



Leading Through Innovation



**HSS & HSS-E**

# PIPE TAPS

# GASGEWINDEBOHRER

- Tapping Whitworth Pipe threads
- Zum Gewindeschneiden von Whitworth-Rohrgewinden

SELECTION GUIDE



# HSS & HSS-E PIPE TAPS

Tapping Whitworth Pipe threads



Please visit [globalyg1.com/mat](http://globalyg1.com/mat) for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.306

HOLE TYPE		Max. 2.0xD Blind/Through Hole	Max. 2.5xD Blind Hole	Max. 3.0xD Through Hole			
TOOL MATERIAL		HSS		HSS-E			
CHAMFER LEAD ACC. TO DIN2197		I/III		C B			
FLUTE TYPE		Straight Flute		Spiral Flute Spiral Point			
SPIRAL FLUTE ANGLE		-		R40 R40 R40 -			
SERIES	M	DINB71/376					
		DINB52					
		DINB57/LONG					
	MF	DINB74					
		DIN2181					
	UNC	DINB71/376					
		DINB51					
	UNF	DINB71/374					
		DIN2181					
	BSW	DIN2182/2183					
		DINB51					
	G(BSP)	DIN5156/5157	T7709 (P301)	TC728 (P302)	TC729 (P303)	TB514 (P304)	TC727 (P305)
	EG-M	DINB71/376					
	EG-UNC	DINB71/376					
EG-UNF	DINB71/374						
SURFACE TREATMENT		Bright	Bright	Bright	VAP	Bright	
MODEL							

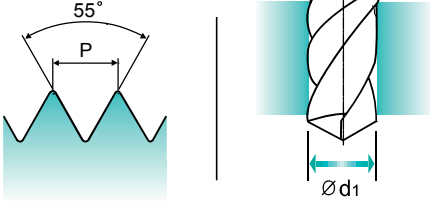
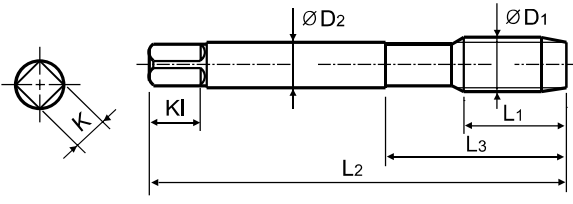
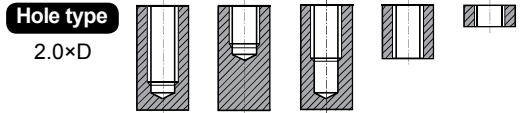
ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment	HB	HRc						
P	1	Non-alloy steel	About 0.15% C Annealed	125		○				◎	
	2		About 0.45% C Annealed	190	13	○	◎			◎	
	3		About 0.45% C Quenched & Tempered	250	25	○	◎			◎	
	4	Low alloy steel	About 0.75% C Annealed	270	28		◎			◎	
	5		About 0.75% C Quenched & Tempered	300	32						
	6		Annealed	180	10	○	◎	○		◎	
	7		Quenched & Tempered	275	29		◎	○		◎	
	8	Quenched & Tempered	300	32			◎				
	9	Quenched & Tempered	350	38			◎				
	10	High alloyed steel, and tool steel	Annealed	200	15						
	11		Quenched & Tempered	325	35						
M	12	Stainless steel	Ferritic / Martensitic Annealed	200	15					◎	
	13		Martensitic Quenched & Tempered	240	23					◎	
	14		Austenitic	180	10			○		◎	
K	15	Grey cast iron	Pearlitic / ferritic	180	10	○					
	16		Pearlitic (Martensitic)	260	26	○					
	17	Nodular cast iron	Ferritic	160	3			◎		◎	
	18		Pearlitic	250	25			◎		◎	
	19		Ferritic	130							
20	Malleable cast iron	Pearlitic	230	21							
N	21	Aluminum-wrought alloy	Not Curable	60		○	○			○	
	22		Curable Hardened	100		○	○			○	
	23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable	75		○	○			○	
	24		≤ 12% Si, Curable Hardened	90			○			○	
	25		> 12% Si, Not Curable	130			◎			◎	
	26		Copper and Cutting Alloys, PB>1%	110			◎			◎	
	27		Copper Alloys (CuZn, CuSnZn (Brass))	90			○			○	
	28		(Bronze / Brass)	CuSn, lead-free copper and electrolytic copper	100						
	29		Non Metallic Materials	Duroplastic, Fiber Reinforced Plastic							
	30			Rubber, Wood, etc.							
S	31	Heat Resistant Super Alloys	Fe Based Annealed	200	15						
	32		Cured	280	30						
	33		Annealed	250	25						
	34		Ni or Co Based Cured	350	38						
	35		Cast	320	34						
	36	Titanium Alloys	Pure Titanium	400 Rm							
	37		Alpha + Beta Alloys Hardened	1050 Rm							
H	38	Hardened steel	Hardened	550	55						
	39		Hardened	630	60						
	40	Chilled Cast Iron	Cast	400	42						
	41	Hardened Cast Iron	Hardened	550	55						

# G(BSP)

## Whitworth Pipe threads DIN ISO 228/1

- Whitworth Rohrgewinde DIN ISO 228/1
- G(BSP) PROFIL 55° DIN ISO 228/1
- Filettatura Whitworth per tubi DIN ISO 228/1

- Serial hand tap set in First and Bottoming.
- Bottoming tap of set has final internal thread dimensions only.
- Handgewindebohrersatz mit Vor- und Fertigschneider.
- Nur der Fertigschneider kann das gewünschte Gewinde schneiden.



Material groups: **GS** HSS DIN 5157 55° I/III Bright

Sets of taps  
Gewindebohrer-Satz

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
G1/16	-28	T7709029	22	56	26	6	4.9	8	3	6.8
G1/8	-28	T7709209	20	63	27	7	5.5	8	4	8.8
G1/4	-19	T7709409	22	70	32	11	9	12	4	11.8
G3/8	-19	T7709489	22	70	32	12	9	12	4	15.25
G1/2	-14	T7709569	22	80	35	16	12	15	4	19
G3/4	-14	T7709709	22	90	40	20	16	19	4	24.5
G1	-11	T7709789	25	100	45	25	20	23	6	30.75
G1-1/4	-11	T7709869	40	125	77	32	24	27	6	39.5
G1-1/2	-11	T7709949	40	140	85	36	29	32	6	45.2

© : Excellent ○ : Good

ISO	P											M			K					
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRC		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended	○	○	○			○									○	○				

ISO	N					S										H					
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed		Copper and Copper Alloys (Bronze / Brass)	Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron				
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○																		



**G(BSP)**

**Whitworth pipe threads DIN ISO 228/1**

- 🇩🇪 Whitworth Rohrgewinde DIN ISO 228/1
- 🇧🇪 G(BSP) PROFIL 55° DIN ISO 228/1
- 🇮🇹 Filettatura Whitworth per tubi DIN ISO 228/1

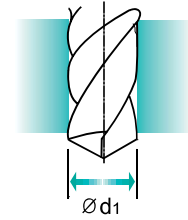
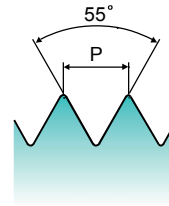
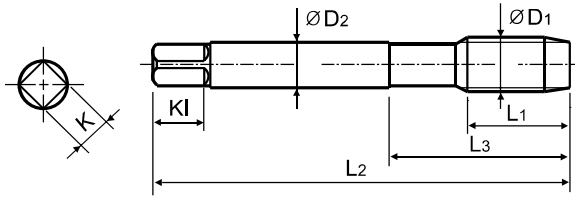
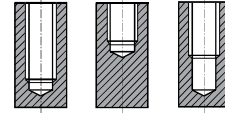
► Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 5156



Hole type  
2.5×D



Machine taps  
Maschinengewindebohrer

Recommended Cutting Page : P.306

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
G1/8 - 28		TC728200	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		TC728400	22	100	40	11	9	12	3	11.8
G3/8 - 19		TC728480	22	100	40	12	9	12	3	15.25
G1/2 - 14		TC728560	25	125	50	16	12	15	4	19
G3/4 - 14		TC728700	28	140	54	20	16	19	4	24.5
G1 - 11		TC728780	30	160	60	25	20	23	4	30.75

◎ : Excellent ○ : Good

ISO	P										M				K						
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	160	250		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	

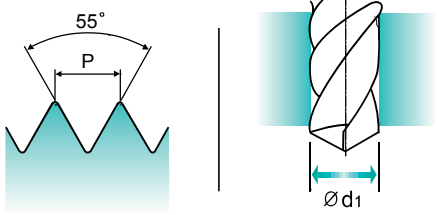
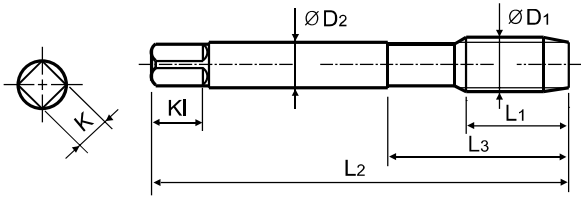
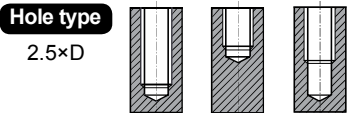
  

ISO	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	200	280	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

**G(BSP)** Whitworth pipe threads DIN ISO 228/1  
 ● Whitworth Rohrgewinde DIN ISO 228/1  
 ○ G(BSP) PROFIL 55° DIN ISO 228/1  
 ○ Filettatura Whitworth per tubi DIN ISO 228/1

► Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.      ► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 5156



Material groups **VG** HSS-E DIN 5156 55° C Bright R40

Machine taps  
Maschinengewindebohrer

Recommended Cutting Page : P.306 Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
G1/8 - 28		TC729200	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		TC729400	22	100	40	11	9	12	3	11.8
G3/8 - 19		TC729480	22	100	40	12	9	12	3	15.25
G1/2 - 14		TC729560	25	125	50	16	12	15	4	19
G3/4 - 14		TC729700	28	140	54	20	16	19	4	24.5
G1 - 11		TC729780	30	160	60	25	20	23	4	30.75

◎ : Excellent ○ : Good

ISO	P											M				K						
	Non-alloy steel					Low alloy steel						High alloyed steel, and tool steel				Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HRc		13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	3	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230		
Recommended						○	○	◎	◎					○								

ISO	N					S										H					
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended																					

- THREAD MILLS
- SYNCHRO TAPS
- COMBO TAPS
- YG TAP GENERAL
- YG TAP STEEL
- YG TAP HARDENED
- YG TAP INOX
- YG TAP CAST IRON
- YG TAP ALU
- YG TAP Ti Ni
- YG TAP FORMING
- NUT TAPS
- STI TAPS
- PIPE TAPS
- TECHNICAL DATA

**G(BSP)**

**Whitworth pipe threads DIN ISO 228/1**

- Whitworth Rohrgewinde DIN ISO 228/1
- G(BSP) PROFIL 55° DIN ISO 228/1
- Filettatura Whitworth per tubi DIN ISO 228/1

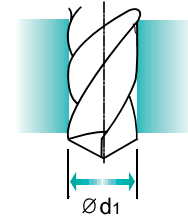
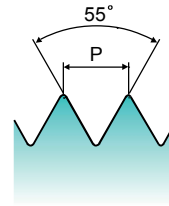
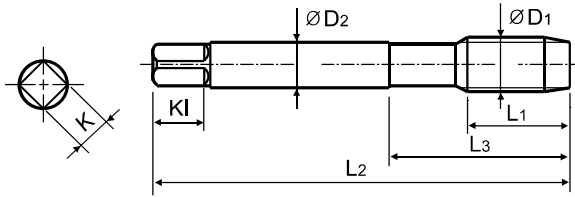
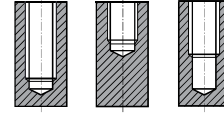
► Suitable for tapping blind holes due to special flute geometry and excellent chip evacuation.

► Geeignet zum Gewinden von Sacklöchern dank besonderer Nutengeometrie und ausgezeichneter Spanabfuhr.

DIN 5156



Hole type  
2.5×D



Machine taps  
Maschinengewindebohrer

Recommended Cutting Page : P.306

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Vap	L1	L2	L3	ØD2	K	KI	Z	Ød1
G1/8 - 28		<b>TB514200</b>	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		<b>TB514400</b>	22	100	40	11	9	12	3	11.8
G3/8 - 19		<b>TB514480</b>	22	100	40	12	9	12	3	15.25
G1/2 - 14		<b>TB514560</b>	25	125	50	16	12	15	4	19
G3/4 - 14		<b>TB514700</b>	28	140	54	20	16	19	4	24.5
G1 - 11		<b>TB514780</b>	30	160	60	25	20	23	4	30.75

◎ : Excellent ○ : Good

ISO	P										M				K								
Material Description	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
HRc	13	25	28	32	10	29	32	38	15	35	15	23	10	15	26	3	25						
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230			
Recommended	◎	◎								◎	◎	◎	◎	◎									

ISO	N										S					H					
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys					Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron	
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended																					

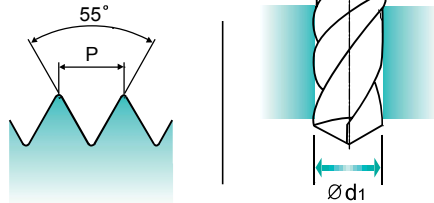
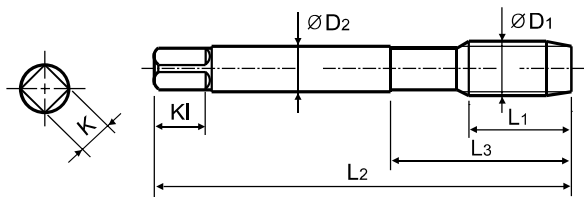
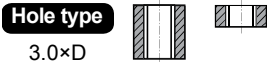
# G(BSP)

## Whitworth Pipe threads DIN ISO 228/1

- Whitworth Rohrgewinde DIN ISO 228/1
- G(BSP) PROFIL 55° DIN ISO 228/1
- Filettatura Whitworth per tubi DIN ISO 228/1

► Suitable for through hole in more cutting speed than other taps due to strong geometry.

► Geeignet für Sacklöcher in höherer Schnittgeschwindigkeit als andere Gewindebohrer dank einer stabilen Bohrergeometrie.



Material groups **GS** **HSS-E** **DIN 5156** **55°** **B** **Bright**

Machine taps  
Maschinengewindebohrer

Recommended Cutting Page : P.306

Unit : mm

SIZE	TPI	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1		Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
G1/8 - 28		<b>TC727200</b>	20	90	36	7	5.5	8	3	8.8
G1/4 - 19		<b>TC727400</b>	22	100	40	11	9	12	3	11.8
G3/8 - 19		<b>TC727480</b>	22	100	40	12	9	12	3	15.25
G1/2 - 14		<b>TC727560</b>	25	125	50	16	12	15	4	19
G3/4 - 14		<b>TC727700</b>	28	140	54	20	16	19	4	24.5
G1 - 11		<b>TC727780</b>	30	160	60	25	20	23	4	30.75

◎ : Excellent ○ : Good

ISO	P											M			K						
	Non-alloy steel					Low alloy steel						High alloyed steel, and tool steel			Stainless steel			Grey cast iron		Nodular cast iron	
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRc	13	25	28	32	10	29	32	38	15	35	15	23	10	10	26	3	25	130	21		
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	◎	◎	◎	◎										◎	◎			

ISO	N					S					H										
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)		Non Metallic Materials			Heat Resistant Super Alloys			Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron			
Material Description	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc	60	100	75	90	130	110	90	100			15	30	25	38	34	200	280	55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended	○	○	○	○	◎	◎	○														



**RECOMMENDED CUTTING CONDITIONS**  
**EMPFOHLENE SCHNEIDKONDITIONEN**

THREAD MILLS

SYNCHRO TAPS

COMBO TAPS

YG TAP GENERAL

YG TAP STEEL

YG TAP HARDENED

YG TAP INOX

YG TAP CAST IRON

YG TAP ALU

YG TAP Ti Ni

YG TAP FORMING

NUT TAPS

STI TAPS

PIPE TAPS

TECHNICAL DATA

					TC728	TC729	TB514	TC727
ISO	VDI 3323	Material Description	HB	HRC	Vc (m/min)			
P	1	Non-alloy steel	125				15-20	
	2		190	13	15-20		15-20	15-20
	3		250	25	12-18			12-18
	4		270	28	10-15			10-15
	5		300	32				
	6	Low alloy steel	180	10	10-15	10-15		10-15
	7		275	29	10-15	10-15		10-15
	8		300	32		6-10		
	9		350	38		3-5		
	10		High alloyed steel, and tool steel	200	15			
	11	325		35				
M	12	Stainless steel	200	15			7-10	
	13		240	23			5-8	
	14		180	10		4-6	4-6	
K	15	Grey cast iron	180	10				
	16		260	26				
	17	Nodular cast iron	160	3	10-15			10-15
	18		250	25	5-8			5-8
	19		Malleable cast iron	130				
20	230	21						
N	21	Aluminum-wrought alloy	60		10-15			10-15
	22		100		10-15			10-15
	23	Aluminum-cast, alloyed	75		15-20			15-20
	24		90		15-20			15-20
	25		130		10-15			10-15
	26		110		25-35			25-35
	27	Copper and Copper Alloys (Bronze / Brass)	90		8-12			8-12
	28		100					
	29		Non Metallic Materials					
	30							
S	31	Heat Resistant Super Alloys	200	15				
	32		280	30				
	33		250	25				
	34		350	38				
	35		320	34				
	36	Titanium Alloys	400 Rm					
	37		1050 Rm					
H	38	Hardened steel	550	55				
	39		630	60				
	40	Chilled Cast Iron	400	42				
	41	Hardened Cast Iron	550	55				



# HIGH QUALITY PRODUCTS and ON TIME DELIVERY for WORLD-WIDE CUSTOMERS

Since 1982, YG-1 has been committed to quality, innovation and the unique customer experience.

Our performance and experience have granted YG-1 the global impression of one of the leading manufacturers of high quality cutting tool solutions. This global footprint expands over 75 countries, with international logistic centers, pledging to our customers to give the best service available today - and tomorrow.

## EUROPE

---

 BELGIUM	 FINLAND	 ITALY	 PORTUGAL	 SLOVENIA	 THE NETHERLANDS
 CROATIA	 FRANCE	 LITHUANIA	 ROMANIA	 SPAIN	 TURKEY
 CZECH REPUBLIC	 GERMANY	 NORWAY	 RUSSIA	 SWEDEN	 UNITED KINGDOM
 DENMARK	 HUNGARY	 POLAND	 SERBIA	 SWITZERLAND	

## ASIA PACIFIC

---

 AUSTRALIA	 INDONESIA	 MALAYSIA	 SINGAPORE	 UNITED ARAB EMIRATES
 CHINA	 ISRAEL	 PAKISTAN	 SOUTH KOREA	 VIETNAM
 HONG KONG	 JAPAN	 PHILIPPINES	 TAIWAN	
 INDIA	 KINGDOM OF SAUDI ARABIA		 THAILAND	

## AMERICAS

---

 BRAZIL	 CANADA	 COLOMBIA	 MEXICO	 UNITED STATES
--	--	--	--	---

## AFRICA

---

 EGYPT	 SOUTH AFRICA
---	--



## HEAD OFFICE

211, Sewolcheon-ro, Bupyeong-gu, Incheon, South Korea

**Phone: +82-32-526-0909**

**Http://www.yg1.kr E-mail: yg1@yg1.kr**

**Note** The information is provided for reference only. Tool specifications are subject to change without prior notice.  
Although we endeavor to supply accurate and timely information, there can be no guarantee to cover every particular application.  
YG-1 or publishers are not liable for any damage for use of the information.



Search 'YG-1' on social media outlets