



# Things to know

## Recommended Hole Saw Cutting Speeds

### Things to know



**Speed vs Diameter:** As a general rule, larger hole saw diameters require lower rotational speeds (RPM) to prevent overheating the teeth.

**Material Impact:** Harder materials like stainless steel require significantly lower speeds compared to wood or plastics.

**Bi-Metal Focus:** This guide strictly covers speed settings for Bi-Metal Fast Cut (FCH), Deep Cut (DCH), and Cordless Smooth Cut (CSC) hole saws.

Saw Diameter		Mild Steel	Stainless & Tool Steel	Wood, Plastic & Aluminium
mm	inch	(RPM)	(RPM)	(RPM)
16 - 20	5/8 - 25/32	500	230	700
22 - 29	7/8 - 1.1/8	400	185	550
30 - 41	1.3/16 - 1.1/2	330	150	450



Saw Diameter		Wood & Plastic	Mild Steel	Brass, Copper & Aluminium	Stainless & Tool Steel	Cast Iron
mm	inch	(RPM)	(RPM)	(RPM)	(RPM)	(RPM)
14 - 25	9/16 - 1	800 - 500	580 - 350	790 - 470	300 - 175	400 - 235
27 - 51	1.1/16 - 2	500 - 200	325 - 170	435 - 230	160 - 85	215 - 115
52 - 76	2.1/16 - 3	200 - 150	165 - 115	220 - 150	80 - 55	110 - 75
79 - 102	3.1/8 - 4	150 - 100	110 - 85	140 - 110	55 - 40	70 - 55
105 - 127	4.1/8 - 5	100 - 85	80 - 65	110 - 85	40 - 30	55 - 25
133 - 152	5.1/4 - 6	75	55	75	25	55 - 25
160 - 210	6.5/16 - 8.9/32	60	40	60	20	55 - 25



**Q What happens if I run the hole saw faster than the recommended RPM?**

**A** Excessive speed causes rapid heat build-up, which quickly dulls or strips the HSS cutting teeth, rendering the saw useless.

**Q Does cutting depth affect the speed I should use?**

**A** Yes. For deeper cuts, especially near the 41mm limit of FCH/DCH saws, stick to the lower end of the recommended RPM range. This helps manage heat build-up and gives you more control to stop periodically and clear out trapped metal shavings or wood debris.