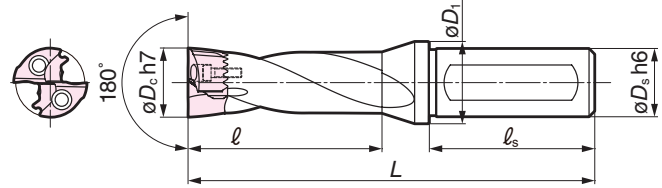
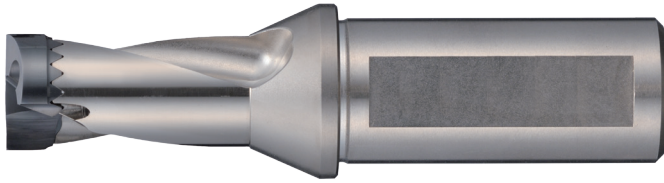


# 1.5X DIAMETER SMD

**NEW**

## SMD Replaceable Tip Drill

### 1.5X Diameter



### ■ SMD INCH BODIES (1.5X Diameter)

○ Available 1st Quarter 2017

Body No.	Stock	Drill Tip Diameter (inch / mm)		$\phi D_s$	$\phi D_1$	L	$\ell_1$ Max Depth	$\ell_3$	Screw	Wrench
SMDH047S	○	0.4688 - 0.4917	12.00 - 12.49	0.625	0.7874	3.4843	1.0039	1.875	BXD02208IP	TRDR08IP
SMDH049S	○	0.4921 - 0.5114	12.50 - 12.99	0.625	0.7874	3.4961	1.0157	1.875	BXD02208IP	TRDR08IP
SMDH049S	○	0.5118 - 0.5311	13.00 - 13.49	0.625	0.7874	3.5433	1.0630	1.875	BXD02208IP	TRDR08IP
SMDH055S	○	0.5315 - 0.5709	13.50 - 14.50	0.750	0.7874	3.6969	1.1929	2.000	BXD02208IP	TRDR08IP
SMDH059S	○	0.5713 - 0.6102	14.51 - 15.50	0.750	0.9843	3.8307	1.2717	2.000	BXD02208IP	TRDR08IP
SMDH063S	○	0.6106 - 0.6496	15.51 - 16.50	0.750	0.9843	3.9331	1.3740	2.000	BXD02509IP	TRDR10IP
SMDH067S	○	0.6500 - 0.6890	16.51 - 17.50	0.750	0.9843	3.9921	1.4331	2.000	BXD02509IP	TRDR10IP
SMDH071S	○	0.6894 - 0.7283	17.51 - 18.50	0.750	0.9843	4.0945	1.5354	2.000	BXD02509IP	TRDR10IP
SMDH075S	○	0.7287 - 0.7677	18.51 - 19.50	1.000	1.1811	4.3858	1.5906	2.250	BXD03011IP	TRDR15IP
SMDH079S	○	0.7681 - 0.8070	19.51 - 20.50	1.000	1.1811	4.4882	1.6929	2.250	BXD03011IP	TRDR15IP
SMDH083S	○	0.8074 - 0.8465	20.51 - 21.50	1.000	1.1811	4.5472	1.7520	2.250	BXD03011IP	TRDR15IP
SMDH087S	○	0.8469 - 0.8976	21.51 - 22.80	1.000	1.1811	4.6102	1.8150	2.250	BXD03512IP	TRDR15IP
SMDH091S	○	0.8980 - 0.9370	22.81 - 23.80	1.000	1.1811	4.6457	1.8504	2.250	BXD03512IP	TRDR15IP
SMDH096S	○	0.9374 - 0.9764	23.81 - 24.80	1.000	1.4567	4.8937	1.9409	2.250	BXD03512IP	TRDR15IP
SMDH100S	○	0.9768 - 1.0157	24.81 - 25.80	1.250	1.4567	4.9094	1.9567	2.375	BXD04014IP	TRDR20IP
SMDH104S	○	1.0161 - 1.0551	25.81 - 26.80	1.250	1.4567	5.0118	2.0591	2.375	BXD04014IP	TRDR20IP
SMDH107S	○	1.0555 - 1.0945	26.81 - 27.80	1.250	1.4567	5.0315	2.0787	2.375	BXD04014IP	TRDR20IP
SMDH112S	○	1.0949 - 1.1339	27.81 - 28.80	1.250	1.4567	5.0945	2.1417	2.375	BXD04515IP	TRDR25IP
SMDH115S	○	1.1343 - 1.1732	28.81 - 29.80	1.250	1.4567	5.1496	2.1969	2.375	BXD04515IP	TRDR25IP
SMDH118S	○	1.1736 - 1.2125	29.81 - 30.80	1.250	1.4567	5.2520	2.2992	2.375	BXD04515IP	TRDR25IP

### ■ SMD METRIC BODIES (1.5X Diameter)

Body No.	Stock	Drill Tip Diameter (inch / mm)		$\phi D_s$	$\phi D_1$	L	$\ell_1$ Max Depth	$\ell_3$	Screw	Wrench
SMDH120S	○	0.4688 - 0.4917	12.00 - 12.49	16.0	20.0	88.5	25.5	48	BXD02208IP	TRDR08IP
SMDH125S	○	0.4921 - 0.5114	12.50 - 12.99	16.0	20.0	88.8	25.8	48	BXD02208IP	TRDR08IP
SMDH130S	○	0.5118 - 0.5311	13.00 - 13.49	16.0	20.0	90.0	27.0	48	BXD02208IP	TRDR08IP
SMDH140S	○	0.5315 - 0.5709	13.50 - 14.50	16.0	20.0	93.9	30.9	48	BXD02208IP	TRDR08IP
SMDH150S	○	0.5713 - 0.6102	14.51 - 15.50	20.0	25.0	97.3	32.3	50	BXD02208IP	TRDR08IP
SMDH160S	○	0.6106 - 0.6496	15.51 - 16.50	20.0	25.0	99.9	34.9	50	BXD02509IP	TRDR10IP
SMDH170S	○	0.6500 - 0.6890	16.51 - 17.50	20.0	25.0	101.4	36.4	50	BXD02509IP	TRDR10IP
SMDH180S	○	0.6894 - 0.7283	17.51 - 18.50	20.0	25.0	104.0	39.0	50	BXD02509IP	TRDR10IP
SMDH190S	○	0.7287 - 0.7677	18.51 - 19.50	25.0	30.0	111.4	40.4	56	BXD03011IP	TRDR15IP
SMDH200S	○	0.7681 - 0.8070	19.51 - 20.50	25.0	30.0	114.0	43.0	56	BXD03011IP	TRDR15IP
SMDH210S	○	0.8074 - 0.8465	20.51 - 21.50	25.0	30.0	115.5	44.5	56	BXD03011IP	TRDR15IP
SMDH220S	○	0.8469 - 0.8976	21.51 - 22.80	25.0	30.0	117.1	46.1	56	BXD03512IP	TRDR15IP
SMDH230S	○	0.8980 - 0.9370	22.81 - 23.80	25.0	30.0	118.0	47.0	56	BXD03512IP	TRDR15IP
SMDH240S	○	0.9374 - 0.9764	23.81 - 24.80	32.0	37.0	124.3	49.3	60	BXD03512IP	TRDR15IP
SMDH250S	○	0.9768 - 1.0157	24.81 - 25.80	32.0	37.0	124.7	49.7	60	BXD04014IP	TRDR20IP
SMDH260S	○	1.0161 - 1.0551	25.81 - 26.80	32.0	37.0	127.3	52.3	60	BXD04014IP	TRDR20IP
SMDH270S	○	1.0555 - 1.0945	26.81 - 27.80	32.0	37.0	127.8	52.8	60	BXD04014IP	TRDR20IP
SMDH280S	○	1.0949 - 1.1339	27.81 - 28.80	32.0	37.0	129.4	54.4	60	BXD04515IP	TRDR25IP
SMDH290S	○	1.1343 - 1.1732	28.81 - 29.80	32.0	37.0	130.8	55.8	60	BXD04515IP	TRDR25IP
SMDH300S	○	1.1736 - 1.2125	29.81 - 30.80	32.0	37.0	133.4	58.4	60	BXD04515IP	TRDR25IP

Tips for 1.5XD Diameter on the next page





## SMD Replaceable Tip Drill

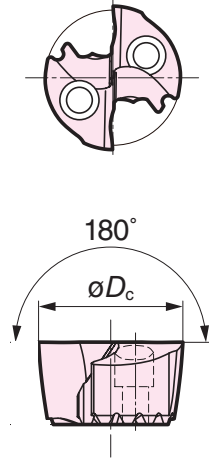
# 1.5X Diameter SMD

## 1.5X Diameter

### ■ SMD Drills Tips (1.5X Diameter)

1.5XD Flat Drill Tip	Stock	øDc	Body
SMDT04688MFS-ACX70	○	15/32	0.4688
SMDT1200MFS-ACX70	○	12.0mm	0.4724
SMDT04844MFS-ACX70	○	31/64	0.4844
SMDT1250MFS-ACX70	○	12.5mm	0.4921
SMDT05000MFS-ACX70	○	1/2	0.5000
SMDT1300MFS-ACX70	○	13.0mm	0.5118
SMDT05156MFS-ACX70	○	33/64	0.5156
SMDT05312MFS-ACX70	○	17/32	0.5312
SMDT1350MFS-ACX70	○	13.5mm	0.5315
SMDT05469MFS-ACX70	○	35/64	0.5469
SMDT1400MFS-ACX70	○	14.0mm	0.5512
SMDT05625MFS-ACX70	○	9/16	0.5625
SMDT1450MFS-ACX70	○	14.5mm	0.5709
SMDT05781MFS-ACX70	○	37/64	0.5781
SMDT1500MFS-ACX70	○	15.0mm	0.5906
SMDT05938MFS-ACX70	○	19/32	0.5938
SMDT06094MFS-ACX70	○	39/64	0.6094
SMDT1550MFS-ACX70	○	15.5mm	0.6102
SMDT06250MFS-ACX70	○	5/8	0.6250
SMDT1600MFS-ACX70	○	16.0mm	0.6300
SMDT06406MFS-ACX70	○	41/64	0.6406
SMDT1650MFS-ACX70	○	16.5mm	0.6496
SMDT06563MFS-ACX70	○	21/32	0.6563
SMDT1700MFS-ACX70	○	17.0mm	0.6693
SMDT06719MFS-ACX70	○	43/64	0.6719
SMDT06875MFS-ACX70	○	11/16	0.6875
SMDT1750MFS-ACX70	○	17.5mm	0.6890
SMDT07031MFS-ACX70	○	45/64	0.7031
SMDT1800MFS-ACX70	○	18.0mm	0.7087
SMDT07188MFS-ACX70	○	23/32	0.7188
SMDT1850MFS-ACX70	○	18.5mm	0.7283
SMDT07344MFS-ACX70	○	47/64	0.7344
SMDT1900MFS-ACX70	○	19.0mm	0.7480
SMDT07500MFS-ACX70	○	3/4	0.7500
SMDT07656MFS-ACX70	○	49/64	0.7656
SMDT1950MFS-ACX70	○	19.5mm	0.7677
SMDT07813MFS-ACX70	○	25/32	0.7813
SMDT2000MFS-ACX70	○	20.0mm	0.7874
SMDT07969MFS-ACX70	○	51/64	0.7969

○ Available 1st Quarter 2017



1.5XD Flat Drill Tip	Stock	øDc	Body
SMDT2050MFS-ACX70	○	20.5mm	0.8071
SMDT08125MFS-ACX70	○	13/16	0.8125
SMDT2100MFS-ACX70	○	21.0mm	0.8268
SMDT08281MFS-ACX70	○	53/64	0.8281
SMDT08438MFS-ACX70	○	27/32	0.8438
SMDT2150MFS-ACX70	○	21.5mm	0.8465
SMDT08594MFS-ACX70	○	55/64	0.8594
SMDT2200MFS-ACX70	○	22.0mm	0.8661
SMDT08750MFS-ACX70	○	7/8	0.8750
SMDT2250MFS-ACX70	○	22.5mm	0.8858
SMDT08906MFS-ACX70	○	57/64	0.8906
SMDT2300MFS-ACX70	○	23.0mm	0.9055
SMDT09062MFS-ACX70	○	29/32	0.9062
SMDT09219MFS-ACX70	○	59/64	0.9219
SMDT2350MFS-ACX70	○	23.5mm	0.9252
SMDT09375MFS-ACX70	○	15/16	0.9375
SMDT2400MFS-ACX70	○	24.0mm	0.9449
SMDT09531MFS-ACX70	○	61/64	0.9531
SMDT2450MFS-ACX70	○	24.5mm	0.9646
SMDT09687MFS-ACX70	○	31/32	0.9687
SMDT2500MFS-ACX70	○	25.0mm	0.9843
SMDT09844MFS-ACX70	○	63/64	0.9844
SMDT10000MFS-ACX70	○	1	1.0000
SMDT2550MFS-ACX70	○	25.5mm	1.0039
SMDT10156MFS-ACX70	○	1 1/64	1.0156
SMDT2600MFS-ACX70	○	26.0mm	1.0236
SMDT10312MFS-ACX70	○	1 1/32	1.0312
SMDT2650MFS-ACX70	○	26.5mm	1.0433
SMDT10469MFS-ACX70	○	1 3/64	1.0469
SMDT10625MFS-ACX70	○	1 1/16	1.0625
SMDT2700MFS-ACX70	○	27.0mm	1.0630
SMDT10781MFS-ACX70	○	1 5/64	1.0781
SMDT2750MFS-ACX70	○	27.5mm	1.0827
SMDT10937MFS-ACX70	○	1 3/32	1.0937
SMDT2800MFS-ACX70	○	28.0mm	1.1024
SMDT11094MFS-ACX70	○	1 7/64	1.1094
SMDT2850MFS-ACX70	○	28.5mm	1.1220
SMDT11250MFS-ACX70	○	1 1/8	1.1250
SMDT11406MFS-ACX70	○	1 9/64	1.1406
SMDT2900MFS-ACX70	○	29.0mm	1.1417
SMDT11562MFS-ACX70	○	1 5/32	1.1562
SMDT2950MFS-ACX70	○	29.5mm	1.1614
SMDT11719MFS-ACX70	○	1 11/64	1.1719
SMDT3000MFS-ACX70	○	30.0mm	1.1811
SMDT11875MFS-ACX70	○	1 3/16	1.1875

○ Available 1st Quarter 2017

\*1.5xD Drills only fit SMDT-MFS style tips.

### ■ Recommended Speeds & Feeds - 1.5XD Speed: v (SFM) / Feed: f (IPR)

Drill Dia.	Soft Steel	General Steel	Hardened Steel	Stainless Steel	Gray Cast Iron	Ductile Cast Iron	Aluminum Alloy
øDc	Min - Optimum - Max	Min - Optimum - Max	Min - Optimum - Max	Min - Optimum - Max	Min - Optimum - Max	Min - Optimum - Max	Min - Optimum - Max
~0.6299	Vc 200 - 260 - 330 f .0039 - .0059 - .0079	Vc 160 - 230 - 300 f .009 - .0059 - .0079	Vc 130 - 200 - 260 f .0019 - .0039 - .0059	Vc 130 - 200 - 260 f .0019 - .0039 - .0059	Vc 160 - 230 - 300 f .0039 - .0059 - .0079	Vc 160 - 215 - 260 f .0039 - .0059 - .0079	Vc 330 - 500 - 650 f .0098 - .012 - .014
~0.7874	Vc 200 - 260 - 330 f .0039 - .0059 - .0079	Vc 160 - 230 - 300 f .0039 - .0059 - .0079	Vc 130 - 200 - 260 f .0019 - .0039 - .0059	Vc 160 - 230 - 300 f .0019 - .0039 - .0059	Vc 160 - 230 - 300 f .0039 - .0059 - .0079	Vc 160 - 215 - 260 f .0039 - .0059 - .0079	Vc 330 - 500 - 650 f .012 - .014 - .016
~1.212	Vc 200 - 260 - 330 f .0059 - .0079 - .0098	Vc 160 - 230 - 300 f .0059 - .0079 - .0098	Vc 130 - 200 - 260 f .0039 - .0059 - .0079	Vc 160 - 230 - 300 f .0019 - .0039 - .0059	Vc 160 - 230 - 300 f .0059 - .0079 - .0098	Vc 160 - 215 - 260 f .0059 - .0079 - .0098	Vc 330 - 500 - 650 f .014 - .016 - .018

#### Note:

1. The recommended hole depth is 2 x drill diameter. The depth is measured from the highest point of the hole on drilling in inclined surfaces.
2. The recommended cutting conditions are those for drilling on flat horizontal surfaces.
3. Adjust the feed rate according to the inclination angle when drilling on an inclined surface.
4. Set the feed rate at 70% or lower when the inclination angle is 30° or less.
5. Set the feed rate at 50% or lower when the inclination angle is larger than 30°.
6. This product is a drilling tool. Do not use it for traversing or helical milling.

