



G-DEX INDEXABLE GUN DRILLS

Diameter range 12.00 mm – 33.30 mm (0.472 in – 1.311 in)



G-Dex Indexable Gun Drills

Diameter range: 12.00 mm – 33.30 mm (0.472 in – 1.311 in)

Sunnen offers gun drilling tools ranging from 12.00 mm to 33.30 mm (0.472 in. to 1.311 in.) diameter with several different carbide grades, coatings and cutting edge geometry options.

Advantages of Sunnen G-Dex Series Indexable Gun Drill Tools

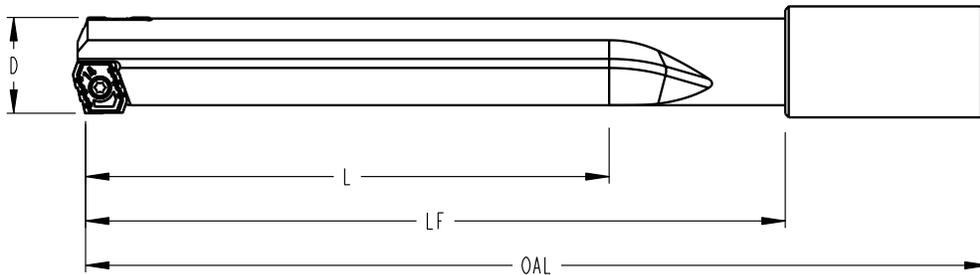
- User-friendly, indexable design allows high-feed operation
- Feed rate up to 3-5 times faster than conventional gun drills
- Ideally suited for gun drilling and CNC machines with high-pressure coolant systems
- No regrinding needed
- Indexable inserts with advanced chip breaker geometries for optimum chip control
- Premium coated indexable inserts and guide pads provide enhanced tool performance
- Optional extended guide pads available for cross-hole drilling
- Stocking programs available

Drill Head Part Numbering Code Example: Metric: GDM01200L1234A5 Imperial: GD01200L123S01

GD		M		2000		L1234		S01	
G-Dex Prefix		Units		Bore Size		Overall Length		Driver # or Special #	
Description	Code	Description	Code	Description	Code	Description	Code	Description	Code
G-Dex	GD	Metric	M	(##.## mm)	####	(#### mm)	L####	Driver	A5
		Imperial	'blank'	(##.### in)	####	(### in)	L###	Special Instance	S##

For any non-standard driver, cross-hole configuration, or any other alteration; an S## suffix must be used. The number represents the next sequential number available for that particular diameter and length and will be determined by the product engineer. Insert numbering does not include geometry, grade, or coating. Pad numbering does not include coating.

G-Dex - Tool Requests



The following is required for any new tooling request:

- 1) Define the lengths: D, L, LF, OAL. OAL must be to the nearest 1mm or 1 inch.
- 2) Determine if pad configuration is standard or the cross-hole option.
- 3) Select a driver from provided the chart.

If the driver is not listed, customer must specify all driver details.

G-Dex Range Components

Drill ϕ	Item Code	Components	
'D'		Insert	Pad
12.00 - 13.99 mm	GDM_L_[]	BTMDN06P	GPS0418D0110
.472 - .550 in	GD_L_[]		
14.00 - 14.99 mm	GDM_L_[]	BTMDN08P	GPS0418D0130
.551 - .590 in	GD_L_[]		
15.00 - 15.99 mm	GDM_L_[]	BTMDN08P	GPS0618D0140
.591 - .629 in	GD_L_[]		
16.00 - 17.99 mm	GDM_L_[]	BTMDN09P	GPS0618D0150
.630 - .708 in	GD_L_[]		
18.00 - 19.99 mm	GDM_L_[]	BTMDN10P	GPS0618D0170
.709 - .787 in	GD_L_[]		
20.00 - 21.99 mm	GDM_L_[]	BTMDN11P	GPS0618D0190
.787 - .865 in	GD_L_[]		
22.00 - 24.99 mm	GDM_L_[]	BTMDN13P	GPS0618D0210
.866 - .983 in	GD_L_[]		
25.00 - 28.69 mm	GDM_L_[]	BTMDN14P	GPS0618D0240
.984 - 1.129 in	GD_L_[]		
28.70 - 30.99 mm	GDM_L_[]	BTMDN15P	GPS0618D0260
1.130 - 1.220 in	GD_L_[]		
31.00 - 33.30 mm	GDM_L_[]	BTMDN16P	GPS0720DD
1.221 - 1.311 in	GD_L_[]		

Cross-hole Applications

For larger cross-hole applications, a second row of guide pads can be added. The cross-hole pad configuration also includes an additional pad to help stabilize the tool as the insert passes the cross-hole.



G-Dex Spare Parts



Insert

Insert	
Insert	Insert Screw
BTMDN06P	PHSM1349
BTMDN08P	PHSM1326
BTMDN09P	PHSM1326
BTMDN10P	PHSM1328
BTMDN11P	PHSM1329
BTMDN13P	PHSM1330
BTMDN14P	PHSM1330
BTMDN15P	PHSM1364
BTMDN16P	PHSM1364

Ordering Example: BTMDN09PDU1TE.
Standard grade for most materials.



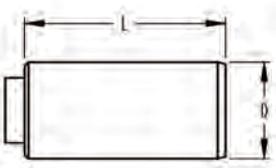
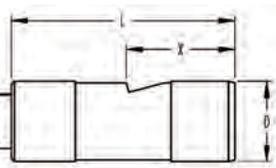
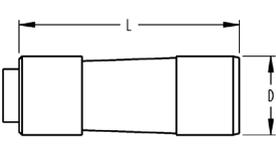
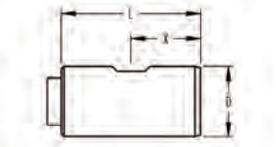
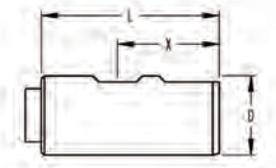
Support Pad

Support Pad	
Solid Pad	Pad Screw
GPS0418D0110	PHSM1349
GPS0418D0130	PHSM1349
GPS0618D0140	PHSM1327
GPS0618D0150	PHSM1327
GPS0618D0170	PHSM1327
GPS0618D0190	PHSM1327
GPS0618D0210	PHSM1327
GPS0618D0240	PHSM1327
GPS0618D0260	PHSM1327
GPS0720DD	PHSM1155

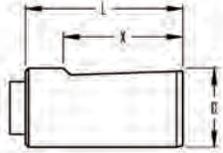
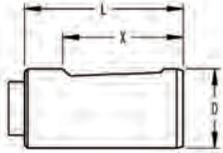
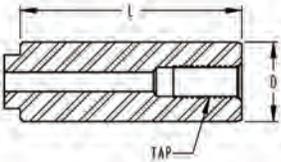
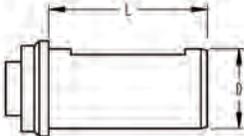
Ordering Example: GPS0618D0150TEL.
Standard grade for most materials.

Screws and wrenches are included with purchase of tool. Inserts, pads, and spare screws are all sold in packs of 10.

Drivers for G-Dex Indexable Gun Drills

	CODE	D (in)	L (in)	X (in) / TAP	D (mm)	L (mm)	X (mm) / TAP
	A0	.6299"	1.890"	-	16	48	-
	A1	.750"	2.047"	-	19.05	52	-
	A2	.7874"	1.969"	-	20	50	-
	A3	.9843"	2.205"	-	25	56	-
	A4	1.000"	2.283"	-	25.4	58	-
	A5	1.250"	2.283"	-	31.75	58	-
	A6	1.2598"	2.362"	-	32	60	-
	A7	1.5748"	2.756"	-	40	70	-
	A8	1.9685"	3.150"	-	50	80	-
	A9	2.4803"	3.543"	-	63	90	-
	B0	.6299"	1.772"	1.220"	16	45	31
	B1	.750"	2.756"	1.339"	19.05	70	34
	B2	.7874"	2.756"	1.339"	20	70	34
	B3	.9843"	2.756"	1.339"	25	70	34
	B4	1.000"	2.756"	1.339"	25.4	70	34
	B5	1.250"	2.756"	1.339"	31.75	70	34
	B6	1.2598"	2.756"	1.339"	32	70	34
	B7	1.500"	2.756"	1.339"	38.1	70	34
	C0	.500"	1.500"	-	12.7	38.1	-
	C1	.6299"	2.756"	-	16	70	-
	C2	.750"	2.756"	-	19.05	70	-
	C3	.7874"	2.756"	-	20	70	-
	C4	1.500"	2.756"	-	38.1	70	-
	D0	.6299"	1.890"	.945"	16	48	24
	D1	.7087"	1.890"	.945"	18	48	24
	D2	.750"	2.047"	1.024"	19.05	52	26
	D3	.7874"	1.969"	.984"	20	50	25
	E0	.9843"	2.205"	1.260"	25	56	32
	E1	1.000"	2.283"	1.417"	25.4	58	36
	E2	1.250"	2.283"	1.417"	31.75	58	36
	E3	1.2598"	2.362"	1.417"	32	60	36
	E4	1.5748"	2.756"	1.575"	40	70	40
	E5	1.9685"	3.150"	1.772"	50	80	45
	E6	2.4803"	3.543"	1.969"	63	90	50

Drivers for G-Dex Indexable Gun Drills

	CODE	D (in)	L (in)	X (in) / TAP	D (mm)	L (mm)	X (mm) / TAP
	F0	.6299"	1.890"	1.417"	16	48	36
	F1	.7087"	1.890"	1.417"	18	48	36
	F2	.7874"	1.969"	1.496"	20	50	38
	F3	.9843"	2.205"	1.732"	25	56	44
	F4	1.000"	2.756"	2.264"	25.4	70	57.5
	F5	1.250"	2.756"	2.264"	31.75	70	57.5
	F6	1.2598"	2.362"	1.890"	32	60	48
	F7	1.500"	2.756"	2.264"	38.1	70	57.5
	F8	1.5748"	2.756"	2.598"	40	70	66
	G0	.6299"	1.890"	1.417"	16	48	36
	G1	.7087"	1.890"	1.417"	18	48	36
	G2	.7874"	1.969"	1.496"	20	50	38
	G3	.9843"	2.205"	1.732"	25	56	44
	G4	1.000"	2.756"	2.264"	25.4	70	57.5
	G5	1.250"	2.756"	2.264"	31.75	70	57.5
	G6	1.2598"	2.362"	1.890"	32	60	48
	G7	1.500"	2.756"	2.264"	38.1	70	57.5
	G8	1.5748"	2.756"	2.598"	40	70	66
	H0	.500"	1.969"	-	12.7	50	M6 x 0.5
	H1	.6299"	3.150"	-	16	80	M10 x 1.0
	H2	.9843"	3.937"	-	25	100	M16 x 1.5
	H3	1.000"	3.937"	-	25.4	100	M16 x 1.5
	H4	1.4173"	4.724"	-	36	120	M24 x 1.5
	J0	.7874"	1.969"	-	20	50	-
	J1	.9843"	2.205"	-	25	56	-
	J2	1.000"	2.205"	-	25.4	56	-
	J3	1.250"	2.362"	-	31.75	60	-
	J4	1.2598"	2.362"	-	32	60	-
	J5	1.5748"	2.756"	-	40	70	-
	J6	1.9685"	3.150"	-	50	80	-

G-Dex - Indexable Gun Drill Feed & Speed

ISO	ANSI	Material	Hardness Brinell HB	Geometry / Grade	Cutting speed vc SFM	Drill diameter, mm	
						12.00 -17.99 mm	18.00 -33.30 mm
						Feed IPR	Feed IPR
P	1018, 1020, 1215	Unalloyed steel Non-hardened 0.10-0.25% C	90-200	TE	260-328	.002-.004	.003-.005
	1045, 1050, 1335	Non-hardened 0.25-0.55% C	125-225	TE	260-328	.002-.004	.003-.005
	1055, 1060	Non-hardened 0.55-0.80% C	150-250	TE	260-328	.002-.004	.003-.005
	1095	High carbon steel, annealed	180-275	TES	200-300	.002-.004	.003-.005
	4140, 52100, 8620	Low alloy steel Non hardened	150-260	TE	230-328	.002-.004	.003-.005
	4140, 52100, 8620	Hardened and tempered	220-450	TE	200-328	.002-.004	.003-.005
	D3, H13, A2	High alloy steel Annealed	150-250	TE	200-328	.002-.004	.003-.005
	M3, M35 D3, H13, A2	Annealed HSS Hardened tool steel	150-250 250-350	TE TE	230-328 200-328	.002-.004	.003-.005
	D3, H13, A2	Hardened steel, others	250-450	TE	200-328	.002-.004	.003-.005
	1018, 1045, 1055	Castings Unalloyed	90-225	TE	200-328	.002-.004	.003-.005
	4140, 52100, 8620	Low alloyed (alloying elements < 5%)	150-250	TE	165-300	.002-.004	.003-.005
M	403, 405, 410	Rolled/forged Ferritic/Martensitic, non hardened	150-270	TE	165-295	.002-.004	.003-.005
	15-5, 17-4	corrosion resistance	277-352	TE	127-200	.002-.004	.003-.005
	304, 316, 318	Austenitic	150-275	TE	165-290	.002-.004	.003-.005
K	32510 40010, 50005	Malleable Ferritic Pearlitic	110-145 150-270	TE TE	250-328 250-328	.002-.004	.003-.005
	Class 20, 25, 30 Class 45, 50, 60	Grey Low tensile strength High tensile strength	150-220 200-330	TE TE	196-300 196-300	.002-.004	.003-.005
	60-40-18, 80-55-56 100-70-03	Nodular Ferritic Pearlitic	125-230 200-300	TES TES	165-275 165-275	.002-.004	.003-.005
N	7075, 2024, 7010 7075, 2024, 7010 7075, 2024, 7010 7075, 2024, 7010	Aluminium alloys Wrought or wrought and coldworked, non-aging Wrought or wrought and aged Cast, non aging Cast or cast and aged	30-100 30-150 40-100 70-140	TE TE TE TE	213-427 213-427 213-427 213-427	.002-.004	.003-.005
	Copper, Copper Alloy	Copper and copper alloys Free cutting alloys (Pb > 1%) Brass and leaded alloys (Pb < 1%)	70-160 50-200	TE TE	213-427 213-427	.0015-.004	.003-.005
S	330	Iron base Annealed or solution treated	180-230	TES	50-150	.002-.004	.003-.005
	Waspaloy, Inconel	Nickel base Annealed or solution treated	140-300	TES	50-150	.002-.004	.003-.005
	Air Resistant 213, Jetalloy 209	Cobalt alloys Annealed or solution treated	180-230	TES	50-150	.002-.004	.003-.005
	Ti6Al4V	Titanium Alfa-, near Alfa- and Alfa + Beta alloys annealed	600-1100	TES TES	100-165 100-165	.002-.004	.003-.005

Sunnen's Deep Hole Drilling Tools

Offering the lowest cost per hole for identical replacements of discontinued Sandvik Tools

Sunnen is committed to designing, manufacturing, and delivering world class deep hole machining tools and systems that meet or exceed customer requirements.

Whether a Single Tube, Double Tube, Gun Drilling or other specialty system is needed, Sunnen has the engineering expertise and manufacturing capabilities to meet any deep hole machining requirements.



MicroDex - Replaces Brazed Drill Heads

STS

Diameter Range
12.00 – 28.00 mm
0.472 – 1.102 inch



DirectDex - Replaces CoroDrill 800 series

STS

Diameter Range
25.00 – 65.00 mm
0.984 - 2.559 inch

DTS

Diameter Range
25.00 – 65.00 mm
0.984 - 2.559 inch



FlexiDex - Replaces CoroDrill 801 series

STS

Diameter Range
65.00 mm – 195.99 mm
2.559 in – 7.716 in



TrueDex - Replaces Sandvik 424.10 series

STS

Diameter Range
63.50 mm – 183.90 mm
2.500 in – 7.240 in



CounterDex - Replaces Sandvik 818 series

STS

Diameter Range
35.00 mm – 216.00 mm
1.378 in – 8.503 in

Sunnen also offers replacement parts for all of these tools, including inserts, pads, cartridges, shims and screws.



a legacy of excellence since 1924.

SUNNEN WORLDWIDE



With world headquarters in St. Louis, Missouri, Sunnen is the largest fully integrated company in the world specializing in precision bore creation, sizing and finishing equipment. A Sunnen solution might include honing, lapping, skiving/roller burnishing or deep hole machining...or a combination of those processes.

Our 13 international subsidiaries and over 40 authorized distributors allow us to deliver top quality Sunnen machines, tools, service and training wherever they are needed around the globe.

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