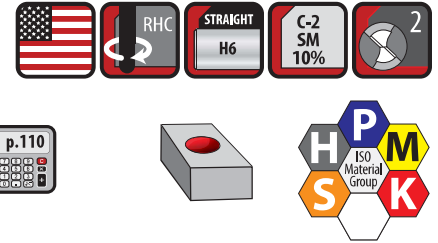


COMBINATION DRILL & COUNTERSINKS

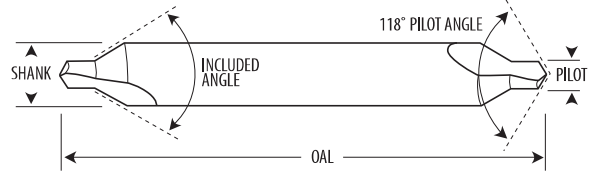


Also known as Center Drills

Multipurpose tool: drill, chamfer, deburr & countersink



Thick body and small point promote sturdiness and consistency, making the tool suitable for use in all materials


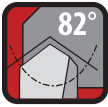
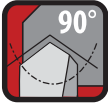


DIAMETER TOLERANCE: +0.0000 / -0.0005" INCLUDED ANGLE : ±1.0°











Included Angle	SIZE	Pilot DIA	Shank	OAL	Length	Bright	TiN	AlTiN
	00	0.0265	1/8	1-1/2	Regular	300-001001	300-001501	300-001001B
	0	1/32	1/8	1-1/2	Regular	300-001002	300-001502	300-001002B
	1	3/64	1/8	1-1/2	Regular	300-001003	300-001503	300-001003B
	2	5/64	3/16	1-7/8	Regular	300-001004	300-001504	300-001004B
	3	7/64	1/4	2	Regular	300-001005	300-001505	300-001005B
	4	1/8	5/16	2-1/8	Regular	300-001006	300-001506	300-001006B
	5	3/16	7/16	2-3/4	Regular	300-001007	300-001507	300-001007B
	6	7/32	1/2	3	Regular	300-001008	300-001508	300-001008B
	7	1/4	5/8	3-1/4	Regular	300-001009	300-001509	300-001009B
	8	5/16	3/4	3-1/2	Regular	300-001010	300-001510	300-001010B
	00	0.0265	1/8	1-1/2	Regular	300-002001	—	300-002001B
	0	1/32	1/8	1-1/2	Regular	300-002002	—	300-002002B
	1	3/64	1/8	1-1/2	Regular	300-002003	—	300-002003B
	2	5/64	3/16	1-7/8	Regular	300-002004	—	300-002004B
	3	7/64	1/4	2	Regular	300-002005	—	300-002005B
	4	1/8	5/16	2-1/8	Regular	300-002006	—	300-002006B
	5	3/16	7/16	2-3/4	Regular	300-002007	—	300-002007B
	6	7/32	1/2	3	Regular	300-002008	—	300-002008B
	7	1/4	5/8	3-1/4	Regular	300-002009	—	300-002009B
	8	5/16	3/4	3-1/2	Regular	300-002010	—	300-002010B
	00	0.0265	1/8	1-1/2	Regular	300-003001	—	300-003001B
	0	1/32	1/8	1-1/2	Regular	300-003002	—	300-003002B
	1	3/64	1/8	1-1/2	Regular	300-003003	—	300-003003B
	2	5/64	3/16	1-7/8	Regular	300-003004	—	300-003004B
	3	7/64	1/4	2	Regular	300-003005	—	300-003005B
	4	1/8	5/16	2-1/8	Regular	300-003006	—	300-003006B
	5	3/16	7/16	2-3/4	Regular	300-003007	—	300-003007B
6	7/32	1/2	3	Regular	300-003008	—	300-003008B	
7	1/4	5/8	3-1/4	Regular	300-003009	—	300-003009B	
8	5/16	3/4	3-1/2	Regular	300-003010	—	300-003010B	

COMBINATION DRILL & COUNTERSINKS CONTINUED

DIAMETER TOLERANCE: +0.0000 / -0.0005" INCLUDED ANGLE : ±1.0°

Included Angle	SIZE	Pilot DIA	Shank	OAL	Length	Bright	TiN	AlTiN
	1	3/64	1/8	4	Long	300-005001	300-005501	300-005001B
	2	5/64	3/16	4	Long	300-005002	300-005502	300-005002B
	3	7/64	1/4	4	Long	300-005003	300-005503	300-005003B
	4	1/8	5/16	4	Long	300-005004	300-005504	300-005004B
	5	3/16	7/16	6	Long	300-005005	300-005505	300-005005B
	6	7/32	1/2	6	Long	300-005006	300-005506	300-005006B
	7	1/4	5/8	6	Long	300-005007	300-005507	300-005007B
	8	5/16	3/4	6	Long	300-005008	300-005508	300-005008B
	1	3/64	1/8	4	Long	300-006001	—	300-006001B
	2	5/64	3/16	4	Long	300-006002	—	300-006002B
	3	7/64	1/4	4	Long	300-006003	—	300-006003B
	4	1/8	5/16	4	Long	300-006004	—	300-006004B
	5	3/16	7/16	6	Long	300-006005	—	300-006005B
	6	7/32	1/2	6	Long	300-006006	—	300-006006B
	7	1/4	5/8	6	Long	300-006007	—	300-006007B
	8	5/16	3/4	6	Long	300-006008	—	300-006008B
	1	3/64	1/8	4	Long	300-007001	—	300-007001B
	2	5/64	3/16	4	Long	300-007002	—	300-007002B
	3	7/64	1/4	4	Long	300-007003	—	300-007003B
	4	1/8	5/16	4	Long	300-007004	—	300-007004B
	5	3/16	7/16	6	Long	300-007005	—	300-007005B
	6	7/32	1/2	6	Long	300-007006	—	300-007006B
	7	1/4	5/8	6	Long	300-007007	—	300-007007B
	8	5/16	3/4	6	Long	300-007008	—	300-007008B

DRILLING RECOMMENDATIONS - COMBINATION DRILL & COUNTERSINKS

Workpiece Material Group	Hardness	SFM	Drill Point Depth (DPD)					
			(DPD) Pilot Diameter					
			1/32	1/16	1/8	1/4	3/8	1/2
Steels Free Machining & Low Carbon: 10XX, 11XX, 12XX 12LXX, ASTM A27 ASTM A36 Medium/High Carbon Steels, Alloy Steels & Easy to Machine Tool: 13XX, 41XX, 43XX, 51XX, 86XX, 93XX	 ≤ 28 Rc	175						
	 28-38 Rc	165						
Tool & Die Steels A2, H13, L6, P20, S7	 28-44 Rc	150						
Stainless Steel Easy to Machine, 430F, 301, 303, 410, 416 Annealed, 420F, 430, 430F Moderately Difficult to Machine, Nitronic 50, Nitronic 60, 301, 303 304, 304L Incoloy 27-7MO, 316 316L, 321, 347	 ≤ 28 Rc	125	0.0005	0.0010	0.0015	0.0030	0.0040	0.0050
	 > 28 Rc	60						
Super Alloys High Temp, Nimonics, Inconel, Monel, Hastelloy Titanium: Ti 3Al-2.5V, Ti 6Al-4V Ti 10V-2Fe-3Al	 ≤ 42 Rc	40						
	 ≤ 42 Rc	80						
Hardened Materials Gray: SAE J431, ASTM A48 Ductile & Malleable, ASTM A536, ASTM 897, ASTM A47, ASTM A220 ASTM A602	 35-45 Rc	50						
	 ≤ 240 HB	275						
	 > 240 HB	175						