


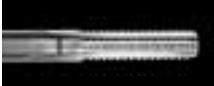


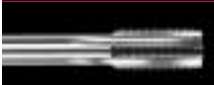








Balax Thredshaver Application Chart

Tap Style

Tap Style	Steel & Stainless Steel						Iron	Non-Ferrous				Aerospace			
	Low Carbon Steel	Medium Carbon Steel	High Carbon Steel	Tool Steels	300 Series Stainless Steel	400 Series Stainless Steel	Cast Iron	Wrought Aluminum Alloys	Aluminum & Zinc Diecast	Magnesium	Copper & Brass (Free Machining)	Brass/Bronze Castings	Titanium	Nickel Alloys, Inconel	A286, Waspalloy
 Series BX100 & BX170 Spiral Point Hi-Hook	.	.			.			.	.	.	.	.
 Series BX150 Spiral Point Lo-Hook		.	.	.		.				
 Series BX160 A286 Spiral Point												.			.
 Series BX410 Straight Flute Inconel													.		
 Series BX200, BX220, BX300 45° Hi-Spiral Flute	.	.			.			.	.	.	.	.
 Series BX400 15° Slow-Spiral Flute			.	.		.						.	.
 Series BX420 Straight Flute Chipbreaker	.	.	.								.
 Series BX500, BX510 Diecast Slow-Spiral Flute								.	.						
 Series BX600, BX610, BX620 Straight Flute Cast Iron							.	.	.						
 Series BX700 NPSF Dryseal Pipe Tap							.	.	.						
 Series BX710 Spiral Flute Taper Pipe Tap	.	.			.	.		.			.	.
 Thredfloer Cold Forming Tap	.	.			.			.	.		.	.
 Series BX450 Cleanout Thredshavers	All threads with paint, weld spatter, excess plating, etc.														

SERIES BX100

Spiral Point Hi-Hook Powdered Metal Thredshavers

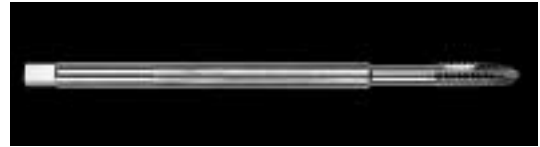


Plug Chamfer

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers							
		1	2	3	4	5	6	7	8
2-56	2	30001	30002	30003					
3-48	2	30011	30012	30013					
4-40	2		34222	34223	34224	34225	34226	34227	
4-40	3		30022	30023	30024	30025	30026	30027	
5-40	2		34232	34233	34234	34235	34236	34237	
5-40	3		30032	30033	30034	30035	30036	30037	
6-32	2		34242	34243	34244	34245	34246	34247	
6-32	3		30042	30043	30044	30045	30046	30047	
8-32	3		30052	30053	30054	30055	30056	30057	
10-24	3		30062	30063	30064	30065	30066	30067	
10-32	3		30072	30073	30074	30075	30076	30077	
1/4-20	3		30082	30083	30084	30085	30086	30087	
1/4-28	3		30092	30093	30094	30095	30096	30097	
5/16-18	3		30102	30103	30104	30105	30106	30107	30108
5/16-24	3		30112	30113	30114	30115	30116	30117	30118
3/8-16	3		30122	30123	30124	30125	30126	30127	30128
3/8-24	3		30132	30133	30134	30135	30136	30137	30138
7/16-14	3		30142	30143	30144	30145	30146	30147	30148
7/16-20	3		30152	30153	30154	30155	30156	30157	30158
1/2-13	4		30162	30163	30164	30165	30166	30167	30168
1/2-20	4		30172	30173	30174	30175	30176	30177	30178
5/8-11	4		30182	30183	30184	30185	30186	30187	30188
5/8-18	4		30192	30193	30194	30195	30196	30197	30198
3/4-10	4		30202	30203	30204	30205	30206	30207	30208
3/4-16	4		30212	30213	30214	30215	30216	30217	30218
7/8-9	4		30222	30223	30224	30225	30226	30227	30228
7/8-14	4		30232	30233	30234	30235	30236	30237	30238
1-8	4		30242	30243	30244	30245	30246	30247	30248
1-12	4		30252	30253	30254	30255	30256	30257	30258
METRIC									
M2.5 x 0.45	2		31002	31003	31004	31005			
M3.0 x 0.5	3		31012	31013	31014	31015			
M3.5 x 0.6	3		31022	31023	31024	31025			
M4.0 x 0.7	3		31032	31033	31034	31035	31036		
M5.0 x 0.8	3		31042	31043	31044	31045	31046		
M6.0 x 1.0	3		31052	31053	31054	31055	31056	31057	
M8.0 x 1.25	3		31062	31063	31064	31065	31066	31067	31068
M10 x 1.5	3		31072	31073	31074	31075	31076	31077	31078
M12 x 1.75	4		31082	31083	31084	31085	31086	31087	31088

SERIES BX170 Extension Spiral Pt. Hi-Hook Thredshavers • 4" & 6" OAL



Plug Chamfer

See page 59 for shank and square dimensions.

Thredshaver Size	OAL Length (In.)	H / D Numbers				
		2	3	4	5	6
4-40	4	35002				
6-32	4		35203			
8-32	4		35303			
10-24	6		35403			
10-32	6		35503			
1/4-20	6				35605	
1/4-28	6			35704		
5/16-18	6				35805	
5/16-24	6			35904		
3/8-16	6				36005	
3/8-24	6			36104		
METRIC						
M3.0 x 0.5	4		38003			
M3.5 x 0.6	4			38104		
M4.0 x 0.7	4			38204		
M5.0 x 0.8	6			38304		
M6.0 x 1.0	6				38405	
M8.0 x 1.25	6				38505	
M10 x 1.5	6					38606

Recommended Applications — Series BX100 and BX170

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Low carbon steel RC 20 & below	1010, 1020, 1035, 1040, 1215	•							•			
High carbon & alloy steel	1050, 1065	•		•	•							
Austenitic stainless steel	302, 303, 304, 316	•							•		•	
Martensitic stainless steel	410, 420, 440	•		•	•							
Wrought aluminum	2024, 6061, 7075	•				•						
Diecast aluminum	380, 383	•		•					•		•	
Diecast zinc		•				•						
Copper & Brass Free Machining		•							•			
Brass-cast bronze		•		•	•							

SERIES BX150

Spiral Point Lo-Hook Powdered Metal Thredshavers



Plug Chamfer

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers					
		2	3	4	5	6	7
2-56	2	32002	32003				
3-48	2	32012	32013				
4-40	2	32022	32023	32024	32025		
4-40	3	32322	32323	32324	32325		
5-40	3	32032	32033	32034	32035		
6-32	2	32242	32243	32244	32245	32246	32247
6-32	3	32042	32043	32044	32045	32046	32047
8-32	3	32052	32053	32054	32055	32056	32057
10-24	3	32062	32063	32064	32065	32066	32067
10-32	3	32072	32073	32074	32075	32076	32077
1/4-20	3	32082	32083	32084	32085	32086	32087
1/4-28	3	32092	32093	32094	32095	32096	32097
5/16-18	3		32103	32104	32105		
5/16-24	3		32113	32114	32115		
3/8-16	3		32123	32124	32125		
3/8-24	3		32133	32134	32135		
METRIC							
M2.5 x 0.45	2	33002	33003				
M3.0 x 0.5	3	33012	33013				
M3.5 x 0.6	3		33023	33024	33025		
M4.0 x 0.7	3		33033	33034	33035		
M5.0 x 0.8	3		33043	33044	33045		
M6.0 x 1.0	3		33053	33054	33055		
M8.0 x 1.25	3		33063	33064	33065		
M10 x 1.5	3			33074	33075	33076	

Recommended Applications — Series BX150

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
High carbon steel Alloy steel	1050 1065	•		•	•							
High strength alloy steel RC 25 & above	4140, 4340, 17-4, A286	•		•	•							
Tool & die steel Pre-heat treat	D2, H13, M1, M7	•		•	•							
Martensitic stainless steel	410, 420, 440	•		•	•							
Nickel alloys	Inconel 625 & 718, Waspalloy	•		•	•							
Titanium alloys	6AL4V	•		•	•							

SERIES BX160

A286 Spiral Point Thredshavers



Plug Chamfer

See page 59 for blank dimensions.

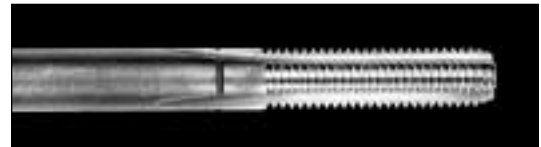
Thredshaver Size	Number of Flutes	H Numbers				
		3	4	5	6	7
6-32	3	34043	34044	34045	34046	34047
8-32	3	34053	34054	34055	34056	34057
10-24	3	34063	34064	34065	34066	34067
10-32	3	34073	34074	34075	34076	34077
1/4-20	3	34083	34084	34085	34086	34087
1/4-28	3	34093	34094	34095	34096	34097

Recommended Applications — Series BX160

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
A286		•	•	•	•						•	

SERIES BX410

Straight Flute Inconel Thredshavers



Balax Straight Flute Inconel Thredshavers offer a heavy duty design and special thread grinding

configuration for tapping Inconel. They come standard with nitride/steam oxide treatment.

Bottom Chamfer: 2 Threads

See page 58 for blank dimensions.

Thredshaver Size	Number of Flutes	H Numbers	
		2	3
6-32	3	34252-016	34253-016
8-32	3	34262-016	34263-016
10-32	3	34282-016	34283-016
1/4-28	3	34302-016	34303-016
5/16-24	3	34322-016	34323-016

Recommended Applications — Series BX410

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Inconel	718	•	•	•	•							

SERIES BX200

45° Hi-Spiral Flute Powdered Metal Thredshavers



Modified Bottom Chamfer: 2-1/2 Threads

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers							
		1	2	3	4	5	6	7	8
2-56	2	40001	40002	40003					
3-48	2	40011	40012	40013					
4-40	2		40022	40023	40024	40025	40026	40027	
5-40	3		40032	40033	40034	40035	40036	40037	
6-32	3		40042	40043	40044	40045	40046	40047	
8-32	3		40052	40053	40054	40055	40056	40057	
10-24	3		40062	40063	40064	40065	40066	40067	
10-32	3		40072	40073	40074	40075	40076	40077	
1/4-20	3		40082	40083	40084	40085	40086	40087	
1/4-28	3		40092	40093	40094	40095	40096	40097	
5/16-18	3		40102	40103	40104	40105	40106	40107	40108
5/16-24	3		40112	40113	40114	40115	40116	40117	40118
3/8-16	3		40122	40123	40124	40125	40126	40127	40128
3/8-24	3		40132	40133	40134	40135	40136	40137	40138
7/16-14	3		40142	40143	40144	40145	40146	40147	40148
7/16-20	3		40152	40153	40154	40155	40156	40157	40158
1/2-13	3		40162	40163	40164	40165	40166	40167	40168
1/2-20	3		40172	40173	40174	40175	40176	40177	40178
5/8-11	4		40182	40183	40184	40185	40186	40187	40188
5/8-18	4		40192	40193	40194	40195	40196	40197	40198
3/4-10	4		40202	40203	40204	40205	40206	40207	40208
3/4-16	4		40212	40213	40214	40215	40216	40217	40218
7/8- 9	4		40222	40223	40224	40225	40226	40227	40228
7/8-14	4		40232	40233	40234	40235	40236	40237	40238
1-8	4		40242	40243	40244	40245	40246	40247	40248
1-12	4		40252	40253	40254	40255	40256	40257	40258
METRIC									
M2.5 x 0.45	2		43002	43003	43004	43005			
M3.0 x 0.5	3		43012	43013	43014	43015			
M3.5 x 0.6	3		43022	43023	43024	43025	43026		
M4.0 x 0.7	3			43033	43034	43035	43036		
M5.0 x 0.8	3			43043	43044	43045	43046	43047	
M6.0 x 1.0	3			43053	43054	43055	43056	43057	43058
M8.0 x 1.25	3			43063	43064	43065	43066	43067	43068
M10 x 1.5	3			43073	43074	43075	43076	43077	43078
M12 x 1.75	3			43083	43084	43085	43086	43087	43088

SERIES BX220 Extension

45° Hi-Spiral Flute Thredshavers • 4" & 6" OAL



Modified Bottom Chamfer: 2-1/2 Threads

See page 59 for shank and square dimensions.

Thredshaver Size	OAL Length (In.)	H / D Numbers					
		2	3	4	5	6	
4-40	4	46002					
6-32	4		46203				
8-32	4		46303				
10-24	6		46403				
10-32	6		46503				
1/4-20	6				46605		
1/4-28	6			46704			
5/16-18	6				46805		
5/16-24	6			46904			
3/8-16	6				47005		
3/8-24	6			47104			
METRIC							
M3.0 x 0.5	4		49003				
M3.5 x 0.6	4			49104			
M4.0 x 0.7	4			49204			
M5.0 x 0.8	6			49304			
M6.0 x 1.0	6				49405		
M8.0 x 1.25	6				49505		
M10 x 1.5	6					49606	

Recommended Applications — Series BX200 and BX220

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Low carbon steel RC 20 & below	1010, 1020, 1035, 1040, 1215		•						•			
High carbon & alloy steel	1050, 1065		•	•	•							
Austenitic stainless steel	302, 303, 304, 316		•						•		•	
Martensitic stainless steel	410, 420, 440		•	•	•							
Wrought aluminum	2024, 6061, 7075		•			•						
Diecast aluminum	380, 383		•	•					•			
Diecast zinc			•			•						
Copper & Brass Free Machining			•						•			
Brass-cast bronze			•	•	•							

SERIES BX300

45° Hi-Spiral Flute STI Thredshavers



Modified Bottom Chamfer: 2-1/2 Threads

See page 59 for blank dimensions.

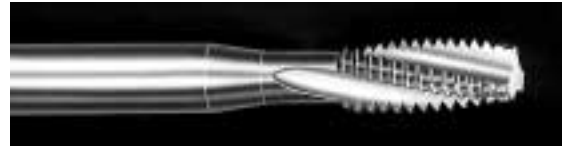
Thredshaver Size	Number of Flutes	Tap Blank Size	H Numbers	
			2	3
2-56	2	#3	44002	
3-48	2	#5	44012	
4-40	3	#6	44022	44023
6-32	3	#10	44032	44033
8-32	3	#12	44042	44043
10-24	3	1/4	44052	44053
10-32	3	1/4	44062	44063
1/4-20	3	5/16	44072	44073
1/4-28	3	5/16	44082	44083

Recommended Applications — Series BX300

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Low carbon steel RC 20 & below	1010, 1020, 1035, 1040, 1215		•						•			
High carbon & alloy steel	1050, 1065		•	•	•							
Austenitic stainless steel	302, 303, 304, 316		•						•		•	
Martensitic stainless steel	410, 420, 440		•	•	•							
Wrought aluminum	2024, 6061, 7075		•			•						
Diecast aluminum	380, 383		•	•					•			
Diecast zinc			•			•						
Copper & Brass Free Machining			•						•			
Brass-cast bronze			•	•	•							

SERIES BX400

15° Slow-Spiral Flute Powdered Metal Thredshavers



Balax Series BX400 Thredshavers are engineered for blind hole applications in difficult to cut materials, including many aerospace materials. The slow spiral flute design provides excellent tap strength while

lifting chips from the bottom of the hole. BX400 taps are ground with special thread profiles to reduce tapping torque while providing accurate thread gaging results.

Semi-Bottom Chamfer: 3 to 3-1/2 Threads

See page 59 for blank dimensions.

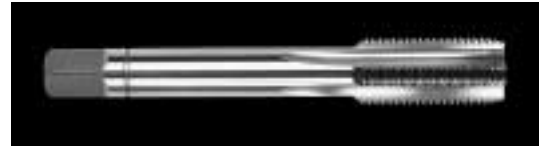
Thredshaver Size	Number of Flutes	H / D Numbers					
		2	3	4	5	6	
2-56	2	51002	51003				
3-48	2	51012	51013				
4-40	2		51023		51025		
5-40	3		51033		51035		
6-32	3		51043		51045		
8-32	3		51053		51055		
10-24	3		51063		51065		
10-32	3		51073		51075		
1/4-20	3		51083		51085		
1/4-28	3		51093		51095		
5/16-18	3		51103		51105		
5/16-24	3		51113		51115		
3/8-16	3		51123		51125		
3/8-24	3		51133		51135		
METRIC							
M2.5 x 0.45	2	52002	52003				
M3.0 x 0.5	3	52012	52013				
M3.5 x 0.6	3		52023		52025		
M4.0 x 0.7	3		52033		52035		
M5.0 x 0.8	3		52043		52045		
M6.0 x 1.0	3		52053		52055		
M8.0 x 1.25	3		52063		52065		
M10 x 1.5	3			52074		52076	

Recommended Applications — Series BX400

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
High carbon steel Alloy steel	1050 1065	•	•	•	•							
High strength alloy steel RC 25 & above	4140, 4340, 17-4, A286	•	•	•	•							
Tool & die steel Pre-heat treat	D2, H13, M1, M7	•	•	•	•							
Nickel alloys	Inconel 625 & 718, Waspalloy	•	•	•	•							
Titanium alloys	6AL4V	•	•	•	•							

SERIES BX420

Straight Flute Chipbreaker Thredshavers



Straight Flute Chipbreaker Thredshavers are engineered for tapping deep blind and thru holes where chips made by spiral flute or conventional flute taps are a problem. The special heavy duty flute configuration converts chips to small flakes that are

easily handled without causing tap binding or seizure. Coolant-thru taps work especially well because the small chips produced by the BX420 chipbreaker design are easily flushed from blind holes.

Bottom Chamfer: 2-1/2 Threads

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers			Coolant-Thru H / D Numbers		
		3	4	5	3	4	5
5/16-18	3	36063		36065	36068		36069
5/16-24	3	36073		36075	36078		36079
3/8-16	3	36083		36085	36088		36089
3/8-24	3	36093		36095	36098		36099
7/16-14	3	36103		36105	36108		36109
7/16-20	3	36113		36115	36118		36119
1/2-13	4	36123		36125	36128		36129
1/2-20	4	36133		36135	36138		36139
METRIC							
M8 x 1.25	3	36533		36535	36538		36539
M10 x 1.5	3	36543		36545	36548		36549
M12 x 1.75	4	36553		36555	36558		36559

Recommended Applications — Series BX420

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Low carbon steel RC 20 & below	1018 1020	•	•	•	•							
High carbon steel	1045, 1050, 1065	•	•	•	•							
Tool & die steel Pre-heat treat	D2, H13, M1, M7	•	•	•	•							

SERIES BX500

Diecast Slow-Spiral Flute Thredshavers



Balax BX500 Slow Spiral Flute Thredshavers are engineered for multi-spindle applications in diecast aluminum. The heavy duty slow spiral design provides additional tap strength compared to hi-spiral

flute taps and excellent chip evacuation for deep blind hole tapping. **Stock Coolant-Thru Diecast Thredshavers** are now available to improve chip evacuation and tap life.

Bottom Chamfer: 2 Threads

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers				Coolant-Thru H / D Numbers			
		3	4	5	6	3	4	5	6
6-32	3	52463				52469			
8-32	3	52473				52479			
10-24	3	52483				52489			
10-32	3	52493				52499			
1/4-20	3	52503		52505				52509	
1/4-28	3	52513		52515			52519		
5/16-18	3	52523		52525				52529	
5/16-24	3	52533		52535			52539		
3/8-16	3	52543		52545				52549	
3/8-24	3	52553		52555				52559	
METRIC									
M3 x .5	3	52783							
M3.5 x .6	3		52794				52799		
M4 x .7	3		52804				52809		
M5 x .8	3		52814				52819		
M6.0 x 1.0	3			52825				52829	
M8.0 x 1.25	3			52835				52839	
M10 x 1.5	3				52846				52849
M12 x 1.75	3				52856				52859

SERIES BX510

DIN 371 Diecast Slow-Spiral Flute Thredshavers



Balax BX510 DIN 371 Diecast Slow Spiral Flute Thredshavers are similar to Series BX 500 except

they are manufactured to DIN 371 standards.

Bottom Chamfer: 2 Threads

See page 60 for blank dimensions.

Thredshaver Size	Number of Flutes	D Numbers		Coolant-Thru D Numbers	
		5	6	5	6
M6.0 x 1.0	3	52905		52909	
M8.0 x 1.25	3	52915		52919	
M10.0 x 1.5	3		52926		52929
M12.0 x 1.75	3		52936		52939

Recommended Applications — Series BX500 & BX510

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Diecast aluminum	319, 380, 383		•	•					•		•	
Diecast zinc			•			•						

SERIES BX600

Cast Iron Thredshavers



Balax BX600 Cast Iron Thredshavers are made from premium M42 cobalt tool steel with special flute and thread grinding geometry designed specifically for cutting abrasive materials with powdery chips. They provide outstanding tool life, especially with titanium nitride or titanium carbonitride coating.

Stock Coolant-Thru Cast Iron Thredshavers are now available to improve chip evacuation and tap life in deep blind holes. These are stocked in Class 2B and 6H fits with Titanium Nitride surface treatment.

Bottom Chamfer: 2 Threads

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	H / D Numbers				Coolant-Thru H / D Numbers	
		3	4	5	6	5	6
6-32	3	54003		54005			
8-32	3	54013		54015			
10-24	4	54023		54025			
10-32	4	54033		54035			
1/4-20	4	54043		54045		55005	
1/4-28	4	54053		54055		55015	
5/16-18	4	54063		54065		55025	
5/16-24	4	54073		54075		55035	
3/8-16	4	54083		54085		55045	
3/8-24	4	54093		54095		55055	
7/16-14	4	54103		54105		55065	
7/16-20	4	54113		54115		55075	
1/2-13	4	54123		54125		55085	
1/2-20	4	54133		54135		55095	
METRIC							
M6.0 x 1.0	4	54603		54605		55605	
M8.0 x 1.25	4	54613		54615		55615	
M10 x 1.5	4		54624		54626		55626
M12 x 1.75	4		54634		54636		55636

SERIES BX605

Premium Powdered Metal Cast Iron Thredshavers



Balax BX605 Cast Iron Taps are manufactured using premium powdered metal tool steel that is specially heat treated to provide maximum wear resistance and tap life compared to regular tap materials. BX605 Taps are furnished with special straight flute geometry

designed for cast iron. Taps perform best when used with TiN, TiCN or Hardlube coating.

Stock Premium Powdered Metal Coolant-Thru Cast Iron Thredshavers are now available to improve chip evacuation and tap life in deep blind holes.

Bottom Chamfer: 2 Threads

See page 59 for blank dimensions.

Thredshaver Size	Number of Flutes	D Numbers		Coolant-Thru D Numbers	
		5	6	5	6
M6.0 x 1.0	4	54705		54709	
M8.0 x 1.25	4	54715		54719	
M10.0 x 1.5	4		54726		54729
M12.0 x 1.75	4		54736		54739

SERIES BX610

DIN 371 Powdered Metal Cast Iron Thredshavers



Balax BX610 DIN 371 Cast Iron Thredshavers are made from powdered metal tool steel with special flute and thread grinding geometry designed specifically for cutting abrasive materials with powdery chips. They provide outstanding tool life, especially with titanium nitride or titanium carbonitride coating.

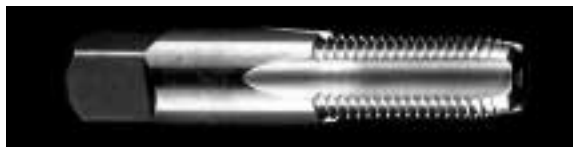
Stock DIN 371 Coolant-Thru Cast Iron Thredshavers are now available to improve chip evacuation and tap life in deep blind holes.

Bottom Chamfer: 2 Threads

See page 60 for blank dimensions.

Thredshaver Size	Number of Flutes	D Numbers		Coolant-Thru D Numbers	
		5	6	5	6
M6.0 x 1.0	4	54805		54809	
M8.0 x 1.25	4	54815		54819	
M10.0 x 1.5	4		54826		54829
M12.0 x 1.75	4		54836		54839

BX700 NPSF Dryseal Pipe Tap Thredshavers



NPSF Dryseal Pipe Taps are four flute M42 Cobalt Thredshavers made with controlled major and minor

diameters that provide consistent and accurate thread gaging of dryseal pipe threads

Chamfer: 2 Threads

Thredshaver Size	NPSF EDP No.	Number of Flutes
1/8-27 SM (.3125 shank)	59914	4
1/8-27 LG (.4375 shank)	59924	4
1/4-18	59934	4
3/8-18	59944	4
1/2-14	59954	4

Recommended Applications — BX700

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Diecast aluminum	380, 383	•	•	•					•			
Diecast zinc		•	•			•						
Cast iron	Grey Iron, Ductile	•	•	•	•				•			
Bronze casting		•	•	•	•				•			

BX710 Spiral Flute Taper Pipe Tap Thredshavers



15° Spiral Flute Taper Pipe Tap Thredshavers are designed to lift and remove chips generated during

tapping. Taper Pipe Taps are made to SAE short projection specifications.

Thredshaver Size	Projections (inches)		NPT EDP No.	NPTDF EDP No.	Number of Flutes
	Minimum	Maximum			
1/16-27	.222	.259	59900	59902	4
1/8-27 SM (.3125 shank)	.222	.259	59910	59912	4
1/8-27 LG (.4375 shank)	.222	.259	59920	59922	4
1/4-18	.333	.389	59930	59932	4
3/8-18	.333	.389	59940	59942	4
1/2-14	.429	.500	59950	59952	4
3/4-14	.429	.500	59960	59962	5

BX710 (Cont.) Spiral Flute Taper Pipe Tap Thredshavers



Recommended Applications — BX710

Materials	Examples	Thru Hole	Blind Hole	Nitride	Steam Oxide	Bright Finish	Balwear	Balube	TiN	Super TiN	TiCN	TiAlN
Low carbon steel RC 20 & below	1010, 1020, 1035, 1040, 1215	•	•						•			
High carbon steel Alloy steel	1050, 1065	•	•	•	•							
Tool & die steel Pre-heat treat	D2, H13, M1, M7	•	•	•	•							
Austenitic stainless steel	302, 303, 304, 316	•	•						•		•	
Martensitic stainless steel	410, 420, 440	•	•	•	•							
Wrought aluminum	2024, 6061, 7075	•	•			•						
Diecast aluminum	380, 383	•	•	•					•			
Diecast zinc		•	•			•						
Copper & brass Free machining		•	•				•		•			

BX450 Cleanout Thredshavers



Balax Cleanout Thredshavers are designed for removing dirt, paint, weld spatter, and other obstructions in existing tapped holes. Cleanout Thredshavers have a special geometry to prevent

recutting of thread flanks or cross threading that would result in damage to the part. They come standard with nitride/steam oxide treatment.

Semi-Bottom Chamfer: 3 to 3-1/2 Threads

See page 58 for blank dimensions.

Size	Number of Flutes	EDP Number
1/4 -20	3	54040-006
5/16-18	4	54060-006
3/8-16	4	54080-006
7/16-14	4	54100-006
1/2-13	4	54120-006
METRIC		
M6 x 1.0	3	54600-006
M8 x 1.25	4	54610-006
M10 x 1.5	4	54620-006
M11 x 1.5	4	54625-006
M12 x 1.75	4	54630-006