RANGE & SELECTION GUIDE

JEI Cutting Tooling

Annular cutters, TCT holesaws, drilling, reaming and tapping tools.



Find the Tool for Your Job

Operation	Tooling	Page
Core drill plate with a mag drill	HSS, TCT, coated and rail annular cutters	02
Match the pilot pin or buy a kit	Annular cutter sets and pilot pins	03
Cut a hole with a chuck or impact driver	TCT holesaws and replacement pilots	04
Drill or chamfer a hole	Twist drills, mini cutters, step drills and countersinks	05
Open up an existing hole	Straight-shank, bridge, hex and step reamers	06
Cut an internal thread	Turbo M-Taps, drill-and-tap tools and holders	07
Set up the drill	Arbors, chucks, adaptors, fixtures and lubricants	08

SHOP DRILLING, TAPPING & CUTTING

For a tooling match, tell us the material, hole size, cut depth and drill model.

View the R H Davey range

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Choose an Annular Cutter

An annular cutter removes a ring of material and leaves a slug. Match the cutter to the material, hole diameter, cut depth and drill arbor.



Turbo Steel



Turbo Endurance



Turbo Tough



Turbo Endurance+



Turbo Rail

JEI family	Cut depth	Choose it for
Turbo Steel M2-AL HSS	25 / 50 mm	Everyday holes in mild and structural steel or aluminium
Turbo Endurance coated HSS	25 / 50 mm	Similar work where longer tool life is the priority
Turbo Tough TCT	40 / 55 mm; deeper series	Structural steel, stainless steel and cast iron
Turbo Endurance+ coated TCT	40 / 55 mm	Hard-wearing plate, including Hardox and armour plate
Turbo Rail TCT / Super Tough	Check rail series	Track drilling with a compatible rail drill

Turbo Tough also comes in 80, 110, 150 and 200 mm depths, depending on diameter.

Examples to Order

Order code	Size or configuration	Family
JEICS18	18 mm Ø × 25 mm depth	Turbo Steel HSS
JEICL18	18 mm Ø × 50 mm depth	Turbo Steel HSS
JEIECS18	18 mm Ø × 25 mm depth	Turbo Endurance coated HSS
JEITCS18	18 mm Ø, short series	Turbo Tough TCT
JEITCL18	18 mm Ø × 55 mm depth	Turbo Tough TCT
JEIETCS18	18 mm Ø × 40 mm depth	Turbo Endurance+ coated TCT

MATCH THE SHANK AND PILOT PIN

Many metric cutters use a 19.05 mm (¾ in) shank. Larger and specialist cutters can use a different shank. Confirm the arbor, machine capacity and matching pin before ordering. Ask us to confirm the cut depth of Turbo Tough short-series stock.

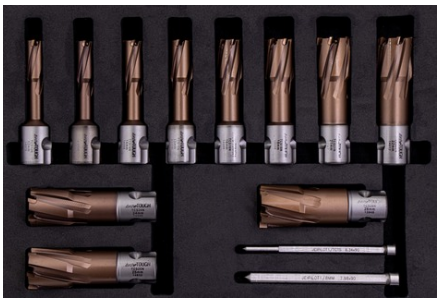
JEI diameter, depth and shank tables

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Kits and Pilot Pins

Choose a kit for your regular hole sizes. Match replacement pins to the cutter family, diameter and depth.







Annular Cutter Sets

Family	Series	3-piece set	5-piece set	11-piece set
Turbo Steel HSS	Short	JEICS-SET3	JEICS-SET5	JEICS-SET11
Turbo Steel HSS	Long	JEICL-SET3	JEICL-SET5	JEICL-SET11
Turbo Endurance coated HSS	Short	JEIECS-SET3	JEIECS-SET5	JEIECS-SET11
Turbo Endurance coated HSS	Long	JEIECL-SET3	JEIECL-SET5	JEIECL-SET11
Turbo Tough TCT	Short	JEITCS-SET3	JEITCS-SET5	JEITCS-SET11
Turbo Tough TCT	Long	JEITCL-SET3	JEITCL-SET5	JEITCL-SET11
Turbo Endurance+ coated TCT	Short	JEIETCS-SET3	JEIETCS-SET5	JEIETCS-SET11
Turbo Endurance+ coated TCT	Long	JEIETCL-SET3	JEIETCL-SET5	JEIETCL-SET11

3-piece sets cover 14, 18 and 22 mm. 5-piece sets add 16 and 20 mm. The 11-piece sets span selected sizes from 12 to 26 mm. Sets include matching pilot pins.

Pilot Pin Examples

Order code	Pin size (length × Ø)	Example cutter pairing
JEIPILOT1	77 × 6.35 mm	Turbo Steel CS, 10–65 mm Ø
JEIPILOT2	103 × 6.35 mm	Turbo Steel CL, 12–65 mm Ø
JEIPILOT1/8MM	90 × 7.98 mm	Turbo Tough TCS, 18–65 mm Ø
JEIPILOT2/8MM	103 × 7.98 mm	Turbo Tough TCL, 18–65 mm Ø
JEIPILOT3/8MM	130 × 7.98 mm	Turbo Tough TCX, 18–65 mm Ø

WHAT THE PIN DOES

The pin locates the hole and ejects the slug as the cutter retracts. With a compatible coolant-fed arbor, it also controls internal coolant flow. Use JEI's pin chart for smaller bores, longer cutters and adaptor setups.

JEI pilot-pin compatibility chart

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TCT Holesaws

Cut holes for cable glands, conduit, panel fittings and workshop fabrication. Choose by cut depth and drive type.









Cut depth	Drive	JEI series	Use for
2 mm	¼ in hex impact drive	JEIHHXX	Thin metal enclosures and panels
5 mm	Drill chuck	JEIHXS	Sheet and shallow entry holes
25 mm	Drill chuck	JEIHS	General metalworking and gland entries
50 mm	Drill chuck	JEIHL	Deeper cuts with a suitable drill setup

Turbo Tough chuck-drive holesaws use a spring-loaded pilot drill to centre the cut and eject the slug. They suit materials including structural steel, stainless steel, brass and copper. Use JEI's speed chart for the diameter and material.

Sets and Replacement Pilots

Order code	Configuration
JEIHXS-SET6	5 mm depth set, 14 / 16 / 18 / 20 / 22 / 25 mm
JEIHS-SET6	25 mm depth set, 16 / 18 / 19 / 20 / 22 / 25 mm
JEIHXS-PILOT	Pilot and spring for 5 mm heavy-duty holesaws
JEIHS-PILOT	Pilot and spring for 25 mm heavy-duty holesaws
JEIHL-PILOT	Pilot and spring for 50 mm heavy-duty holesaws
JEIHHXX-PILOT	Spare pilot for 2 mm impact-drive holesaws

ORDER BY DIAMETER AND CUT DEPTH

R H Davey code JEIHS22 is 22 × 25 mm, while JEIHL22 is 22 × 50 mm. Ask for the exact diameter if you are matching a cable gland or fitting.

JEI holesaw sizes and cutting speeds

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Drill, Step and Countersink

Use a twist drill for a solid hole, a step drill for several sheet-metal sizes, or a countersink to chamfer an existing hole.











Tool family	Holding method	Choose it for
HSS twist drills	Drill chuck	Solid holes, 1–13 mm in the JEI range
Turbo HSS twist drills	19 mm shank adaptor	Solid holes from a compatible mag drill arbor
Turbo Gold step drills	Three-flat chuck shank	Stepped holes in sheet up to 4 mm
Mini sheet-metal cutters	Matched arbor in drill chuck	8–25 mm holes in sheet, pipe and plastics
Mag drill countersinks	19 mm shank	Chamfers for fasteners and edge finishing
Turbo Gold countersinks	Drill chuck	Chamfering with a hand drill or drill press
Double-cut carbide burrs	6 mm shank rotary tool	Shape metal and remove sharp edges and burrs

Useful Ordering References

Order code	Configuration
JEITD-08	8 mm Turbo twist drill with 19 mm adaptor
JEITD-SET	6 / 8 / 10 / 12 mm Turbo twist drill set
JEISDT-SET3	Turbo Gold step drills, 4–12 / 4–20 / 6–30 mm
JEISMC-SET	7 mini cutters, 8–20 mm, with pilot pins
JEICSK-25	Turbo Steel countersink, 4–25 mm × 90°
JEICSKM-SET	6-piece Turbo Gold countersink set, 6.3–20.5 mm

MATCH THE COUNTERSINK TO THE FASTENER

Match the angle and diameter to the fastener head. JEI offers HSS and TCT mag drill countersinks, both with coated options.

JEI drill and countersink ordering tables

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Open Up an Existing Hole

Use a reamer to bring an undersize hole to the required diameter. Choose by the existing hole size, final diameter, material thickness and drive.









JEI reamer family	Holding method	Available sizes
Straight-shank car	12.7 mm chuck shank	14, 18, 22 and 26 mm
Turbo Bridge	19.05 mm shank	14–32 mm, selected diameters
Turbo Hex Bridge	Hex socket on impact wrench	14–39 mm, selected diameters
Turbo Step	10 mm shank	8–16, 14–22 and 20–28 mm

Ordering Examples

Order code	Configuration
JEICR-SET4	R H Davey straight-shank set, 14 / 18 / 22 / 26 mm
JEITBR-SET3	Bridge reamers, 14 / 18 / 22 mm
JEITBR-SET5	Bridge reamers, 14 / 18 / 22 / 26 / 32 mm
JEIHR-SET3	Hex bridge reamers, 14 / 18 / 22 mm
JEIHR-SET5	Hex bridge reamers, 14 / 18 / 22 / 26 / 32 mm
JEISR-SET3	Three step reamers, 8–16 / 14–22 / 20–28 mm

CHECK THE START DIAMETER

The reamer must enter the existing hole. Check JEI's start diameter and maximum hole depth for the exact size, and match the drive or socket to the tool.

JEI reamer start diameters and depths

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Tap a Through Hole

Turbo M-Taps and Drill & Tap in One tools use a 19 mm Weldon shank. Use a compatible variable-speed mag drill with reverse.





TURBO M-TAP

Cut a thread in a pre-drilled through hole. Match the tap to the required thread and preparation diameter.

DRILL & TAP IN ONE

Drill to size and thread with one tool. Start with a pilot hole and allow the tool to pass through the work.

Metric coarse	Turbo M-Tap	Drill & Tap in One	M-Tap max. depth*
M8 × 1.25	JEITAPM8	JEIDT-08	17 mm
M10 × 1.5	JEITAPM10	JEIDT-10	20 mm
M12 × 1.75	JEITAPM12	JEIDT-12	20 mm
M14 × 2	JEITAPM14	JEIDT-14	18 mm
M16 × 2	JEITAPM16	JEIDT-16	20 mm
M18 × 2.5	JEITAPM18	JEIDT-18	20 mm
M20 × 2.5	JEITAPM20	JEIDT-20	25 mm
M22 × 2.5	—	JEIDT-22	—
M24 × 3	JEITAPM24	JEIDT-24	26 mm
M27 × 3	JEITAPM27	JEIDT-27	29 mm
M30 × 3.5	JEITAPM30	JEIDT-30	31 mm

* JEI's listed maximum for the M-Tap on a suitable mag drill. For an impact wrench, use JEI's adaptor and observe the 12 mm maximum tapping depth.

Tapping Accessories

Order code or family	Use
JEIHEXS / JEIHEXL	½ in / ¾ in impact socket adaptors for Turbo M-Taps
JEITH series	19 mm holders for compatible DIN 376 taps

For blind holes, ask for a suitable tapping head, collet and tap matched to the machine and hole.

JEI tapping setup and adaptor details

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Accessories and Cutting Fluids

Match the spindle, tool shank and job first. Check that any adaptor or extension leaves enough stroke and clearance for the cut.








Item	Order reference	Use
Industrial cutter arbor	JEIARBOR-2MT / -3MT / -4MT	19 mm cutters in a matching Morse taper spindle
Cutter extension	JEICE-25 to JEICE-150	Extra reach, 25–150 mm series
19 mm to larger cutter adaptor	JEIADPT-19/32	1¼ in cutter in a compatible 19 mm arbor
Reducer for larger arbors	JEIADPT-32/19	19 mm cutter in a compatible 1¼ in arbor
13 mm keyed chuck kit	JEICA-13MM/19	Use chuck-shank drills in a suitable mag drill
13 mm keyless chuck kit	JEICA-13MM/19QR	Keyless option for a compatible 19 mm holder
Pipe chain base	JEICB series	Secure a compatible mag drill to pipe or tube
Vacuum pad	JEIVPAD / JEIVPAD-L	Fixture for suitable non-magnetic or thin work
Magnetic swarf pickup	JEIMB-S / -M / -L	Collect ferrous chips around the work area

Cutting Fluids

Product	Order reference	Use
Turbo Steel soluble oil	JEIOIL-SOL / -SOL/5	1 L / 5 L, water-mix coolant
Turbo Tough neat oil	JEIOIL-NEAT / -NEAT/5	1 L / 5 L, direct application
Turbo Tough drill & tap spray	JEIOIL-TTA	500 ml, cutting and tapping
Turbo Endurance+ paste	JEIOIL-TEP	500 ml, vertical and overhead drilling

Send the drill model and spindle type when ordering an arbor, chuck, chain base or vacuum pad.

JEI accessory dimensions and compatibility

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