EUREKA

DRILL BITS 4A

CSTHBE4A

Cobalt

Stainless Steel
High strength steels
Mild Steel

- Stronger and harder than Titanium
- Can drill at much higher temperatures while maintaining sharpness. It can therefore be used to drill stainless steel and other hard metals
- Split point is for accuracy & easy start
- Fully ground for optimal precision
- It is advisable to use in a drill press where more controlled pressure with added stability is available

Titanium

High strength steels
Mild Steel
Also for
Hard Wood

- Titanium bits are stronger and harder than HSS Black. The thin Titanium nitride coating keeps the bit sharper and harder
- The bit life is +- 5 times longer than HSS Black bits
- Use slow rotation speed to prevent overheating
- Use a pumping action in wood to prevent choking caused by sawdust
- Split point is for accuracy & easy start
- Fully ground for optimal precision

HSS Black

Mild Steel
Wood
Soft Metals
Plastic

- HSS Black bit is a good allrounder. Can be used on most materials
- HSS = High Speed Steel is the form of tool steel used to make these bits
- The black oxide coating provides heat resistance and lubricity as well as corrosion resistance
- The 118 degrees cutting point makes it a general use bit and is acceptable to use in wood plastics and milder type steels

General Tips

- Always clamp work securely where possible
- If possible use a drill press where more controlled pressure with added stability is available
- Determine required depth of hole prior to drilling, use masking tape as a depth marker
- Use successive pilot holes for big diameter holes in thick/hard material Example: For a 14mm hole - Start with 6mm then 10mm then only 14mm
- If a bit tends to walk or wander on a smooth surface, it can be minimised by drilling through pieces of masking tape placed on the surface
- Use water or cutting oil for cooling down bits. Overheating will cause the bit to become blunt quicker

WARNING: Use Eye Protection

WARNING: Use Hearing Protection

WARNING: Use Breathing Protection

DRILLING METHOD

- SPEED: Where possible drill at slow rotation speed to prevent overheating which will cause the bit to become blunt quicker
- PRESSURE: When using the smaller size drill bits i.e. 1,2,3mm use minimum pressure Keep pressure perpendicular (90° angle) to surface to prevent breakage
- DRILL FUNCTION: Always make sure power drill is on correct drilling action i.e. hammer vs. normal

METAL

Blind Rivets

Rivet size	Hole size
3.2 mm	3.2 mm
4.0 mm	4.0 mm
4.8 mm	4.8 mm

Stubby bit

Self Tappers

Screw size	+- Pilot hole sizes Thin	Thick
3.0 mm	2.0 mm	2.5 mm
3.5 mm	2.8 mm	3.0 mm
4.0 mm	3.2 mm	3.5 mm
4.5 mm	3.5 mm	4.0 mm
5.0 mm	4.0 mm	4.5 mm
6.0 mm	5.0 mm	5.5 mm

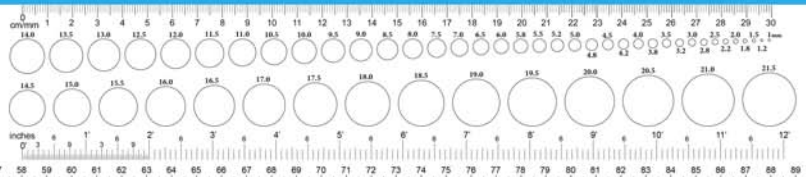
WOOD

Wood Screws

Size	+- Pilot hole sizes Soft	Hard
3.0 mm	1.5 mm	2.0 mm
3.5 mm	1.5 mm	2.0 mm
4.0 mm	2.0 mm	2.5 mm
4.5 mm	2.0 mm	2.8 mm
5.0 mm	2.5 mm	3.2 mm
5.5 mm	3.0 mm	3.5 mm

Chipboard Screw

Size	Pozi drive
3.0 mm	Pozi 1
3.5 - 5mm	Pozi 2
6.0 mm	Pozi 3

Cut Screws

Size	Square Bit
3.0 - 3.5mm	Square 1
4.0 - 5mm	Square 2
6 mm	Square 3