITCL62	JEITCX62	JEITCXL62	JEITCXXL62	-
65 mm	JEITCS65	JEITCL65	JEITCX65	JEITCXL65	JEITCXXL65	-

Cutter Dia Ø	35 mm DOC Part No.	55 mm DOC Part No.	80 mm DOC Part No.	110 mm DOC Part No.	150 mm DOC Part No.	200 mm DOC Part No.
66 mm	JEITCS66	JEITCL66	JEITCX66	JEITCXL66	JEITCXXL66	-
67 mm	JEITCS67	JEITCL67	JEITCX67	JEITCXL67	JEITCXXL67	-
68 mm	JEITCS68	JEITCL68	JEITCX68	JEITCXL68	JEITCXXL68	-
69 mm	JEITCS69	JEITCL69	JEITCX69	JEITCXL69	JEITCXXL69	-
70 mm	JEITCS70	JEITCL70	JEITCX70	JEITCXL70	JEITCXXL70	-
71 mm	-	JEITCL71	JEITCX71	JEITCXL71	JEITCXXL71	-
72 mm	-	JEITCL72	JEITCX72	JEITCXL72	JEITCXXL72	-
73 mm	-	JEITCL73	JEITCX73	JEITCXL73	JEITCXXL73	-
74 mm	-	JEITCL74	JEITCX74	JEITCXL74	JEITCXXL74	-
75 mm	-	JEITCL75	JEITCX75	JEITCXL75	JEITCXXL75	-
76 mm	-	JEITCL76	JEITCX76	JEITCXL76	JEITCXXL76	-
77 mm	-	JEITCL77	JEITCX77	JEITCXL77	JEITCXXL77	-
78 mm	-	JEITCL78	JEITCX78	JEITCXL78	JEITCXXL78	-
79 mm	-	JEITCL79	JEITCX79	JEITCXL79	JEITCXXL79	-
80 mm	-	JEITCL80	JEITCX80	JEITCXL80	JEITCXXL80	-
81 mm	-	JEITCL81	JEITCX81	JEITCXL81	JEITCXXL81	-
82 mm	-	JEITCL82	JEITCX82	JEITCXL82	JEITCXXL82	-
83 mm	-	JEITCL83	JEITCX83	JEITCXL83	JEITCXXL83	-
84 mm	-	JEITCL84	JEITCX84	JEITCXL84	JEITCXXL84	-
85 mm	-	JEITCL85	JEITCX85	JEITCXL85	JEITCXXL85	-
86 mm	-	JEITCL86	JEITCX86	JEITCXL86	JEITCXXL86	-
87 mm	-	JEITCL87	JEITCX87	JEITCXL87	JEITCXXL87	-
88 mm	-	JEITCL88	JEITCX88	JEITCXL88	JEITCXXL88	-
89 mm	-	JEITCL89	JEITCX89	JEITCXL89	JEITCXXL89	-
90 mm	-	JEITCL90	JEITCX90	JEITCXL90	JEITCXXL90	-
91 mm	-	JEITCL91	JEITCX91	JEITCXL91	JEITCXXL91	-
92 mm	-	JEITCL92	JEITCX92	JEITCXL92	JEITCXXL92	-
93 mm	-	JEITCL93	JEITCX93	JEITCXL93	JEITCXXL93	-
94 mm	-	JEITCL94	JEITCX94	JEITCXL94	JEITCXXL94	-
95 mm	-	JEITCL95	JEITCX95	JEITCXL95	JEITCXXL95	-
96 mm	-	JEITCL96	JEITCX96	JEITCXL96	JEITCXXL96	-
97 mm	-	JEITCL97	JEITCX97	JEITCXL97	JEITCXXL97	-
98 mm	-	JEITCL98	JEITCX98	JEITCXL98	JEITCXXL98	-
99 mm	-	JEITCL99	JEITCX99	JEITCXL99	JEITCXXL99	-
100 mm	-	JEITCL100	JEITCX100	JEITCXL100	JEITCXXL100	-
105 mm	-	JEITCL105	JEITCX105	JEITCXL105	-	-
110 mm	-	JEITCL110	JEITCX110	JEITCXL110	-	-
115 mm	-	JEITCL115	JEITCX115	JEITCXL115	-	-
120 mm	-	JEITCL120	JEITCX120	JEITCXL120	-	-
125 mm	-	JEITCL125	JEITCX125	JEITCXL125	-	-
130 mm	-	JEITCL130	JEITCX130	JEITCXL130	-	-
135 mm	-	JEITCL135	JEITCX135	JEITCXL135	-	-
140 mm	-	JEITCL140	-	JEITCXL140	-	-
145 mm	-	JEITCL145	-	JEITCXL145	-	-
150 mm	-	JEITCL150	-	JEITCXL150	-	-
200 mm	-	JEITCL200	-	-	-	-

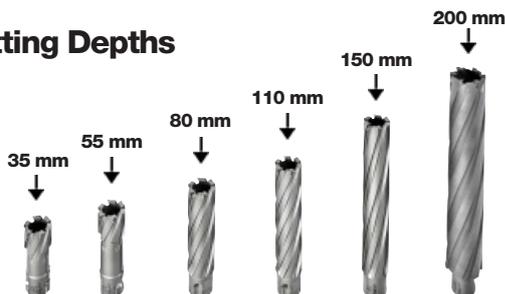
Pilot Pins

Cutter Diameter Range	Use Pilot Part No					
12-17 mm	JEIPILOT1/TCTS	JEIPILOT2	-	-	-	-
18-65 mm	JEIPILOT1/8MM	JEIPILOT2/8MM	JEIPILOT3/8MM	JEIPILOT4/8MM	JEIPILOT6/8MM	JEIPILOT8/8MM
66 mm +	JEIPILOT1/8MM/W	JEIPILOT2/8MM/W	JEIPILOT3/8MM/W	JEIPILOT4/8MM/W	JEIPILOT6/8MM/W	-

Detachable Pins

PART NUMBER	OVERALL LENGTH (MM)	DIAMETER Ø	USE WITH JEI CUTTERS (IF APPLICABLE)
JEIPILOT3/8MMD	130 / 80	7.98	Turbo Tough 80mm D.O.C. < 66 mm Ø
JEIPILOT4/8MMD	157 / 107	7.98	Turbo Tough 110mm D.O.C. < 66 mm Ø
JEIPILOT6/8MMD	221.5 / 174	7.98	Turbo Tough 150mm D.O.C. < 66 mm Ø

Cutting Depths



Cutting Tool Solutions

turbo™ ENDURANCE+



Turbo Endurance+ (Super Tough Cutter)

The Turbo Endurance+ cutters have been designed and developed to tackle the world's toughest materials. The super tough coating provides increased surface hardness, a friction free cutting face and better heat transfer at the surface. These great benefits allow the Turbo Endurance+ cutter to tackle Hardox, Weldox, Abro, Armoured Plate and Duplex with ease. With fantastic tool life, the Turbo Endurance+ cutter saves time and money for the user on every occasion.

CUTTER TYPE	Super Coated TCT
SIZE RANGE	12 mm – 200 mmØ
CUTTING DEPTHS	35 mm, 55 mm Bespoke cutting depths of 80 mm, 110 mm & 150 mm can be specifically manufactured on request
MAX. TENSILE STRENGTH	<1600RM (N/ mm ²)
IDEAL FOR	Hardox, Weldox, Armoured Plate, Super Duplex, Aircraft Steels, Abro Plate - The toughest materials



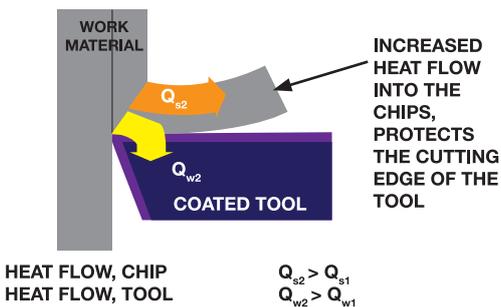
Turbo Endurance+ super tough coating cuts through the most challenging materials

The benefits of Turbo Endurance+ cutting edge coating technology:

- Cuts through the most challenging of materials.
- Greater protection from heat build and surface softening.
- Unrivalled performance – less production down time.
- Ability to drill dry when required.
- Low cost per hole ratio.

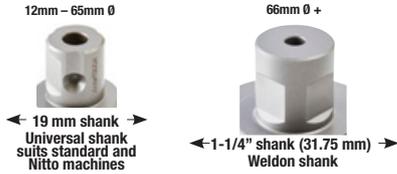
Turbo Endurance+

Cutting Edge Coating Technology



turbo™ ENDURANCE+ Part Numbers

Metric Sizes



Can't see the size you require?
JEI's team can manufacture to
your specific requirements
Contact your distributor for details

Cutter Dia Ø	35 mm D.O.C. Part No.	55 mm D.O.C. Part No.
12 mm	JEIETCS12	JEIETCL12
13 mm	JEIETCS13	JEIETCL13
14 mm	JEIETCS14	JEIETCL14
15 mm	JEIETCS15	JEIETCL15
16 mm	JEIETCS16	JEIETCL16
17 mm	JEIETCS17	JEIETCL17
18 mm	JEIETCS18	JEIETCL18
19 mm	JEIETCS19	JEIETCL19
20 mm	JEIETCS20	JEIETCL20
21 mm	JEIETCS21	JEIETCL21
22 mm	JEIETCS22	JEIETCL22
23 mm	JEIETCS23	JEIETCL23
24 mm	JEIETCS24	JEIETCL24
25 mm	JEIETCS25	JEIETCL25
26 mm	JEIETCS26	JEIETCL26
27 mm	JEIETCS27	JEIETCL27
28 mm	JEIETCS28	JEIETCL28
29 mm	JEIETCS29	JEIETCL29
30 mm	JEIETCS30	JEIETCL30
31 mm	JEIETCS31	JEIETCL31
32 mm	JEIETCS32	JEIETCL32
33 mm	JEIETCS33	JEIETCL33
34 mm	JEIETCS34	JEIETCL34
35 mm	JEIETCS35	JEIETCL35
36 mm	JEIETCS36	JEIETCL36
37 mm	JEIETCS37	JEIETCL37
38 mm	JEIETCS38	JEIETCL38
39 mm	JEIETCS39	JEIETCL39
40 mm	JEIETCS40	JEIETCL40
41 mm	JEIETCS41	JEIETCL41
42 mm	JEIETCS42	JEIETCL42
43 mm	JEIETCS43	JEIETCL43
44 mm	JEIETCS44	JEIETCL44
45 mm	JEIETCS45	JEIETCL45
46 mm	JEIETCS46	JEIETCL46
47 mm	JEIETCS47	JEIETCL47
48 mm	JEIETCS48	JEIETCL48
49 mm	JEIETCS49	JEIETCL49
50 mm	JEIETCS50	JEIETCL50
51 mm	JEIETCS51	JEIETCL51
52 mm	JEIETCS52	JEIETCL52
53 mm	JEIETCS53	JEIETCL53
54 mm	JEIETCS54	JEIETCL54
55 mm	JEIETCS55	JEIETCL55
56 mm	JEIETCS56	JEIETCL56
57 mm	JEIETCS57	JEIETCL57
58 mm	JEIETCS58	JEIETCL58
59 mm	JEIETCS59	JEIETCL59
60 mm	JEIETCS60	JEIETCL60
61 mm	JEIETCS61	JEIETCL61
62 mm	JEIETCS62	JEIETCL62
63 mm	JEIETCS63	JEIETCL63
64 mm	JEIETCS64	JEIETCL64
65 mm	JEIETCS65	JEIETCL65

Cutter Dia Ø	35 mm D.O.C. Part No.	55 mm D.O.C. Part No.
66 mm	JEIETCS66	JEIETCL66
67 mm	JEIETCS67	JEIETCL67
68 mm	JEIETCS68	JEIETCL68
69 mm	JEIETCS69	JEIETCL69
70 mm	JEIETCS70	JEIETCL70
71 mm	-	JEIETCL71
72 mm	-	JEIETCL72
73 mm	-	JEIETCL73
74 mm	-	JEIETCL74
75 mm	-	JEIETCL75
76 mm	-	JEIETCL76
77 mm	-	JEIETCL77
78 mm	-	JEIETCL78
79 mm	-	JEIETCL79
80 mm	-	JEIETCL80
81 mm	-	JEIETCL81
82 mm	-	JEIETCL82
83 mm	-	JEIETCL83
84 mm	-	JEIETCL84
85 mm	-	JEIETCL85
86 mm	-	JEIETCL86
87 mm	-	JEIETCL87
88 mm	-	JEIETCL88
89 mm	-	JEIETCL89
90 mm	-	JEIETCL90
91 mm	-	JEIETCL91
92 mm	-	JEIETCL92
93 mm	-	JEIETCL93
94 mm	-	JEIETCL94
95 mm	-	JEIETCL95
96 mm	-	JEIETCL96
97 mm	-	JEIETCL97
98 mm	-	JEIETCL98
99 mm	-	JEIETCL99
100 mm	-	JEIETCL100

Cutter Sets available. See page 34.



Short series Kit (35 mm depth of cut)

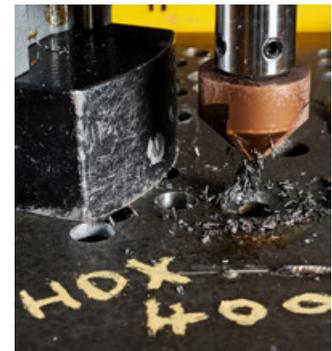


Long series Kit (55 mm depth of cut)

Pilot Pins

Cutter Diameter Range	Use Pilot Part No	Use Pilot Part No
12-17 mm	JEIPILOT1/TCTS	JEIPILOT2
18-65 mm	JEIPILOT1/8MM	JEIPILOT2/8MM
66 mm +	JEIPILOT1/8MM/W	JEIPILOT2/8MM/W

Turbo Endurance+ also available as a
countersinking tool. See page 37



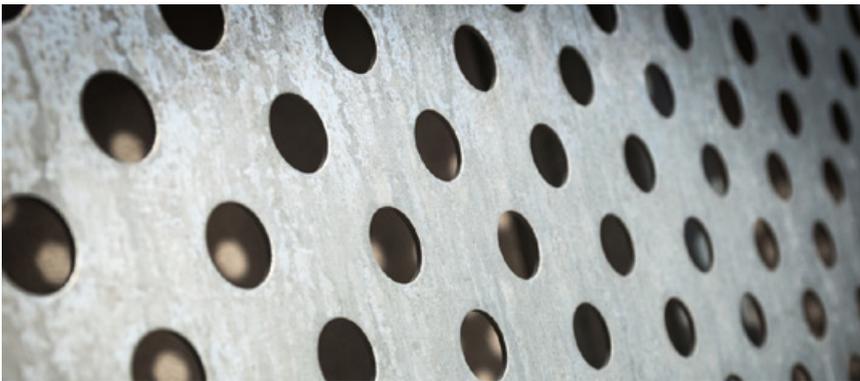
Cutting Tool Solutions

turbo™ ENDURANCE



Turbo Endurance is a high quality, fully CNC ground M2-AL cutter with an innovative coating, designed to provide extensive tool life. It is also equipped to drill through a wide range of challenging materials.

Manufactured from M2-AL material and finished with a toughened coating Turbo Endurance is designed to triple the tool life of a standard HSS Cutter.



CUTTER TYPE	M2-AL Coated (HSS)
SIZE RANGE	12 mm – 65 mmØ
CUTTING DEPTHS	1", 2"
MAX. TENSILE STRENGTH	<1000RM (N/ mm²)
IDEAL FOR	Mild, aluminium and structural steel with extended tool life

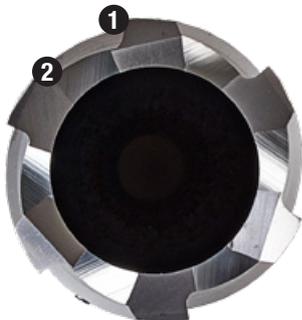
12 mm – 65 mm Ø



< 19 mm shank >

The benefits of Turbo Endurance cutting edge coating technology:

- Greater protection from heat build and surface softening.
- Unrivalled performance – less production down time.
- Ability to drill dry when required.
- Low cost per hole ratio.



Dual cutting tooth technology



Multiple cutting lengths available

Part Numbers

Cutter Dia Ø	1" D.O.C. Part No.	2" D.O.C. Part No.
12 mm	JEIECS12	JEIECL12
13 mm	JEIECS13	JEIECL13
14 mm	JEIECS14	JEIECL14
15 mm	JEIECS15	JEIECL15
16 mm	JEIECS16	JEIECL16
17 mm	JEIECS17	JEIECL17
18 mm	JEIECS18	JEIECL18
19 mm	JEIECS19	JEIECL19
20 mm	JEIECS20	JEIECL20
21 mm	JEIECS21	JEIECL21
22 mm	JEIECS22	JEIECL22
23 mm	JEIECS23	JEIECL23
24 mm	JEIECS24	JEIECL24
25 mm	JEIECS25	JEIECL25
26 mm	JEIECS26	JEIECL26
27 mm	JEIECS27	JEIECL27
28 mm	JEIECS28	JEIECL28
29 mm	JEIECS29	JEIECL29
30 mm	JEIECS30	JEIECL30
31 mm	JEIECS31	JEIECL31
32 mm	JEIECS32	JEIECL32
33 mm	JEIECS33	JEIECL33
34 mm	JEIECS34	JEIECL34
35 mm	JEIECS35	JEIECL35
36 mm	JEIECS36	JEIECL36
37 mm	JEIECS37	JEIECL37
38 mm	JEIECS38	JEIECL38
39 mm	JEIECS39	JEIECL39
40 mm	JEIECS40	JEIECL40
41 mm	JEIECS41	JEIECL41
42 mm	JEIECS42	JEIECL42
43 mm	JEIECS43	JEIECL43
44 mm	JEIECS44	JEIECL44
45 mm	JEIECS45	JEIECL45
46 mm	JEIECS46	JEIECL46
47 mm	JEIECS47	JEIECL47
48 mm	JEIECS48	JEIECL48
49 mm	JEIECS49	JEIECL49
50 mm	JEIECS50	JEIECL50
51 mm	JEIECS51	JEIECL51
52 mm	JEIECS52	JEIECL52
53 mm	JEIECS53	JEIECL53
54 mm	JEIECS54	JEIECL54
55 mm	JEIECS55	JEIECL55
56 mm	JEIECS56	JEIECL56
57 mm	JEIECS57	JEIECL57
58 mm	JEIECS58	JEIECL58
59 mm	JEIECS59	JEIECL59
60 mm	JEIECS60	JEIECL60
61 mm	JEIECS61	JEIECL61
62 mm	JEIECS62	JEIECL62
63 mm	JEIECS63	JEIECL63
64 mm	JEIECS64	JEIECL64
65 mm	JEIECS65	JEIECL65

Pilot Pins

Cutter Diameter Range	Use Pilot Part No	Use Pilot Part No
12–65 mm	JEIPILOT1	JEIPILOT2

Can't see the size you require?
JEI's team can manufacture to your specific requirements
Contact your distributor for details

turbo™ Multi-layer Cutter



Designed for cutting through multiple layers of steel in one fast, clean operation.

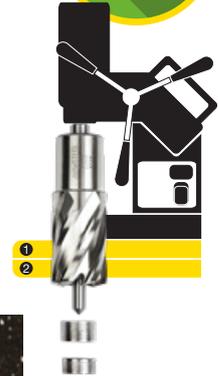
Standard annular cutters are only designed to cut through one solid plate before ejecting the solid slug.

Also referred to as “Laminate”, “ID” or “Stack” drilling, the Turbo multi-layer cutter features a special cutting tooth form that will retract the multiple slugs in the cutter, to be ejected together at the end of the cut.

- Reduces tool breakages – no need to stop and start the whole process.
- Increases productivity – achieve the hole in one cut.
- Ideal for removing existing bolts from old steel structures and bridge refurbishment.
- Use on site work when needing to bolt together two sections of steel.
- Available as an option on all types of Turbo annular cutters.

To order, simply add the postfix code “ID” after the cutter part no.

e.g. to order Turbo Steel 22mm, 1" D.O.C. with I.D. form use part no' CS22ID.



CUTTER TYPE	ADD POSTFIX TO PRODUCT PART NO.
Turbo Steel	ID
Turbo Tough	
Turbo Endurance	
Turbo Endurance+	

turbo™ Tailored

Creating bespoke hole cutting solutions.

Turbo Tailored is JEI Solutions' unique in-house cutting tool design and manufacturing service.

JEI Solutions strive to find the ideal solution for a diverse range of special drilling and cutting applications. We offer a bespoke and comprehensive Turbo cutter manufacturing service to suit a vast range of industry requirements.

With our specialist design and production team, we have the ability to produce cutting tools to suit either client's existing drilling equipment or adapted to compliment the JEI machine drilling range.

JEI Solutions have provided expert hole cutting tool solutions for specialist client projects in the following fields:

- Nuclear decommissioning.
- Wind Farm modifications.
- Mining.
- Offshore platforms.

Contact your JEI representative for further assistance with your special drilling requirements.



250 mm diameter cutters produced for underwater cutting application



Modified JEI drilling machine and cutter solution for specialist offshore application

Cutting Tool Solutions

turbo™ RAIL

Turbo Rail & Turbo Rail+ are specifically manufactured for cutting rail track.

CUTTER TYPE	TCT Rail (uncoated)
SIZE RANGE	14 mm – 36 mmØ
CUTTING DEPTHS	1"
MAX. TENSILE STRENGTH	<1200RM (N/ mm ²)
IDEAL FOR	Rail track

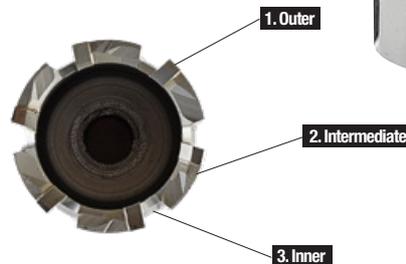


See page 22 for JEI rail drilling machines

Triple Tooth Cutting Geometry

Each tooth provides a different cutting function, providing great results.

- Reduced cutting resistance = less power required.
- Even tooth load = vibration free cut.
- Smooth cutting action = increased cutting efficiency.



turbo™ RAIL+

Turbo Rail+ has been created for more challenging rail track drilling. Using the latest ENDURANCE coating technology this rail cutter provides unrivalled tool life. With increased surface hardness, Turbo Rail+ can tackle the world's toughest rail material. During performance tests with Balfour Beatty Rail, Turbo Rail+ consistently tripled the tool life of a competitor's uncoated rail cutter.

CUTTER TYPE	TCT Super Rail (coated)
SIZE RANGE	14 mm – 36 mmØ
CUTTING DEPTHS	1"
MAX. TENSILE STRENGTH	<1600RM (N/ mm ²)
IDEAL FOR	All types rail track



The benefits of Turbo Rail+ cutting edge coating technology:

- Cuts through the most challenging of materials.
- Greater protection from heat build and surface softening.
- Unrivalled performance.
- Less tool changes = less down time.
- Low cost per hole ratio.

turbo™ RAIL Part Numbers

Can't see the size you require?
JEI's team can manufacture to
your specific requirements
Contact your distributor for details



Cutter Dia Ø	25 mm DOC Part No.
14 mm Turbo RAIL	JEIRCS14
18 mm Turbo RAIL	JEIRCS18
19 mm Turbo RAIL	JEIRCS19
20 mm Turbo RAIL	JEIRCS20
21 mm Turbo RAIL	JEIRCS21
22 mm Turbo RAIL	JEIRCS22
23 mm Turbo RAIL	JEIRCS23
24 mm Turbo RAIL	JEIRCS24
25 mm Turbo RAIL	JEIRCS25
26 mm Turbo RAIL	JEIRCS26
27 mm Turbo RAIL	JEIRCS27
28 mm Turbo RAIL	JEIRCS28
29 mm Turbo RAIL	JEIRCS29
30 mm Turbo RAIL	JEIRCS30
31 mm Turbo RAIL	JEIRCS31
32 mm Turbo RAIL	JEIRCS32
33 mm Turbo RAIL	JEIRCS33
34 mm Turbo RAIL	JEIRCS34
35 mm Turbo RAIL	JEIRCS35
36 mm Turbo RAIL	JEIRCS36

Pilot Pin

Cutter Diameter Range	Use Pilot Part No
14 mm +	JEIPILOT1

turbo™ RAIL+ Part Numbers



Cutter Dia Ø	25 mm DOC Part No.
14 mm Turbo RAIL +	JEIRCSE14
18 mm Turbo RAIL +	JEIRCSE18
19 mm Turbo RAIL +	JEIRCSE19
20 mm Turbo RAIL +	JEIRCSE20
21 mm Turbo RAIL +	JEIRCSE21
22 mm Turbo RAIL +	JEIRCSE22
23 mm Turbo RAIL +	JEIRCSE23
24 mm Turbo RAIL +	JEIRCSE24
25 mm Turbo RAIL +	JEIRCSE25
26 mm Turbo RAIL +	JEIRCSE26
27 mm Turbo RAIL +	JEIRCSE27
28 mm Turbo RAIL +	JEIRCSE28
29 mm Turbo RAIL +	JEIRCSE29
30 mm Turbo RAIL +	JEIRCSE30
31 mm Turbo RAIL +	JEIRCSE31
32 mm Turbo RAIL +	JEIRCSE32
33 mm Turbo RAIL +	JEIRCSE33
34 mm Turbo RAIL +	JEIRCSE34
35 mm Turbo RAIL +	JEIRCSE35
36 mm Turbo RAIL +	JEIRCSE36

Pilot Pin

Cutter Diameter Range	Use Pilot Part No
14 mm +	JEIPILOT1

Cutting Tool Solutions

turbo™ Cutter Sets

turbo™ STEEL



5 Piece Annular Cutter Sets

PART NUMBER	DESCRIPTION
JEICS-SET5	5 Pc cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm, 22 mm short series Turbo Steel cutters plus pilot pin in a plastic case
JEICL-SET5	5 Pc cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm, 22 mm long series Turbo Steel cutters plus pilot pin in a plastic case
JEICS-SET15	5 Pc cutter set, consisting of 1 of each 9/16", 11/16", 13/16", 15/16", 1-1/16" short series Turbo Steel cutters plus pilot pin in a plastic case
JEICLSET15	5 Pc cutter set, consisting of 1 of each 9/16", 11/16", 13/16", 15/16", 1-1/16" long series Turbo Steel cutters plus pilot pin in a plastic case



11 Piece Annular Cutter Sets

PART NUMBER	DESCRIPTION
JEICS-SET11	11 Pc cutter set, consisting of 1 of each 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 18 mm, 20 mm, 22 mm, 24 mm, 25 mm and 26 mm short series Turbo Steel cutters plus pilot pin in a plastic case
JEICL-SET11	11 Pc Cutter set, consisting of 1 of each 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 18 mm, 20 mm, 22 mm, 24 mm, 25 mm and 26 mm long series Turbo Steel cutters plus pilot pin in a plastic case

turbo™ ENDURANCE



Annular Cutter Sets

PART NUMBER	DESCRIPTION
JEIECS-SET5	5 Pc Cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm, 22 mm short series Turbo Endurance cutters plus pilot pin in a plastic case
JEIECL-SET5	5 Pc Cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm, 22 mm long series Turbo Endurance cutters plus pilot pin in a plastic case

turbo™ TOUGH



Annular Cutter Sets

PART NUMBER	DESCRIPTION
JEITCS-SET5	5 Pc Cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm 22 mm short series Turbo Tough cutters plus 2 x pilot pins in a plastic case
JEITCL-SET5	5 Pc Cutter set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm 22 mm long series Turbo Tough cutters plus 2 x pilot pins in a plastic case

turbo™ ENDURANCE+



Annular Cutter Sets

PART NUMBER	DESCRIPTION
JEIETCS-SET5	5 Pc Cutter Set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm 22 mm short series Endurance+ cutters plus 2 x pilot pins in a plastic case
JEIETCL-SET5	5 Pc Cutter Set, consisting of 1 of each 14 mm, 16 mm, 18 mm, 20 mm 22 mm long series Endurance+ cutters plus 2 x pilot pins in a plastic case



Cutter Counter Display Case

PART NUMBER	DESCRIPTION
JEI-CDS	Lockable counter cutter display case. Holds 30 cutters (19 mm shank) Note: Photo for display purpose only, cutters not included. For full display including cutters, contact your local JEI representative.

Regrinding Machine Part no' JEI-GRN1 / 240 V

A simple, easy to use machine, specifically designed for one purpose - regrinding annular cutting tools. Saves time and money in carrying out an effective cutter regrind, particularly if the customer is in urgent need of continued production drilling.

For use with JEI Turbo Steel or other Brands of HSS annular cutters, with a 19 mm Shank. Will regrind cutters from 12 mm diameter to 50 mm diameter in cutting depths of 1" (25 mm) and 2" (50 mm).



Features / Benefits:

- Simple set up and operation - Easy positioning of cutting tool.
- Economical - far less expensive than heavier equipment.
- Lightweight and portable - ideal for site work, or a small workshop.
- Diamond wheel - creates a sharp, clean new cutting edge.
- Easy angle adjustment - simple alignment to original angle geometry.
- Laser guided cutter alignment - ensuring correct positioning of cutting edge to the wheel.
- Additional gullet reforming wheel supplied - extending the life of the annular cutter.
- Will sharpen cutters 12mm to 50mm diameter, with cutting depths of 25mm and 50mm
- Supplied with full range of index plates - to cover most cutter diameters / no. of teeth (HSS type only)

SPECIFICATIONS

Dimensions L x W x H	410 x 412 x 390 mm (without optics)
Net Weight	15.5 kg
Power supply	240 Volts, 50 / 60 Hz
Motor Power Speed	0.12 kW, 2,800RPM
Noise Level	< 70dB
Grinding Disk	Diamond grinding disk, Ø125 mm, Bore Ø10 mm
Annular Cutter Holder Shaft Bore	19 mm (weld on shaft) serial 32 mm (weld on shaft) optional on request

Diamond Grinding Disks To Suit

PART NO.	DESCRIPTION
GRN1-W/1	Cutter tooth grinding wheel
GRN1-W/2	Cutter gullet forming wheel

Please ask about our range of cutter regrinding machine accessories.



TCT Hole Saws

- Manufactured with premium grade solid carbide tips for added strength and durability.
- More hard wearing and longer lasting than HSS hole saws.
- Feature a spring loaded centre pilot drill, to locate the hole and eject the core of material after the cut.
- Designed for use in a chuck – can be used with a magnetic drilling machine or a hand drill.

SIZE RANGE	14 mm–150 mmØ
CUTTING DEPTHS	5 mm with hand drill 50 mm with magnetic drill
MAX. TENSILE STRENGTH	>1400 N/ mm ²
IDEAL FOR	Structural steel, stainless steel

Diameter	5 mm Depth of Cut	25 mm Depth of Cut	50 mm Depth of Cut
14 mm	JEHXS-14	JEHS-14	
15 mm	JEHXS-15	JEHS-15	
16 mm	JEHXS-16	JEHS-16	
17 mm	JEHXS-17	JEHS-17	
18 mm	JEHXS-18	JEHS-18	
19 mm	JEHXS-19	JEHS-19	
20 mm	JEHXS-20	JEHS-20	JEHL-20
21 mm	JEHXS-21	JEHS-21	JEHL-21
22 mm	JEHXS-22	JEHS-22	JEHL-22
23 mm	JEHXS-23	JEHS-23	JEHL-23
24 mm	JEHXS-24	JEHS-24	JEHL-24
25 mm	JEHXS-25	JEHS-25	JEHL-25
26 mm	JEHXS-26	JEHS-26	JEHL-26
27 mm	JEHXS-27	JEHS-27	JEHL-27
28 mm	JEHXS-28	JEHS-28	JEHL-28
29 mm	JEHXS-29	JEHS-29	JEHL-29
30 mm	JEHXS-30	JEHS-30	JEHL-30
31 mm	JEHXS-31	JEHS-31	JEHL-31
32 mm	JEHXS-32	JEHS-32	JEHL-32
33 mm	JEHXS-33	JEHS-33	JEHL-33
34 mm	JEHXS-34	JEHS-34	JEHL-34
35 mm	JEHXS-35	JEHS-35	JEHL-35
36 mm	JEHXS-36	JEHS-36	JEHL-36
37 mm	JEHXS-37	JEHS-37	JEHL-37
38 mm	JEHXS-38	JEHS-38	JEHL-38
39 mm	JEHXS-39	JEHS-39	JEHL-39
40 mm	JEHXS-40	JEHS-40	JEHL-40
41 mm	JEHXS-41	JEHS-41	JEHL-41
42 mm	JEHXS-42	JEHS-42	JEHL-42
43 mm	JEHXS-43	JEHS-43	JEHL-43
44 mm	JEHXS-44	JEHS-44	JEHL-44
45 mm	JEHXS-45	JEHS-45	JEHL-45
46 mm	JEHXS-46	JEHS-46	JEHL-46
47 mm	JEHXS-47	JEHS-47	JEHL-47
48 mm	JEHXS-48	JEHS-48	JEHL-48
49 mm	JEHXS-49	JEHS-49	JEHL-49
50 mm	JEHXS-50	JEHS-50	JEHL-50
51 mm	JEHXS-51	JEHS-51	JEHL-51
52 mm	JEHXS-52	JEHS-52	JEHL-52
53 mm	JEHXS-53	JEHS-53	JEHL-53
54 mm	JEHXS-54	JEHS-54	JEHL-54
55 mm	JEHXS-55	JEHS-55	JEHL-55
56 mm	JEHXS-56	JEHS-56	JEHL-56
57 mm	JEHXS-57	JEHS-57	JEHL-57

Diameter	5 mm Depth of Cut	25 mm Depth of Cut	50 mm Depth of Cut
58 mm	JEHSX-58	JEHS-58	JEHL-58
59 mm	JEHSX-59	JEHS-59	JEHL-59
60 mm	JEHSX-60	JEHS-60	JEHL-60
61 mm	JEHSX-61	JEHS-61	JEHL-61
62 mm	JEHSX-62	JEHS-62	JEHL-62
63 mm	JEHSX-63	JEHS-63	JEHL-63
64 mm	JEHSX-64	JEHS-64	JEHL-64
65 mm	JEHSX-65	JEHS-65	JEHL-65
66 mm	JEHSX-66	JEHS-66	JEHL-66
67 mm	JEHSX-67	JEHS-67	JEHL-67
68 mm	JEHSX-68	JEHS-68	JEHL-68
69 mm	JEHSX-69	JEHS-69	JEHL-69
70 mm	JEHSX-70	JEHS-70	JEHL-70
71 mm	JEHSX-71	JEHS-71	JEHL-71
72 mm	JEHSX-72	JEHS-72	JEHL-72
73 mm	JEHSX-73	JEHS-73	JEHL-73
74 mm	JEHSX-74	JEHS-74	JEHL-74
75 mm	JEHSX-75	JEHS-75	JEHL-75
76 mm	JEHSX-76	JEHS-76	JEHL-76
77 mm	JEHSX-77	JEHS-77	JEHL-77
78 mm	JEHSX-78	JEHS-78	JEHL-78
79 mm	JEHSX-79	JEHS-79	JEHL-79
80 mm	JEHSX-80	JEHS-80	JEHL-80
81 mm	JEHSX-81	JEHS-81	JEHL-81
82 mm	JEHSX-82	JEHS-82	JEHL-82
83 mm	JEHSX-83	JEHS-83	JEHL-83
84 mm	JEHSX-84	JEHS-84	JEHL-84
85 mm	JEHSX-85	JEHS-85	JEHL-85
86 mm	JEHSX-86	JEHS-86	JEHL-86
87 mm	JEHSX-87	JEHS-87	JEHL-87
88 mm	JEHSX-88	JEHS-88	JEHL-88
89 mm	JEHSX-89	JEHS-89	JEHL-89
90 mm	JEHSX-90	JEHS-90	JEHL-90
91 mm	JEHSX-91	JEHS-91	JEHL-91
92 mm	JEHSX-92	JEHS-92	JEHL-92
93 mm	JEHSX-93	JEHS-93	JEHL-93
94 mm	JEHSX-94	JEHS-94	JEHL-94
95 mm	JEHSX-95	JEHS-95	JEHL-95
96 mm	JEHSX-96	JEHS-96	JEHL-96
97 mm	JEHSX-97	JEHS-97	JEHL-97
98 mm	JEHSX-98	JEHS-98	JEHL-98
99 mm	JEHSX-99	JEHS-99	JEHL-99
100 mm	JEHSX-100	JEHS-100	JEHL-100
105 mm	JEHSX-105	JEHS-105	
110 mm	JEHSX-110	JEHS-110	
115 mm	JEHSX-115	JEHS-115	
120 mm	JEHSX-120	JEHS-120	
125 mm	JEHSX-125		
130 mm	JEHSX-130		
135 mm	JEHSX-135		
140 mm	JEHSX-140		
145 mm	JEHSX-145		
150 mm	JEHSX-150		



Use in a hand drill...



...or a magnetic drilling machine

Spare centre pilot drill Part No. JEIHS-TD

Turbo Countersinks

Presenting a full range of countersinks, designed to produce a chamfer on pre-drilled holes, ready for a countersunk bolt. Featuring a 19 mm shank to suit most magnetic drills.



turbo™ STEEL

PART NUMBER	MIN-MAX BODY SIZE, ANGLE
JEICSK-25	4-25 mm Ø, 90°
JEICSK-30	4-30 mm Ø, 90°
JEICSK-40	8-40 mm Ø, 90°
JEICSK-50	12-50 mm Ø, 90°
JEICSK-55	12-55 mm Ø, 90°
JEICSK-55/C	12-55 mm Ø, 60°



MAXIMUM TENSILE STRENGTH	<900 RM (N/ mm²)
Ideal For	Most mild and structural steels

turbo™ ENDURANCE

PART NUMBER	MIN-MAX BODY SIZE, ANGLE
JEIECSK-25	4-25 mm Ø, 90°
JEIECSK-30	4-30 mm Ø, 90°
JEIECSK-40	8-40 mm Ø, 90°
JEIECSK-50	12 -50 mm Ø, 90°
JEIECSK-55	12 -55 mm Ø, 90°
JEIECSK-55/C	12-55 mm Ø, 60°



MAXIMUM TENSILE STRENGTH	<1000 RM (N/ mm²)
Ideal For	Longer life. Most mild and structural steels

turbo™ TOUGH

PART NUMBER	MIN-MAX BODY SIZE, ANGLE
JEITCSK-50	10.5-50 mm Ø, 90°
JEITCSK-60	12-60 mm Ø, 90°



MAXIMUM TENSILE STRENGTH	<1200 RM (N/ mm²)
Ideal For	Mild and structural steels, cast iron, stainless steel

For the world's toughest materials

turbo™ ENDURANCE+

PART NUMBER	MIN-MAX BODY SIZE, ANGLE
JEIETCSK-50	10.5-50 mm Ø, 90°
JEIETCSK-60	12-60 mm Ø, 90°



Ideal for hard wearing plates

MAXIMUM TENSILE STRENGTH	<1600 RM (N/ mm²)
Ideal For	The toughest materials, wear plates, armoured plates, Hardox, Abro, Duplex

Cutting Tool Solutions

turbo™ BRIDGE REAMER

Designed for when the bolt won't fit the hole, JEI present an ideal solution for the steel erector to enlarge and align pre-drilled holes in structural steel.



PART NUMBER	SIZE DIAMETER	HOLE ENLARGING DEPTH	START DIAMETER	OVERALL LENGTH
JEITBR14	14 mm	52 mm	7 mm	140 mm
JEITBR18	18 mm	61 mm	9.5 mm	165 mm
JEITBR20	20 mm	62 mm	11 mm	178 mm
JEITBR22	22 mm	62 mm	13 mm	178 mm
JEITBR24	24 mm	63 mm	15 mm	178 mm
JEITBR26	26 mm	67 mm	16 mm	178 mm
JEITBR28	28 mm	67 mm	18.5 mm	178 mm
JEITBR30	30 mm	64 mm	21 mm	178 mm
JEITBR32	32 mm	64 mm	22.5 mm	178 mm

Can be mounted to an impact wrench with either 1/2" or 3/4" drive using JEI's impact socket adaptor. Ideal for portable use in a vertical or inverted position, to retain the reamer in the machine drive.



Supplied with a 19 mm shank – ideal for use with a magnetic drilling machine (note check drilling stroke of machine)

PART NUMBER	DESCRIPTION
JEIHEXS	Impact socket adapter, to suit 1/2" drive
JEIHEXL	Impact socket adapter, to suit 3/4" drive



PART NUMBER	DESCRIPTION
JEITBR-SET5	Turbo™ Bridge Reamer set, consisting of 1 x 14, 18, 22, 26 & 32 mm reamers, plus 1 x JEIHEXL and JEIHEXS sockets supplied in a sturdy plastic case
JEITBR-SET3	Turbo™ Bridge Reamer set, consisting of 1 x 14, 18, 22mm reamers

turbo™ HEX-BRIDGE REAMER

Featuring a hexagon head, ready to fit socket for use with impact wrench.



PART NUMBER	SIZE DIAMETER	HOLE ENLARGING DEPTH	START DIAMETER	OVERALL LENGTH	HEX SIZE
JEIHR14	14 mm	50 mm	7 mm	140 mm	24 mm
JEIHR18	18 mm	58 mm	9.5 mm	165 mm	24 mm
JEIHR20	20 mm	58 mm	11 mm	171 mm	36 mm
JEIHR22	22 mm	65 mm	13 mm	171 mm	36 mm
JEIHR24	24 mm	65 mm	14.5 mm	171 mm	41 mm
JEIHR26	26 mm	60 mm	16 mm	171 mm	41 mm
JEIHR30	30 mm	60 mm	20.5 mm	171 mm	46 mm
JEIHR32	32 mm	63 mm	22.5 mm	171 mm	46 mm
JEIHR33	33 mm	57 mm	23.5 mm	171 mm	51 mm
JEIHR36	36 mm	57 mm	26 mm	200 mm	46 mm
JEIHR39	39 mm	57 mm	29 mm	200 mm	50 mm



PART NUMBER	DESCRIPTION
JEIHR-SET5	Turbo™ Hex Reamer set, consisting of 1 x 14, 18, 22, 26 & 32 mm reamers supplied in a sturdy plastic case
JEIHR-SET3	Turbo™ Hex Reamer set, consisting of 1 x 14, 18, 22mm reamers

PART NUMBER	HEXAGON SIZE	TO SUIT IMPACT DRIVE SIZE (SQ)
JEIHEXS14R	24 mm	1/2"
JEIHEXS22R	36 mm	1/2"
JEIHEXL14R	24 mm	3/4"
JEIHEXL22R	36 mm	3/4"
JEIHEXL26R	41 mm	3/4"
JEIHEXL32R	46 mm	3/4"
JEIHEXL33R	50 mm	3/4"



Hexagon Sockets

turbo™ M-TAP

With a 19 mm shank, ideal for use with a reverse speed magnetic drill.

PART NUMBER	TAP SIZE X THREAD PITCH
JEITAPM8	M8 x 1,25
JEITAPM10	M10 x 1,5
JEITAPM12	M12 x 1,75
JEITAPM14	M14 x 2
JEITAPM16	M16 x 2
JEITAPM18	M18 x 2,5
JEITAPM20	M20 x 2,5
JEITAPM24	M24 x 3
JEITAPM27	M27 x 3
JEITAPM30	M30 x 3,5
JEITAP-SET5	5 PC Set of Turbo Taps, consisting of 1 x M8, M10, M12, M16 & M20 plus 1 x JEIHEXL and JEIHEXS sockets supplied in a sturdy plastic case *Other set options available - ask for details*

Can be mounted to an impact wrench, using JEI's impact socket adaptor for an even faster site solution (max 12mm depth).

PART NUMBER	DRIVE
JEIHEXS	Turbo Hex Drive Socket, to suit 1/2" Drive
JEIHEXL	Turbo Hex Drive Socket, to suit 3/4" Drive

Drill and Tap in One

A one piece drilling and tapping solution. Requires a pilot hole.

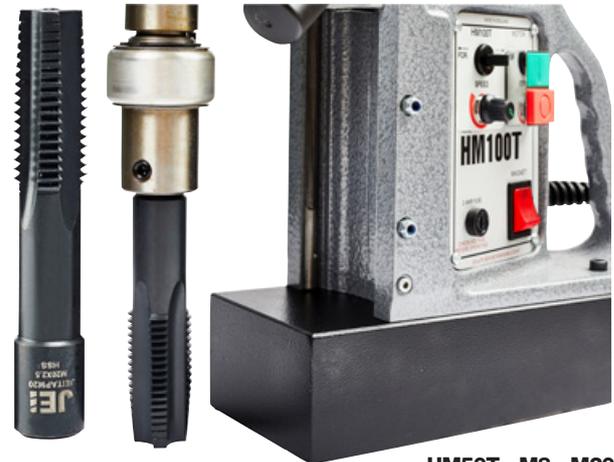
PART NUMBER - DRILL SIZE	TAP SIZE X THREAD PITCH	MAX DRILLING / TAPPING DEPTH
JEIDT-08	M8 x 1,25	17 mm
JEIDT-10	M10 x 1,5	20 mm
JEIDT-12	M12 x 1,75	20 mm
JEIDT-14	M14 x 2,0	18 mm
JEIDT-16	M16 x 2,0	18 mm
JEIDT-18	M18 x 2,5	20 mm
JEIDT-20	M20 x 2,5	25 mm
JEIDT-22	M22 x 2,5	24 mm
JEIDT-24	M24 x 3,0	26 mm
JEIDT-27	M27 x 3,0	29 mm
JEIDT-30	M30 x 3,5	31 mm

Tap Holders (19mm Shank)

PART NUMBER	TAP SIZE	SHANK SIZE (ROUND)
JEITH-M8	M8	Ø 6 mm
JEITH-M10	M10	Ø 7 mm
JEITH-M12	M12	Ø 9 mm
JEITH-M14	M14	Ø 11 mm
JEITH-M16	M16	Ø 12 mm
JEITH-M18	M18	Ø 14 mm
JEITH-M20	M20	Ø 16 mm
JEITH-M22/24	M22-24	Ø 18 mm
JEITH-M27	M27	Ø 18 mm
JEITH-M30	M30	Ø 22 mm

Tapped Hole Size Cutter Solutions

PART NUMBER	DESCRIPTION (TURBO STEEL HSS)	TO SUIT JEI M-TAP PRT NO.
JEITD-6.8	6.8 mm Twist Drill	JEITAPM8
JEITD-8.5	8.2 mm Twist Drill	JEITAPM10
JEITD-10.3	10.3 mm Twist Drill	JEITAPM12
JEICS12	12 mm x 1" Cutter	JEITAPM14
JEICS14	14 mm x 1" Cutter	JEITAPM16
JEICS15.5	15.5 mm x 1" Cutter	JEITAPM18
JEICS17.5	17.5 mm x 1" Cutter	JEITAPM20
JEICS21	21 mm x 1" Cutter	JEITAPM24
JEICS24	24 mm x 1" Cutter	JEITAPM27
JEICS26.5	26.5 mm x 1" Cutter	JEITAPM30



HM50T - M8 - M20
HM100T - M8 - M30



- Feature a 19 mm shank to fit straight into cutter arbor.
- Ideal for JEI models HM50T and HM100T.
- Designed to suit standard DIN 376 type taps.
- Inexpensive option to suit existing taps.
- For through holes only.



See further range of tapping solutions on pages 42-43.

Pilot Pins

The pilot pin or centre pin as it is also known, forms an integral function of the annular broaching cutter.



1. **Centralises** the position of the hole on the pre-marked steel.
2. **Lubricates** the cutter internally by acting as a flow tap for the coolant as it retracts into the spring loaded machine arbor, increasing tool life and ensuring slug ejection.
3. **Ejects** the solid slug of steel on completion of the hole.



JEI's range of pilot pins are fully CNC ground to ensure correct fitting to the cutter, and maximum deferral of breakage.

PART NUMBER	OVERALL LENGTH (MM)	DIAMETER Ø	USE WITH JEI CUTTERS (IF APPLICABLE)
JEIPIN1213S	77	4.74	
JEIPILOT1	77	6.35	Turbo Steel 1" D.O.C. 12 mm–65 mm Ø
JEIPILOT1/TCTS	90	6.35	Turbo Tough 35 mm D.O.C. < 18 mm Ø
JEIPILOT1/8MM	90	7.98	Turbo Tough 35 mm D.O.C. 18 mm–65 mm Ø
JEIPILOT1/8MM/W	108	7.98	Turbo Steel 1" D.O.C. > 65 mm Ø + Turbo Tough 35 mm D.O.C. > 65 mm Ø +
JEIPIN1213L	103	4.74	
JEIPILOT2	103	6.35	Turbo Steel 2" D.O.C. < 65 mm Ø Turbo Tough 55 mm D.O.C. < 18 mm Ø
JEIPILOT2/8MM	108	7.98	Turbo Tough 55 mm D.O.C. 18 mm–65 mm Ø
JEIPILOT2/8MM/W	130	7.98	Turbo Tough 55 mm D.O.C. > 65 mm Ø
JEIPILOT3	130	6.35	Turbo Steel 75 mm D.O.C. < 66 mm Ø
JEIPILOT3/8MM	130	7.98	Turbo Tough 80 mm D.O.C. < 66 mm Ø
JEIPILOT3/8MM/W	155	6.35	Turbo Tough 80mm D.O.C. > 66 mm
JEIPILOT4	155	6.35	Turbo Steel 4" D.O.C. < 66 mm Ø
JEIPILOT4/8MM	160	7.98	Turbo Tough 110 mm D.O.C. < 66 mm Ø
JEIPILOT4/8MM/W	205	7.98	Turbo Tough 110 mm D.O.C. > 66 mm Ø
JEIPILOT6	205	6.35	Turbo Steel 6" D.O.C. < 66 mm Ø
JEIPILOT6/8MM	205	7.98	Turbo Tough 150 mm D.O.C. < 66 mm Ø
JEIPILOT6/8MM/W	205	7.98	Turbo Tough 200 mm D.O.C. < 66 mm Ø

Detachable Pilot Pins

When cutting through a solid plate with a thickness of more than 50 mm, the standard pilot pin will not retract further into the machine arbor. At this stage, the pilot pin is normally removed and replaced with a shorter version to complete the hole operation, or the operator will simply not use a centre pin for the hole, an option which will almost definitely result in cutter breakage.

JEI's solution is the 2 part detachable pilot pin which will allow cutting of solid steel up to 150 mm (6") thick without completely having to remove the pin during operation.

PART NUMBER	OVERALL LENGTH (MM)	DIAMETER Ø	USE WITH JEI CUTTERS (IF APPLICABLE)
JEIPILOT3/8MMD	130 / 80	7.98	Turbo Tough 80mm D.O.C. < 66mm Ø
JEIPILOT4/8MMD	157 / 107	7.98	Turbo Tough 100mm D.O.C. < 66mm Ø
JEIPILOT6/8MMD	221.5 / 174	7.98	Turbo Tough 150mm D.O.C. < 66mm Ø



STEP 1

Fit the 2 part pin into the cutter and begin the cut.

STEP 2

Cut to the maximum depth until the cutter can't continue further.

STEP 3

IMPORTANT – TURN OFF MACHINE ENSURE CUTTER IS NOT TURNING.

Retract the machine arbor and remove the end of the pilot pin.

STEP 4

Continue the cutting process and the slug will be ejected at the end of the cut.



turbo™ STEEL Twist Drills

Provides the ability to convert a magnetic drilling machine to a small drill press without the need of a chuck.



Perfect for use in JEI's MiniBeast

Spare Turbo Twist Drills

- High quality HSS tool life
- Featuring special flat to fit into adaptor



Remove 2 x Allen screws from adaptor to remove drill

PART NUMBER	DIAMETER x FLUTE LENGTH
JEITD-D06	6 mm x 65 mm
JEITD-D07	7 mm x 65 mm
JEITD-D08	8 mm x 65 mm
JEITD-D09	9 mm x 65 mm
JEITD-D10	10 mm x 65 mm
JEITD-D11	11 mm x 65 mm
JEITD-D12	12 mm x 65 mm



Supplied with 19 mm shank, flute length = 65 mm

PART NUMBER	TWIST DRILL SIZE
JEITD-06	6 mm
JEITD-06.8	6.8 mm
JEITD-07	7 mm
JEITD-08	8 mm
JEITD-08.5	8.5 mm
JEITD-09	9 mm
JEITD-10	10 mm
JEITD-10.3	10.3 mm
JEITD-11	11 mm
JEITD-12	12 mm
JEITD-SET	4 pc set, consisting of 6, 8, 10 and 12 mm



JEITD-SET
Handy 4 pc kit in plastic case

Chuck & Adaptor Kits

Easily converts most JEI magnetic drilling machines to accept twist drills.



PART NUMBER	DESCRIPTION	SUITS JEI MODELS
JEICA-13MM	13 mm capacity with 70 mm arbor	HM40
JEICA-13MM/19	13 mm capacity, with 19 mm Shank	All except MiniBeast versions & LP35+, LP45
JEICA-2MT	13 mm capacity, 2MT	HM50, HM50T
JEICA-3MT	19 mm capacity, 3MT	HM100, HM100T
JEICA-4MT	19 mm Capacity, 4MT	HM140T, MagBeast 4

Further Tapping Solutions

Quick Change Tapping Chuck

- Designed to suit the MagBeast® Range (see page 43).
- Suitable for use with either quick change clutched or positive driven type collets.



MagBeast 5 in action with tapping chuck and clutched collet

PART NUMBER	DESCRIPTION	THREADING CAPACITY	SUITABLE FOR USE WITH JEI MODEL
JEITAP-2MT	2 morse taper tapping chuck	M3-M14	HM50T
JEITAP-3MT	3 morse taper tapping chuck	M5-M30	HM100T
JEITAP-4MT	4 morse taper tapping chuck	M14-M42	HM140T
JEITAP-5MT	5 morse taper tapping chuck	M22-M52	MagBeast 5 & AirBeast 200A

Tapping Collets

- Designed for use with JEI's quick change tapping chuck.
- Quick fitting collar to securely hold the required tap.

Clutched Collet

Designed for partial (blind) hole threading.



Positive Drive Collet

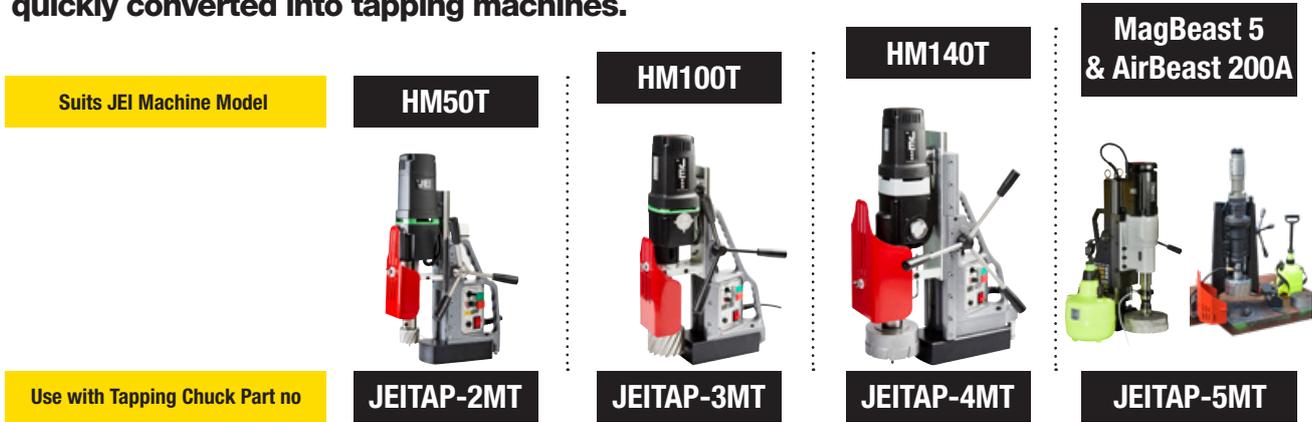
Designed for complete (through) hole threading.



For full list of clutched collets and positive drive collets see opposite page.

JEI MagBeast® magnetic drilling machines can be utilised as an effective tool for carrying out high demand threading jobs on steel plates.

With in-built variable speed and motor reverse options, a selection of models can be quickly converted into tapping machines.



Tap Size	Shank Size Ø x Sq. (mm)	Standard	Clutched Collet part no	Positive Drive Collet part no	Clutched Collet part no	Positive Drive Collet part no	Clutched Collet part no	Positive Drive Collet part no	Clutched Collet part no	Positive Drive Collet part no
M3,5	4 x 3	DIN371	JEITC1-035028	JEIT1-035028						
M4	2,8 x 2,1	DIN376	JEITC1-040030							
M4	4,5 x 3,4	DIN371	JEITC1-045034	JEIT1-045034						
M4	4 x 3,15	ISO529	JEITC1-040031	JEIT1-040031						
M4,5	4,5 x 3,55	ISO529	JEITC1-045035	JEIT1-045035						
M5	3,5 x 2,7	DIN376	JEITC1-035027	JEIT1-035027						
M5	5 x 4	ISO529	JEITC1-050040	JEIT1-050040						
M5	6 x 4,9	DIN371	JEITC1-060049	JEIT1-060049	JEITC2-060049	JEIT2-060049				
M6	4,5 x 3,4	DIN376	JEITC1-045034	JEIT1-045034	JEITC2-045034					
M6	6 x 4,9	DIN371	JEITC1-060049	JEIT1-060049	JEITC2-060049	JEIT2-060049				
M6	6,3 x 5	ISO529	JEITC1-063050	JEIT1-063050	JEITC2-063050	JEIT2-063050				
M8	6 x 4,9	DIN376	JEITC1-060049	JEIT1-060049	JEITC2-060049	JEIT2-060049				
M8	8 x 6,2	DIN371	JEITC1-080062	JEIT1-080062	JEITC2-080062	JEIT2-080062				
M8	8 x 6,3	ISO529	JEITC1-080063	JEIT1-080063	JEITC2-080063	JEIT2-080063				
M10	7 x 5,5	DIN376	JEITC1-070055	JEIT1-070055	JEITC2-070055	JEIT2-070055				
M10	10 x 8	DIN371	JEITC1-100080	JEIT1-100080	JEITC2-100080	JEIT2-100080				
M12	9 x 7	DIN376	JEITC1-090070	JEIT1-090070	JEITC2-090070	JEIT2-090070				
M12	9 x 7,1	ISO529	JEITC1-090071	JEIT1-090071	JEITC2-090071					
M14	11 x 9	DIN376	JEITC1-110090	JEIT1-110090	JEITC2-110090	JEIT2-110090	JEITC3-110090	JEIT3-110090		
M14	11,2 x 9	ISO529	JEITC1-112090	JEIT1-112090	JEITC2-112090	JEIT2-112090	JEITC3-112090	JEIT3-112090		
M16	12 x 9	DIN376	JEITC1-120090	JEIT1-120090	JEITC2-120090	JEIT2-120090	JEITC3-120090	JEIT3-120090		
M16	12,5 x 10	ISO529	JEITC1-125100	JEIT1-125100	JEITC2-125100	JEIT2-125100	JEITC3-125100	JEIT3-125100		
M18	14 x 11	DIN376			JEITC2-140110	JEIT2-140110	JEITC3-140110	JEIT3-140110		
M18	14 x 11,2	ISO529			JEITC2-140112	JEIT2-140112	JEITC3-140112	JEIT3-140112		
M20	14 x 11,2	ISO529			JEITC2-140112	JEIT2-140112	JEITC3-140112	JEIT3-140112		
M20	16 x 12	DIN376			JEITC2-160120	JEIT2-160120	JEITC3-160120	JEIT3-160120		
M22	16 x 12,5	DIN376			JEITC2-160125	JEIT2-160125	JEITC3-160125	JEIT3-160125	JEITC4-160125	JEIT4-160125
M22	18 x 14,5	DIN376			JEITC2-180145	JEIT2-180145	JEITC3-180145	JEIT3-180145	JEITC4-180145	JEIT4-180145
M24	18 x 14	ISO529			JEITC2-180140	JEIT2-180140	JEITC3-180140	JEIT3-180140	JEITC4-180140	JEIT4-180140
M24	18 x 14,5	DIN376			JEITC2-180145	JEIT2-180145	JEITC3-180145	JEIT3-180145	JEITC4-180145	JEIT4-180145
M27	20 X 16	DIN376			JEITC2-200160	JEIT2-200160	JEITC3-200160	JEIT3-200160	JEITC4-200160	JEIT4-200160
M30	22 X 18	DIN376			JEITC2-220180	JEIT2-220180	JEITC3-220180	JEIT3-220180	JEITC4-220180	JEIT4-220180
M33	22.4 X 18	ISO529					JEITC3-224180	JEIT3-224180	JEITC4-224180	JEIT4-224180
M33	25 x 20	DIN376					JEITC3-250200	JEIT3-250200	JEITC4-250200	JEIT4-250200
M36	28 X 22	DIN376					JEITC3-280220	JEIT3-280220	JEITC4-280220	JEIT4-280220
M37	28 X 22.4	ISO529					JEITC3-280224	JEIT3-280224	JEITC4-280224	JEIT4-280224
M39	32 X 24	DIN376					JEITC3-320240	JEIT3-320240	JEITC4-320240	JEIT4-320240
M42	32 X 24	DIN376					JEITC3-320240	JEIT3-320240	JEITC4-320240	JEIT4-320240
M44	31.5 X 25	ISO529							JEITC4-315250	JEIT4-315250
M45	36 X 29	DIN376							JEITC4-360290	JEIT4-360290
M48	36 X 29	DIN376							JEITC4-360290	JEIT4-360290
M50									**	**
M52									**	**

**Consult JEI for further details



Industrial Arbors

Easily converts a drill press, milling machine, lathe or CNC machine to accept cutters, therefore increasing their versatility, and capacity to cut up to 3 times larger diameter holes than solid drills allow.

Also will suit most portable magnetic drilling machines with a morse taper fitting as a spare or replacement arbor.

Available with or without an external coolant ring, which allows cutting oil to be internally fed through the tool, resulting in a cleaner hole finish, positive ejection of the centre slug and prolonged cutter life.



With magnetic drill



With radial arm drill

Standard, without External Coolant Ring

PART NUMBER	DESCRIPTION
JEIARBOR-2MT	2MT Cutter arbor, to suit 19 mm shank cutters
JEIARBOR-3MT	3MT Cutter arbor, to suit 19 mm shank cutters
JEIARBOR-4MT	4MT Cutter arbor, to suit 19 mm shank cutters
JEIARBOR-3MT/32	3MT Cutter arbor, to suit 1-1/4" (31.75 mm) shank cutters
JEIARBOR-4MT/32	4MT Cutter arbor, to suit 1-1/4" (31.75 mm) shank cutters
JEIARBOR-5MT/32	5MT Cutter arbor, to suit 1-1/4" (31.75 mm) shank cutters

With External Coolant Ring

PART NUMBER	DESCRIPTION
JEIARBOR-2MTC	2MT Cutter arbor with external coolant ring, to suit 19 mm shank cutters
JEIARBOR-3MTC	3MT Cutter arbor with external coolant ring, to suit 19 mm shank cutters
JEIARBOR-4MTC	4MT Cutter arbor with external coolant ring, to suit 19 mm shank cutters
JEIARBOR-3MT/32C	3MT Cutter arbor with external coolant ring, to suit 1-1/4" (31.75 mm) shank cutters
JEIARBOR-4MT/32C	4MT Cutter arbor with external coolant ring, to suit 1-1/4" (31.75 mm) shank cutters
JEIARBOR-5MT/32C	5MT Cutter arbor with external coolant ring, to suit 1-1/4" (31.75 mm) shank cutters



Morse Taper Sleeves

Designed to adapt morse taper drills and arbors to fit the required taper socket.

PART NUMBER	DESCRIPTION
JEIMTS-2-1	Morse taper sleeve, 2MT shank reducing for 1MT tooling
JEIMTS-3-1	Morse taper sleeve, 3MT shank reducing for 1MT tooling
JEIMTS-3-2	Morse taper sleeve, 3MT shank reducing for 2MT tooling
JEIMTS-4-2	Morse taper sleeve, 4MT shank reducing for 2MT tooling
JEIMTS-5-3	Morse taper sleeve, 5MT shank reducing for 3MT tooling
JEIMTS-5-4	Morse taper sleeve, 5MT shank reducing for 4MT tooling



Cutter Extensions

- Designed to increase the overall cutting reach of the magnetic drilling machine.
- Ideal for hard access areas, and drilling through hollow box sections.
- Available in 5 cutting lengths, can be stacked together to form a longer extension.

Note – if positioning over an existing hole, the diameter must be larger than 35 mm to allow the arbor to extend through.



Can be joined together to extend reach even further

PART NUMBER	DESCRIPTION
JEICE-25	25 mm CUTTER EXTENSION
JEICE-50	50 mm CUTTER EXTENSION
JEICE-75	75 mm CUTTER EXTENSION
JEICE-100	100 mm CUTTER EXTENSION
JEICE-150	150 mm CUTTER EXTENSION

Cutter Adaptors

Providing versatility to JEI's standard range of cutters and magnetic drilling machines.

PART NUMBER	DESCRIPTION
JEIADPT-19/32	Cutter adaptor, to convert 19 mm drive cutter arbor to suit 1-1/4" shank cutters. Maximum recommended cutter diameter = 100 mm Extension length = 25 mm Can be used as an add on adaptor to standard cutter extensions.
JEI-AFEIN	Cutter adaptor, converts JEI's cutters (19 mm shank) to fit to Fein quick in machine arbor.
JEIADPT-32/19	Reduction ring, to convert 1-1/4" drive cutter arbor to suit 19mm shank cutters.
JEI-A/N 8	Cutter adaptor, converts JEI's Cutters (19 mm shank) To fit to Nitto magnetic drills Use with Pilot Pin = Dia Ø 7.98 mm Note - not required for JEI Turbo Tough TCT cutters, as they feature a "Universal" shank fitting.
JEI-ST02	19 mm shank adaptor, to fit 13 mm chuck to magnetic drilling machine.
JEI-ADPT-1/2	Cutter adaptor, converts JEI's cutters (19 mm shank) to fit in 1/2" chuck.



Pipe Attachment Kits

A handy solution which allows most models of MagBeast® magnetic drilling machines to cut holes in pipe and tube sections.

Features a chain clamping system to secure the machine into a safe drilling location. Four versions are available, with a minimum pipe diameter of 80 mm.

Chain Bases

PART NUMBER	SUITS MODELS	MIN/MAX PIPE Ø (AS SUPPLIED)
JEICB-S	MiniBeast ,HM40 *	80 / 250 mm
JEICB-M	HM50, HM50T*	80 / 250 mm
JEICB-L	MagBeast 4**	150 / 500mm
JEICB-XL	HM100, HM100T**	150 / 500mm

Extra Chain

To increase diameter of pipe capability.

- *1 x length required for JEICB-S, JEICB-M
- **2 x lengths required for JEICB-L, JEICB-XL

PART NUMBER	CHAIN LENGTH / EXTRA DIAMETER Ø
JEICB-18	1700 mm / 500 mm Ø



Vac Pad

The Vac Pad enables magnetic drilling machines to effectively operate on non-ferrous material, providing the ability to convert a magnetic drilling machine to cut on non-magnetic or thin surfaces.

- Requires compressed air pressure (maximum 120 PSI).
- 2 sizes available to cover the complete JEI range of magnetic drilling machines.
- New larger version (JEIVPAD-L) also allows smaller machines to drill in multiple positions without moving fixture.

PART NUMBER	DESCRIPTION	MAGNETIC BASE FOOTPRINT	FITTING
JEIVPAD	Vacuum Pad Standard	200 mm x 135 mm	1/4" BSP
JEIVPAD-L	Vacuum Pad Large	300 mm x 250 mm	1/4" BSP



Ideal for checker plate flooring

Vac Pad, Small Version



With HM40

Vac Pad, Large Version



With HM140T

Cutting Oils & Lubricants

JEI's range of cutting oils and lubricants are specially formulated to use with the Turbo™ range of annular cutting tools, taps, twist drills, reamers and countersinks.

- Increases tool life.
- Ensures positive slug ejection (when used with cutters).
- Maximise tool life – reduces heat build-up in the tool.
- Increases productivity.



Soluble Cutting Oil

turbo Steel

- Mix (dilute) with water, then fill up the machine coolant bottle for through the spindle cooling.
- Use with Turbo Steel cutters for best results.



PART NUMBER	DESCRIPTION
JEIOIL-SOL	Cutting oil soluble, dilutes 20:1, 1 L
JEIOIL-SOL/5	Cutting oil soluble, dilutes 20:1, 5 L
JEIOIL-SOL/25	Cutting oil soluble, dilutes 20:1, 25 L

Neat Cutting Oil

turbo Tough

- Ideal for drilling and tapping.
- Increases performance when drilling tough materials.
- Best results with Turbo Steel and Turbo Tough cutting tools.



PART NUMBER	DESCRIPTION
JEIOIL-NEAT	Cutting oil neat, 1 L
JEIOIL-NEAT/5	Cutting oil neat, 5 L

Cutting Spray

turbo Tough

- For cutting, drilling, countersinking, tapping and reaming.
- Enhanced results on tough materials.
- Best results with Turbo Tough cutting tools.
- Features a unique 360° valve to ensure spraying at all angles.



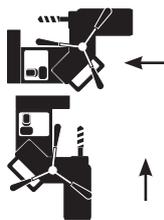
PART NUMBER	DESCRIPTION
JEIOIL-TTA	Turbo tough drill & tap aerosol, 500 ml

Cutting Paste for overhead drilling

turbo Endurance+

A non-drip, revolutionary aerosol magnetic drilling paste formulated for overhead and vertical drilling. Ideal for:

- Steel building.
- Structural bridgework.
- Offshore construction.
- Hazardous environments.



PART NUMBER	DESCRIPTION
JEIOIL-TEP	Endurance+ magnetic drilling paste, 500 ml



Soluble cutting oil with MiniBeast



Endurance+ spray drilling upside down

Magnetic Brushes

Presenting the quick and easy way to tidy the work area after drilling.

- A quick wave of the brush over the steel swarf and it is magnetised to the brush while you transport it to the disposal point.
- A simple pull of the handle releases the swarf into the bin.
- Ideal for use in confined areas in workshops, site and on rail track ballast.



PART NUMBER	DESCRIPTION	DIMENSIONS (length x diameter x working length)
JEIMB-S	Mag Brush Mini (Small)	240 mm x 16 x 102 mm
JEIMB-M	Mag Brush Midi (Medium)	385 mm x 25 x 175 mm
JEIMB-L	Mag Brush Maxi (Large)	1008 mm x 25 x 175 mm



Mini Mag Brush
(240 mm)



Midi Mag Brush
(385 mm)



Maxi Mag Brush
(1008 mm)

JEI Mag Brush Sweeper

Designed to collect all deposited steel chips, swarf and magnetic waste from the floor level.

- Once the area has been swept, simply lift the Mag Brush sweeper over a bin & release the handle to deposit the waste.
- Fitted with roller wheels and telescopic pole handle for ease of operation.
- Width of magnetic collector 450 mm.

PART NUMBER	DESCRIPTION
JEIMB-F	Magnetic Floor Sweeper



Industrial 14" Metal Cutting Saw

Part no' JEIMCS14-1C ⚡ 110 V
Part no' JEIMCS14-2C ⚡ 240 V



*Including mild steel blade

Features / Benefits:

- 14" (355 mm) blade diameter.
- Low speed, high torque, long-life motor.
- Fast and safety conscious cut-off saw action.
- Dry cut with no coolant required.
- Weighs 25 kg.
- Cuts 0–45°.
- Cuts through mild steel and stainless steel.
- 12 month warranty.
- Available in 110 V or 240 V options.

SPECIFICATIONS

Height	623 mm	
Width	330 mm	
Length	635 mm	
Weight	25 kg	
Motor	2200 W	
RPM	1300 RPM	
Capacity	45°	90°
Round	105 mm	130 mm
Square	90 x 90 mm	120 x 120 mm
Rectangle	80 x 110 mm	95 x 185 mm



Ergonomic pull down handle



Quick acting vice handle clip



Portable, ideal to carry on site



Retracting lower safety guard



In-built swarf collection draw

Premium Grade TCT Metal Cutting Saw Blades

	MILD STEEL	
7" (180 mm) diameter 20 mm bore	Part No' MCBL07 180 mm x 36 teeth	
9" (230 mm) diameter 25.4 bore	Part No' MCBL09 230 mm x 48 teeth	
14" (355 mm) diameter 25.4 bore	Part No' MCBL14 355 mm x 66 teeth	

Bevelling Solutions

BM2A Part no' BMB2

A mini, hand held tool designed for cleaning edges of workpieces, by deburring sharp edges or creating a paint ready radius edge. Ideal for mild and stainless steel, aluminium and other materials. Can also deburr internal holes from a minimum 6 mm diameter.

Features:

- Very compact design – weighs only 400 g and fits in the hand.
- Practical - one milling head suits inserts for both deburring (bevelling) and creating a paint ready radius edge.
- Highly reliable pneumatic motor - designed for production use.
- Easy precision set up - dial scale allows precise adjustment size of deburring.
- Supplied ready to go - with milling head and 3 cutting inserts fitted.



Ideal for plates and inside edges



Milling head holds both radius and milling inserts

CARBIDE MILLING INSERTS

DESCRIPTION	BM2A
Insert for deburring 2 mm each	BMB2IS
Insert for Radius R1.5	BMB2IR1.5
Insert for bevelling (coated)	-
Insert for Radius R2.5	-
Insert for Radius R3.5	-
Insert for Radius R4	-

For extra coated inserts for tough materials add prefix "C" to above

SPECIFICATIONS

MODEL	BM2A
Motor power	Pneumatic
Spindle speed (w/o load)	23000 RPM
Max bevel / deburring width	2 mm
Min. dia countersinking	6.8 mm
Bevel angles (optional)	45°
Radius sizes	R1.5
Weight	400 g
Air pressure	max 6 bar– 320 l/min

BM7 Part no' BM7/1 ⚡ 110 V Part no' BM7/2 ⚡ 240 V

A small and lightweight solution designed for milling plates, pipes and contour angle workpieces.

- Perfect for forming a paint ready radius edge, to prevent rust build up on sharp edges.
- Lightweight and compact design – ideal for limited access areas.
- One milling head carries out all operations – saving tooling costs.
- Works on mild and stainless steels, aluminium and other metals.
- Supplied with milling head and set of milling inserts to the customer's choice (Radius r2,r3,r4, r5 or 45° bevelling).



Pipes

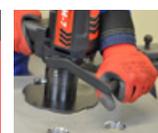
SPECIFICATIONS

MODEL	BM7
Motor	1100 W
Spindle Speed (without load)	6500 RPM
Max. bevel width	7 mm
Minimum diameter of countersinking	35 mm
Bevel angles	45° (Standard), 30° (Optional)
Radius sizes	R2, R3, R4 and R5
Length x Width x Height	327 mm x 142 mm x 319 mm
Weight	5.8 kg
Voltage / Part no.	110 V / Part no. BM-7/1 240 V / Part no. BM-7/2

CARBIDE MILLING INSERTS

DESCRIPTION	BM7
Insert for bevelling Steel	BM7IS
Insert for bevelling Aluminium	BM7IA

For extra coated inserts for tough materials add prefix "C" to above



Inside edges/countersinking

BM16 Part no' BM16/1 ⚡ 110 V Part no' BM16/2 ⚡ 240 V

For straight edge or radius bevelling.

A portable, handy solution designed for milling edges of steel, aluminium, alloys, brass or plastic.

With the new EN1090 & EN-ISO12944 Part 2 applications, many clients are demanding a soft or radius edge before painting. This quick, simple to use system with a 4 tip cutting head, creates a perfect radius in just one pass, saving time and money over conventional grinding methods.

Features:

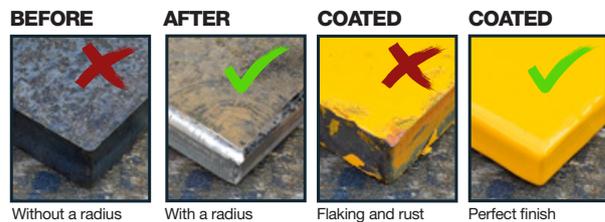
- Minimum bevel thickness of 1.5 mm, maximum 16 mm.
- Countersink holes with a minimum 40 mm diameter.
- Continuous bevel width adjustment.
- Overload protection.
- Electronic speed control.

BM16 Package Includes:

- BM16 machine.
- Milling head and inserts of customer's choice.
- Plastic box.
- 14 mm Allen key.
- 5 mm Allen key.
- 32 mm flat key.
- Operators manual.

A quick and easy system for paint ready edge preparation.

EASY-RAD SYSTEM



SPECIFICATIONS	
MODEL	BM16
Motor	2200 W
Spindle Speed (without load)	1800 - 5850 RPM
Minimum diameter of countersinking	ca 40 mm
Bevel angles	22.5°, 30°, 37.5°, 45°, 55° or 60°
Length	585 mm
Width	156 mm
Height	238 mm
Weight (without milling head)	10 kg
Power Supply	110 V or 240 V/ 50-60Hz

CARBIDE MILLING INSERTS	
DESCRIPTION	BM16
Insert for bevelling Steel	BM16IS
Insert for bevelling Aluminium	BM16IA
Insert for Radius R2	BM16IR2
Insert for Radius R3	BM16IR3
Insert for Radius R4	BM16IR4
Insert for Radius R5	BM16IR5
For extra coated inserts for tough materials add prefix "C" to above	

Pipe Bevelling Solutions

- Range covers 30 mm – 300 mm O.D. pipe.
- Bevells mild, stainless, aluminium or copper pipe.
- Internal, external bevelling with all angle tooling options.
- J bevel capability.
- Available with 2 powerful motor options – pneumatic or electric.



Pipe Diameters Range

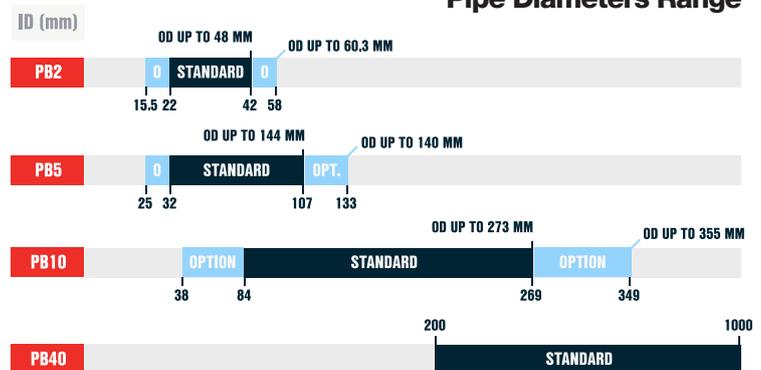


Plate & Pipe Beveling Machines

2 new generation models designed to create a perfect weld ready bevel on both plate and pipe with ease and efficiency.

BM21 for mild steel beveling

Part no' BM21/1 ⚡ 110 V
Part no' BM22/2 ⚡ 240 V



Plate beveling



Facing off plate



Features:

- Single milling head equipped with 10 square inserts, simplifying the machining process.
- Fast and easy exchange of insert with no need for special adjustments.
- Extended work range from 0 to 60° with continuous angle adjustment.
- Easy setting of bevel angle and width.
- Vibration insulation providing added protection for both user and machine.
- One universal guide plate for beveling both plates and pipes.
- Bevels pipe 150 mm to 300 mm as standard.
- Optional attachment available for larger pipe up to 600 mm diameter.

BM21S for stainless steel beveling

Part no' BM21S/1 ⚡ 110 V
Part no' BM21S/2 ⚡ 240 V



Pipe beveling



BM21S hard wearing parts for stainless steel beveling



Features:

- Hard wearing stainless steel roller plate and parts designed to withstand tough use.
- Single milling head equipped with 10 square inserts, simplifying the machining process.
- Quick and simple tool change with no special adjustments.
- Extended work range from 0 to 60° with continuous angle adjustment.
- Easy setting of bevel angle and width.
- Vibration insulation designed to provide added protection for both user and machine.
- One universal guide plate for beveling both plates and pipes.
- Bevels pipe from 150 mm to 300 mm diameter as standard.
- Optional attachment available for larger pipe up to 600 mm.



Optional pipe attachment 260 mm to 600 mm dia.



Milling inserts 4 sided for long tool life

SPECIFICATIONS

MODEL	BM21	BM21S
Motor	1100 W	1600 W
Maximum bevel width	21 mm	21 mm
Pipe diameter	150-300 mm as standard 600 mm with optional attachment	150-300 mm as standard 600 mm with optional attachment
Motor Speed	2800 RPM	1560 RPM
Angle range	0-60° (infinitely variable)	0-60° (infinitely variable)
Tooling (included)	Milling head with 10 (4 sided) inserts	Milling head with 10 (4 sided) inserts
Weight	20 kg	12 kg
Voltage / Part no.	110 V / Part no. BM21 240 V / Part no. BM21/2	110 V / Part no. BM21S 240 V / Part no. BM21S/2

TOOLING AND ACCESSORIES

PART NO.	DESCRIPTION
BM21-PA	Pipe attachment, 260-600 mm to suit model BM21
BM21S-PA	Pipe attachment, 260-600 mm to suit model BM21S (stainless steel)
BM21IS	Carbide inserts (10 required per machine) to suit BM21 & BM21S
BM21IC	Coated carbide inserts (10 required per machine) for tougher materials, to suit BM221 & BM21S
BM21-HD	Heavy duty carbide inserts (10 required per machine) for tougher materials, to suit BM21 & BM21S

Punch HP60 / HP110

Part no' JEIHP-60C/1 ⚡ 110 V
Part no' JEIHP-60C/2 ⚡ 240 V

Part no' JEIHP-110C/1 ⚡ 110 V
Part no' JEIHP-110C/2 ⚡ 240 V

These portable SteelBeast® hydraulic punching machines provide a double action, fully automated process of punching steel plates and profiles, in a simple clean and fast operation.

Features:

- 2 models available - covering up to 27 mm diameter holes through 16 mm thickness.
- Intelligent control system and automatic load system - ensures safe and fast hole punching.
- Mode indicator light - protection from accidental start-up.
- Supplied with portable hydraulic power pack - ready to operate.
- Full range of optional accessories - enhance the performance and production of your investment.

HP110



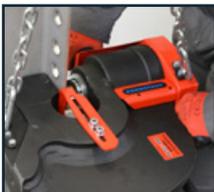
HP60



Supplied complete with hydraulic power pack



Quick and simple operation



Works in any position



Broad range of special shaped punches and dies available. Contact your JEI distributor for details.

TOOLING AND ACCESSORIES

PART NO.	DESCRIPTION
JEIHPH	Hoist set, hoist arm and 2 supports with wheels, allow easy manipulation of punch and power pack as a single unit. *Power pack and head not included
JEIHPA910	Bench top stand with foot pedal, neither balancer nor hoist arms are required to keep puncher in place. An operator can use start and stop buttons on the machine or foot pedals.
JEIHPA900	Wheel puncher slide permits smooth and efficient lineal movement along the workpiece.
JEIHPB	Balancer, to suit HP110
JEIHPB-60	Balancer, to suit HP60

SPECIFICATIONS

MODEL	HP60	HP110
Weight	20 kg	35 kg
Motor	1500 W	1500 W
Max. thickness	13 mm	16 mm
Max. throat depth	60 mm	110 mm
Max. hole dia.	27 mm	27 mm
Max. oblong hole	25 x 18 mm	25 x 18 mm
Punching time	5 seconds	8 seconds
Punching power	35 ton	47 ton
Pump output	1.5 L/min	1.5 L/min
Oil capacity	10 L	10 L
working pressure	700 bar	700 bar
Voltage/ part no (includes hydraulic powerpack)	110 V/ part no JEIHP60C/1 240 V/ part no JEIHP60C/2	110 V/ part no JEIHP110C/1 240 V/ part no JEIHP110C/2

More SteelBeast® Solutions

JEI's extensive range of steel fabrication equipment includes:

Auto-Feed Beveling Machines

- Range covers all applications up to 500 mm bevel width
- Continuously adjustable bevel angles between 15 – 60°
- Double-sided beveling
- Up to 80 mm plate thickness
- Variety of steel grades including stainless steel and aluminium
- High quality finish



Welding Carriages

- A range that produces consistently high quality welds and cuts.
- Manual to automated welding.
- Cutting tracks for Oxy-Fuel, Plasma and more.
- Range includes multi-positioning welding, carriages with oscillators and programmable carriages.



Industrial Belt Grinders

- A heavy duty range built for everyday industrial steel grinding and stock removal.
- Available with either 75 mm or 150 mm wide x 2000 mm belt.
- Built-in dust extraction units available.



Tube & Pipe Notchers

- Manual operation for fast and clean pre-welded joints.
- Grinder notcher for any angle 30 to 90°.



To view the full SteelBeast range, visit our dedicated website

Roto-Star

High precision range of rotary welding positioners

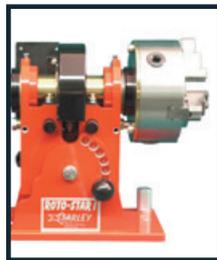
Roto-Star III with plate



Also available for Roto-Star I



Roto-Star III



Roto-Star I

Features/Benefits:

- **Available with a Three Jaw Chuck or Surface Plate**
Designed to hold a wide range of parts.
- **Heavy Duty Construction**
Supports work pieces up to 125 kg.
- **Unique Through Spindle Feature**
Will accommodate any length of material up to 2-1/2" (63.5 mm) diameter.
- **Dual Grounding System**
Makes it ideal for aluminum or stainless steel welding.
- **Variable Speed Control Panel**
With smooth movement forward and reverse from 0-5 RPM.
- **Work Head Positions 0 to 90°**
Increases machine versatility.
- **Stop/Start Foot Pedal Operation**
For hands-free operation.
- **Available with Optional Variable Speed Foot Pedal**
Puts the operator in full control.

TOOLING AND ACCESSORIES

PART NO.	DESCRIPTION
RO501	12" surface plate to mount in chuck, ROT01
RO505	16" surface plate to mount in chuck, ROT03
RO510	Adjustable arm rest
RO570	Idler roller assembly
RO540A	Variable speed foot pedal & controller - to fit existing machine

SPECIFICATIONS

PART NO.	ROTO-STAR I	ROTO-STAR III	ROTO-STAR I - P WITH PLATE ROT01-P	ROTO-STAR III - P WITH PLATE ROT03-P
	ROT01	ROT03		
Chuck	6" / 152 mm	8" / 203 mm	-	-
Swing @ 0° (maximum)	16" / 406 mm	20" / 508 mm	16" / 406 mm	20" / 508 mm
Vertical weight capacity	100 kg	125 kg	100 kg	125 kg
Horizontal weight capacity	50 kg	75 kg	50 kg	75 kg
Thru spindle part capacity	1-1/2" 38.1 mm	2-1/2" 63.5 mm	-	-
Spindle rotation	360°	360°	360°	360°
Spindle speed	0-15 RPM	0-8 RPM	0-15 RPM	0-8 RPM
Angle adjustment*	0-90°	0-90°	0-90°	0-90°
Grounding capacity	300 A	300 A	300 A	300 A
Voltage	110 V or 240 V	110 V or 240 V	110 V or 240 V	110 V or 240 V
Shipping weight	30 kg	45 kg	22.5 kg	32.5 kg
Optional rotary table	12" / 304 mm dia	16" / 406 mm dia	-	-
Fixed rotary table	-	-	12" / 304 mm dia	16" / 406 mm dia

* Adjusts in 15° increments.

JEI Solutions

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Built for Industry

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