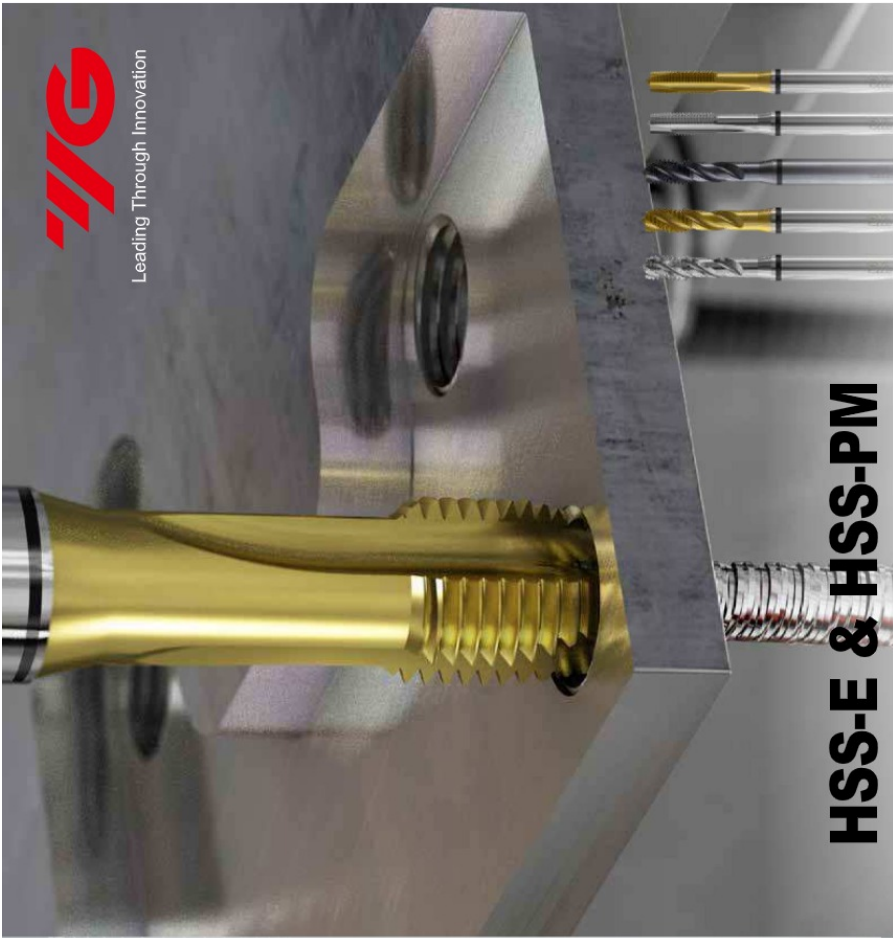


# Ureznici



Leading Through Innovation



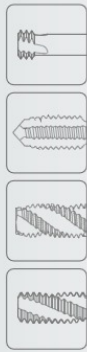
**HSS-E & HSS-PM**

# COMBO TAPS COMBO GEWINDEBOHRER

- For Multi Purpose Tapping  
YG-1's Patent
- Für Mehrbereichs-Gewindebohren  
YG1's Patent



Global Cutting Tool Leader **YG-1**



## THREADING

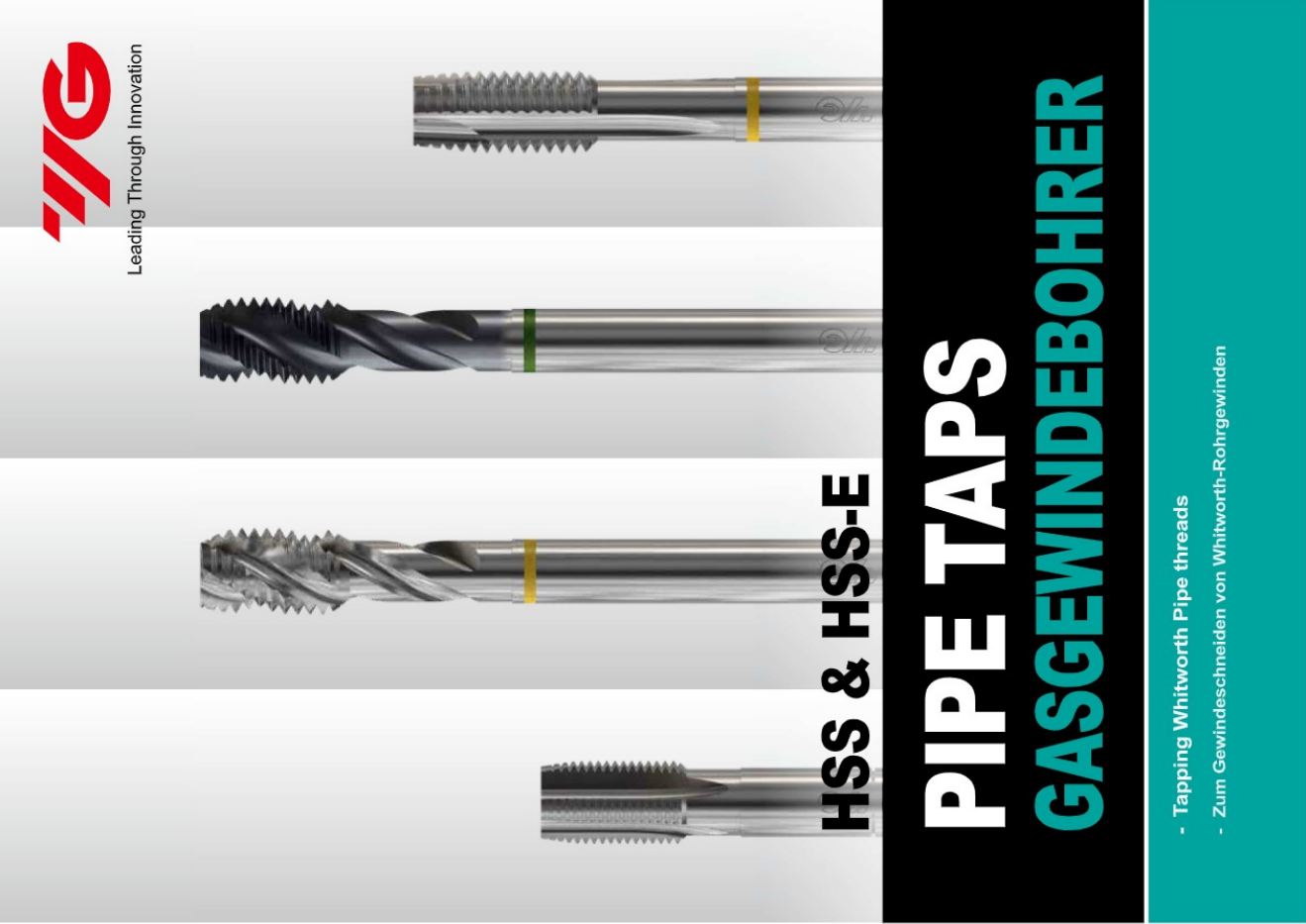
YG1 - COMBO TAPS (HSS-E HSS-PM)

YG1 - PIPE TAPS ( HSS HSS-E )

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDKONDITIONEN**

**SCREW THREAD  
INSERT TAPS**

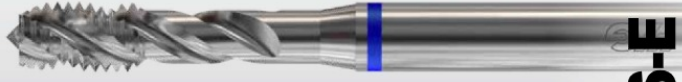
ISO	YG 3323	Material Description	HB	HRC	TC909 TC944	TC973 TC934 TC954	Vc (m/min)
1	125		125	13	15-20	15-20	
2	190	Non-alloy steel	190	13	15-20	15-20	
3	250	Non-alloy steel	250	25	12-18	12-18	
4	270		270	28			
5	300		300	32			
6	180		180	10			
7	275	Low alloy steel	275	29			
8	300	Low alloy steel	300	32			
9	350		350	38			
10	200	High alloyed steel, and tool steel	200	15			
11	325		325	35			
12	200		200	15			
13	240	Stainless steel	240	23			
14	180		180	10			
15	180	Grey cast iron	180	10			
16	260		260	26			
17	160	Nodular cast iron	160	3			
18	250		250	25			
19	130	Malleable cast iron	130				
20	230		230	21			
21	60	Aluminum-wrought alloy	60		10-15	10-15	
22	100		100		10-15	10-15	
23	75	Aluminum-cast alloyed	75		15-20	15-20	
24	90		90		15-20	15-20	
25	130		130				
26	110	Copper and Copper Alloys (Bronze / Brass)	110				
27	90		90		8-12	8-12	
28	100		100				
29		Non Metallic Materials					
30							
31	200		200	15			
32	280	Heat Resistant Super Alloys	280	30			
33	250		250	25			
34	350		350	38			
35	320		320	34			
36	400 f/m 1050 f/m	Titanium Alloys	400 f/m 1050 f/m				
37							
38	550	Hardened steel	550	55			
39	630		630	60			
40	400	Chilled Cast Iron	400	42			
41	550	Hardened Cast Iron	550	55			



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



Leading Through Innovation



HSS-E

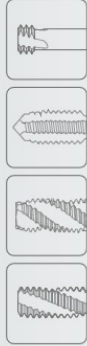
# SCREW THREAD INSERT TAPS

## SCHRAUBENGWINDE INSERT TAPS

- Tapping STI Threads of Soft Materials
- Gewindeschneiden von STI-Gewinden in weichen Materialien



Global Cutting Tool Leader **YG-1**



# THREADING

YG1 - SCREW THREAD INSERT TAPS ( HSS-E )

CARBIDE

HSS

THREAD MILLS

SYNCHRO TAPS

COBALT TAPS

YG TAP GENERAL

YG TAP STEEL

YG TAP HARDENED

YG TAP INOX

YG TAP CAST IRON

YG TAP ALU

YG TAP TINI

YG TAP FORMING

NUITAPS

STI TAPS

PIPE TAPS

TECHNICAL DATA

**THREAD MILLS**

**RECOMMENDED CUTTING CONDITIONS  
EMPFOHLENE SCHNEIDKONDITIONEN**

**For Thread Mills**

Materials	Hardness (HB)	Strength (N/mm <sup>2</sup> )	Feed per Tooth (fz)	
			Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0
Low Carbon Steels	≤ 200	≤ 700	0.02 - 0.04	0.04 - 0.10
Medium Carbon Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
High Carbon Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Alloy Steels	≤ 250	≤ 850	0.02 - 0.04	0.04 - 0.10
Heat Treated Steels	≤ 400	≤ 1400	0.02 - 0.04	0.04 - 0.10
Stainless Steels	≤ 300	≤ 1000	0.01 - 0.02	0.02 - 0.06
Cast Iron	≤ 300	≤ 1000	0.02 - 0.04	0.04 - 0.10
Chrome-Nickel Alloys	≤ 350	≤ 1200	0.01 - 0.02	0.02 - 0.06
Titanium Alloys	≤ 200	≤ 700	0.03 - 0.07	0.05 - 0.10

unit : mm

**For Drill and Thread Mills**

Material	Hardness (HB)	Strength (N/mm <sup>2</sup> )	Fz(Thread Milling) Feed per Tooth		Fz(Drilling) Feed per revolution	
			Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0	Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0
Cast Iron	≤ 200	≤ 700	0.03-0.08	0.08-0.12	0.10-0.20	0.20-0.25
Aluminium	≤ 180	≤ 600	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30
Aluminium-alloy	-	-	0.05-0.10	0.10-0.15	0.10-0.20	0.20-0.30
Magnesium	-	-	-	-	-	-
Plastics	-	-	-	-	-	-

unit : mm

**For Hard Material Miniature Thread Mills**

Material	Hardness	Strength (N/mm <sup>2</sup> )	Feed(mm/tooth)	
			Cutter Diameter ≤Ø6.0	Cutter Diameter >Ø6.0
Alloy Steel	295-415HB	1000-1400	0.02-0.04	0.04-0.06
Stainless Steel	280-415HB	950-1250	0.02-0.04	0.04-0.06
Cast Iron	≤ HB300	≤ 1000	0.03-0.05	0.05-0.07
Chrome-Nickel Alloys	≤ HB445	≤ 1500	0.02-0.03	0.03-0.05
Titanium Alloys	45-50HRc		0.03-0.05	0.05-0.07
Hardened Material	51-55HRc		0.02-0.04	0.04-0.06
	56-62HRc		0.01-0.03	0.03-0.05

unit : mm



**SYNCHRO TAPS**  
**SYNCHRO TAPS**

- For High Speed Tapping on Rigid CNC Machine  
- Für Hochgeschwindigkeits-Gewindebohren auf starren CNC-Maschinen

# YG1 - TAP ALU ( HSS-E)



**YG**  
Global Cutting Tool Leader **YG-1**



**THREADING**



**HSS-E**

**YG TAP ALU**  
**YG TAP ALU**

**Leading Through Innovation**

# YG TAP ALU YG TAP ALU

- For long-chipping Aluminum Wrought Alloys with Large Chip Gullets to Avoid Clogging in the Threading Operations
- Für langspannende Aluminium-Knetlegierungen mit großen Spanabständen zur Vermeidung von Verstopfungen beim Gewindeschneiden.