

Tools – Hole Saws

Bi-Metal Hole Saws · Applications



Use High Speed Steel saws with varied cutting teeth for easily cut materials, such as unalloyed steel (up to 101,521 psi strength), non-ferrous and light metals, plastics, plasterboard and light building boards, fiberboard, plywood and wood.

Use High Speed Steel Cobalt 8 saws with fine cutting teeth for cutting metals such as alloyed and non-alloyed steels (up to 145,037 psi strength), high chromium alloyed steels, such as stainless steel, steels resistant to rusts and acids, non-ferrous and light metals.

Features

- Cutting edges of HSS or HSS Co 8
- Alloyed steel 6135 jacket
- Cutting depth up to 1 1/2" (38 mm)
- High rotational precision
- Sturdy construction
- Hole saw and shank in two parts, so hole saws of different diameters can be exchanged and fitted faster
- Positive chipping and cutting angles ensure more aggressive cutting
- Teeth welded onto steel jacket
- HSS hole saws have 5 teeth per inch, Co 8 hole saws have 6 teeth per inch
- Good chip removal
- Slots in the jacket side aid in removal of cutouts
- Exchangeable centering drill
- Right-hand cutting
- Arbors are sold separately

Ruko Hole Saws Selection Guide								
Part Number High Speed Steel	Price	Part Number High Speed Steel Cobalt 8	Price	Diameter (mm) A	Diameter (inch) A	Conduit Size	Pipe Size (inch)	Arbor Holders
106014	<-->	126014	<-->	14	9/16	–	–	A1 / A5
106016	<-->	126016	<-->	16	5/8	–	–	A1 / A5
106017	<-->	not available	–	17	11/16	–	–	A1 / A5
106019	<-->	126019	<-->	19	3/4	–	3/8	A1 / A5
106020	<-->	not available	–	20	25/32	–	–	A1 / A5
106021	<-->	not available	–	21	13/16	–	–	A1 / A5
106022	<-->	126022	<-->	22	7/8	1/2	1/2	A1 / A5
106024	<-->	126024	<-->	24	15/16	–	–	A1 / A5
106025	<-->	126025	<-->	25	1	–	–	A1 / A5
106027	<-->	126027	<-->	27	1 1/16	–	–	A1 / A5
106029	<-->	126029	<-->	29	1 1/8	3/4	3/4	A1 / A5
106030	<-->	126030	<-->	30	1 3/16	–	–	A1 / A5
106032	<-->	126032	<-->	32	1 1/4	–	–	A2 / A6
106033	<-->	not available	–	33	1 5/16	–	–	A2 / A6
106035	<-->	126035	<-->	35	1 3/8	1	1	A2 / A6
106036	<-->	not available	–	36	1 13/32	–	–	A2 / A6
106037	<-->	not available	–	37	1 7/16	–	–	A2 / A6
106038	<-->	126038	<-->	38	1 1/2	–	–	A2 / A6
106040	<-->	not available	–	40	1 9/16	–	–	A2 / A6
106041	<-->	126041	<-->	41	1 5/8	–	–	A2 / A6
106043	<-->	126043	<-->	43	1 11/16	–	–	A2 / A6
106044	<-->	126044	<-->	44	1 3/4	1 1/4	1 1/4	A2 / A6
106046	<-->	126046	<-->	46	1 13/16	–	–	A2 / A6
106048	<-->	126048	<-->	48	1 7/8	–	–	A2 / A6
106051	<-->	126051	<-->	51	2	1 1/2	1 1/2	A2 / A6
106052	<-->	not available	–	52	2 1/16	–	–	A2 / A6
106054	<-->	126054	<-->	54	2 1/8	–	–	A2 / A6
106055	<-->	not available	–	55	2 11/64	–	–	A2 / A6
106057	<-->	126057	<-->	57	2 1/4	–	–	A2 / A6
106059	<-->	not available	–	59	2 5/16	–	–	A2 / A6

Tools – Hole Saws

Dimensions



Important Operating Notes

- These saws are unsuitable for hammer drill operation
- Only slight pressure required to start drilling
- Drill with light, steady pressure
- Avoid pendulum movements while drilling
- Follow table of cutting speeds
- Use cooling agents recommended for material
- Arbors are sold separately

*Note: For pushbuttons, use RUKO knockout punch.
See page 33-5 for selection.*

Ruko Hole Saws Selection Guide, continued								
Part Number High Speed Steel	Price	Part Number High Speed Steel Cobalt 8	Price	Diameter (mm) A	Diameter (inch) A	Conduit Size	Pipe Size (inch)	For Arbor Holders
106060	<-->	126060	<-->	60	2 3/8	–	–	A2 / A6
106063	<-->	not available	–	63	2 15/32	–	–	A2 / A6
106064	<-->	126064	<-->	64	2 1/2	2	2	A2 / A6
106065	<-->	not available	–	65	2 9/16	–	–	A2 / A6
106067	<-->	126067	<-->	67	2 5/8	–	–	A2 / A6
106068	<-->	not available	–	68	2 11/16	–	–	A2 / A6
106070	<-->	126070	<-->	70	2 3/4	–	–	A2 / A6
106073	<-->	126073	<-->	73	2 7/8	–	–	A2 / A6
106076	<-->	126076	<-->	76	3	2 1/2	2 1/2	A2 / A6
106079	<-->	126079	<-->	79	3 1/8	–	–	A2 / A6
106083	<-->	126083	<-->	83	3 1/4	–	–	A2 / A6
106086	<-->	126086	<-->	86	3 3/8	–	–	A2 / A6
106089	<-->	126089	<-->	89	3 1/2	–	–	A2 / A6
106092	<-->	126092	<-->	92	3 5/8	3	3	A2 / A6
106095	<-->	126095	<-->	95	3 3/4	–	–	A2 / A6
106098	<-->	126098	<-->	98	3 7/8	–	–	A2 / A6
106102	<-->	126102	<-->	102	4	–	–	A2 / A6
106105	<-->	not available	–	105	4 1/8	3 1/2	3 1/2	A2 / A6
106108	<-->	126108	<-->	108	4 1/4	–	–	A2 / A6
106111	<-->	126111	<-->	111	4 3/8	–	–	A2 / A6
106114	<-->	126114	<-->	114	4 1/2	4	4	A2 / A6
106121	<-->	126121	<-->	121	4 3/4	–	–	A2 / A6
106127	<-->	126127	<-->	127	5	–	–	A2 / A6
106133	<-->	not available	–	133	5 1/4	–	–	A2 / A6
106140	<-->	126140	<-->	140	5 1/2	–	5	A2 / A6
106152	<-->	126152	<-->	152	6	–	–	A2 / A6
106160	<-->	126160	<-->	160	6 5/16	–	–	A2 / A6
106168	<-->	126168	<-->	168	6 5/8	–	–	A2 / A6
106177	<-->	not available	–	177	6 31/32	–	–	A2 / A6
106200	<-->	126200	<-->	210	8 1/4	–	–	A2 / A6

Tools – Hole Saws

Arbor Holders with Pilot Drill

To select the correct arbor size, find the arbors that are compatible with your hole saw diameter.

From those, choose one with a shank size that fits into your drill chuck.

Arbors include HSS pilot bit, ejector spring and 4 mm allen wrench.



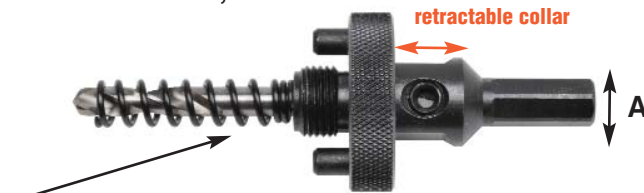
Ruko Arbor Holders with Pilot Drill for HSS Hole Saws						
HSS Part Number	Price	Hole Saws Diameter (inch)	Arbor Holders Type	Shank Diameter (inch) A	Shank Shape	Thread
106201	<-->	9/16" - 1 3/16"	A1	7/16"	Hex	1/2" x 20
106202	<-->	1 1/4" - 8 1/4"	A2	7/16"	Hex	5/8" x 18
106209	<-->	1 1/4" - 8 1/4"	A6	3/8"	Hex	5/8" x 18
106210	<-->	9/16" - 1 3/16"	A5	3/8"	Hex	1/2" x 20

Part Numbers 106201, 106210



Pilot drill: 6.35 mm (1/4") x 82 mm (3 1/4")

Part Numbers 106202, 106209



Pilot drill: 6.35 mm (1/4") x 82 mm (3 1/4")

Pilot Drills



Ruko Pilot Drill for HSS and HSS Co8 Hole Saws					
HSS Part Number	Price	HSS Cobalt Part Number	Price	Arbor Holders Type	Description
106206	<-->	126206	<-->	A1, A2, A5, A6	Pilot drill HSS / HSS Co 5, ground, Ø 6.35 mm x 82 mm and split point in accordance with DIN 1412 C



Tools – Hole Saws

Recommended Cutting Speeds

Ruko Hole Saws Recommended Cutting Speeds									
Material		High carbon structural steel up to 101,521 psi	Alloyed steel up to 145,037 psi	Cast iron over 36,259 psi	CuZn alloy	Aluminium alloy up to 11% Silicon	Thermo-plastics	Duro-plastics	Wood
Vc = m/min		30	20	10	35	30	20	15	40
Coolant		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø inch	Ø mm	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
9/16	14	682	455	227	796	682	455	341	910
5/8	16	597	398	199	697	597	398	299	796
11/16	17	562	375	187	656	562	375	281	749
3/4	19	503	335	168	587	503	335	251	670
25/32	20	477	318	159	557	477	318	239	637
13/16	21	455	303	152	531	455	303	227	607
7/8	22	434	290	145	507	434	290	217	579
15/16	24	398	265	133	464	398	265	199	531
1	25	382	255	127	446	382	255	191	510
1 1/16	27	354	236	118	413	354	236	177	472
1 1/8	29	329	220	110	384	329	220	165	439
1 3/16	30	318	212	106	372	318	212	159	425
1 1/4	32	299	199	100	348	299	199	149	398
1 5/16	33	290	193	97	338	290	193	145	386
1 3/8	35	273	182	91	318	273	182	136	364
1 13/32	36	265	177	88	310	265	177	133	354
1 7/16	37	258	172	86	301	258	172	129	344
1 1/2	38	251	168	84	293	251	168	126	335
1 9/16	40	239	159	80	279	239	159	119	318
1 5/8	41	233	155	78	272	233	155	117	311
1 11/16	43	222	148	74	259	222	148	111	296
1 3/4	44	217	145	72	253	217	145	109	290
1 13/16	46	208	138	69	242	208	138	104	277
1 7/8	48	199	133	66	232	199	133	100	265
2	51	187	125	62	219	187	125	94	250
2 1/16	52	184	122	61	214	184	122	92	245
2 1/8	54	177	118	59	206	177	118	88	236
2 11/64	55	174	116	58	203	174	116	87	231
2 1/4	57	168	112	56	196	168	112	84	223
2 5/16	59	162	108	54	189	162	108	81	216
2 3/8	60	159	106	53	186	159	106	80	212
2 15/32	63	152	101	51	177	152	101	76	202
2 1/2	64	149	100	50	174	149	100	75	199
2 9/16	65	147	98	49	171	147	98	73	196
2 5/8	67	143	95	48	166	143	95	71	190
2 11/16	68	141	94	47	164	141	94	70	187
2 3/4	70	136	91	45	159	136	91	68	182
2 7/8	73	131	87	44	153	131	87	65	175
3	76	126	84	42	147	126	84	63	168
3 1/8	79	121	81	40	141	121	81	60	161
3 1/4	83	115	77	38	134	115	77	58	153
3 3/8	86	111	74	37	130	111	74	56	148
3 1/2	89	107	72	36	125	107	72	54	143



Tools – Hole Saws – Recommended Cutting Speeds, continued

Ruko Hole Saws Recommended Cutting Speeds, continued									
Material		High carbon structural steel up to 101,521 psi	Alloyed steel up to 145,037 psi	Cast iron over 36,259 psi	CuZn alloy	Aluminium alloy up to 11% Silicon	Thermo-plastics	Duro-plastics	Wood
Vc = m/min		30	20	10	35	30	20	15	40
Coolant		Cutting spray	Cutting spray	Compressed air	Compressed air	Cutting spray	Water	Compressed air	Compressed air
Ø inch	Ø mm	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.	r.p.m.
3 5/8	92	104	69	35	121	104	69	52	138
3 3/4	95	101	67	34	117	101	67	50	134
3 7/8	98	97	65	32	114	97	65	49	130
4	102	94	62	31	109	94	62	47	125
4 1/8	105	91	61	30	106	91	61	45	121
4 1/4	108	88	59	29	103	88	59	44	118
4 3/8	111	86	57	29	100	86	57	43	115
4 1/2	114	84	56	28	98	84	56	42	112
4 3/4	121	79	53	26	92	79	53	39	105
5	127	75	50	25	88	75	50	38	100
5 1/4	133	72	48	24	84	72	48	36	96
5 1/2	140	68	45	23	80	68	45	34	91
6	152	63	42	21	73	63	42	31	84
6 5/16	160	60	40	20	70	60	40	30	80
6 5/8	168	57	38	19	66	57	38	28	76
6 31/32	177	54	36	18	63	54	36	27	72
8 1/4	210	45	30	15	53	45	30	23	61

Note: V_c equals the recommended maximum linear speed of hole saw for each material.