

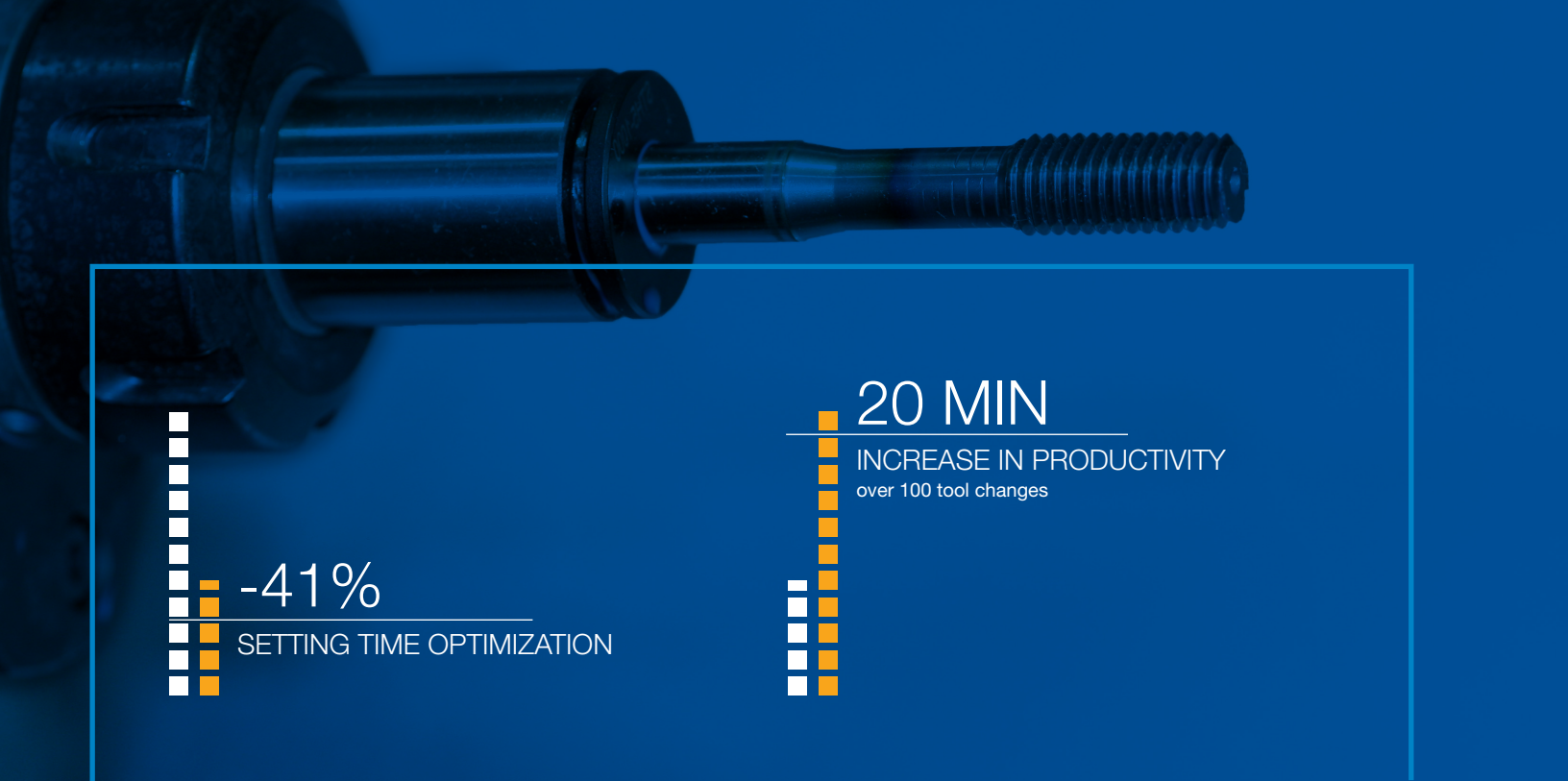
**bilz**

# STA Synchro Tap Adaptor

Used with ER collet chucks and driven tools  
ISO 15488 (DIN6499)



**FOR HIGHEST  
PRECISION AND  
QUALITY**  
from the first thread



**-41%**

SETTING TIME OPTIMIZATION



**20 MIN**

INCREASE IN PRODUCTIVITY  
over 100 tool changes

### Advantages

- Compensates for synchronization errors
- Reduction of axial forces on the thread flanks
- Better thread quality
- Can be used in tight spaces
- Low maintenance

### Benefits

- High productivity due to fast tool change times
- Significant increase in tool life and process reliability
- Reduced risk of tool breakage
- Cost savings due to reduced tap inventory
- Reduced spindle wear
- Increase in process reliability



The new STA Synchro Tapping Adaptor was designed specifically for ER collet chucks and driven tools which allows for synchronous thread cutting and forming to be achieved with all suitable machines.

### Features:

- For all types of tooling with or without internal coolant
- Minimal length compensation with tension and compression
- Optimal damping
- Compact design
- Allows quick tap changes
- Patent pending

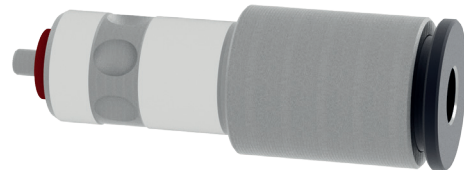
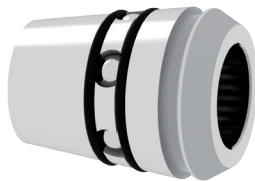
STA saves considerable time when changing taps. Optimizes tap tool life and thus improves productivity and quality.

# STA Synchro Tap Adaptor with Quick Change



## STA Synchro Tapping Adaptor

- For ER collet chucks ISO 15488 (DIN6499)
- For synchronised cut tapping and form tapping
- Coolant pressure: max. 20 bar
- Minimal length compensation: + 0,5mm/- 0,2mm



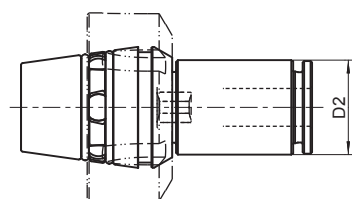
Synchro Collet (STL)			
Size	Location Machine	Designation	Ident No.
2	ER16	STL2-K1-ER16	5099865
3	ER20	STL3-K1-ER20	5099856
4	ER25	STL4-K1-ER25	5099833
5	ER32	STL5-K1-ER32	5092917

Synchro Tool Head (STH)			
D1 x □ [mm]	Thread Sizes	Designation	Ident No.
3,5 x 2,7	M3 ; M5	STH2-0350X0270-24-K1	5100071
4,5 x 3,4	M4 ; M6	STH2-0450X0340-24-K1	5100078
5,0 x 4,0	M4 ; M5	STH2-0500X0400-24-K1	5100087
6,0 x 4,9	M5 ; M6 ; M8	STH3-0600X0490-35-K1	5113800
7,0 x 5,5	M7 ; M9 ; M10	STH3-0700X0550-35-K1	5100015
7,0 x 5,5	M7 ; M9 ; M10	STH4-0700X0550-30-K1	5099927
8,0 x 6,2	M8 ; M11	STH4-0800X0620-30-K1	5099948
9,0 x 7,0	M9 ; M12	STH4-0900X0700-40-K1	5099939
8,0 x 6,2	M8 ; M11	STH5-0800X0620-37-K1	5100155
9,0 x 7,0	M9 ; M12	STH5-0900X0700-37-K1	5092928
10,0 x 8,0	M10	STH5-1000X0800-37-K1	5100154
11,0 x 9,0	M14	STH5-1100X0900-37-K1	5100157*
12,0 x 9,0	M16	STH5-1200X0900-37-K1	5100156*



Collect Type Synchro Tool Head		
Size	Designation	Ident No.
2	STH2-ER11-26-K1	5111075
2	STH2-ER8M-21-N	5111080
3	STH3-ER11-25-K1	5111084
4	STH4-ER16-42-K1	5111087
5	STH5-ER20-46-K1	5111119

Synchro Tool Head (STH)			
D1 x □ [inch]	Thread Sizes	Designation	Ident No.
.141 x .110	#0-6, M3, M3.5 ANSI	STH2-0358X0279-24-K1	5148053
.168 x .131	#8, M4 ANSI	STH2-0358X0279-24-K1	5148054
.194 x .152	#10, M5 ANSI	STH2-0493X0386-24-K1	5148059
.220 x .165	#12	STH2-0559X0419-24-K1	5148057
.194 x .152	#10, M5 ANSI	STH3-0493X0386-25-K1	5148040
.255 x .191	1/4", M6 ANSI	STH3-0648X0485-30-K1	5147002
.318 x .238	5/16", M8 ANSI	STH3-0808X0605-38-K1	5148039
.255 x .191	1/4", M6 ANSI	STH4-0648X0485-30-K1	5146993
.318 x .238	5/16", M8 ANSI	STH4-0808X0605-30-K1	5148037
.323 x .242	7/16"	STH4-0820X0615-30-K1	5148038
.381 x .286	3/8", M10 ANSI	STH4-0968X0726-30-K1	5146996
.367 x .275	1/2", M12 ANSI	STH4-0932X0699-42-K1	5146994
.255 x .191	1/4", M6 ANSI	STH5-0648X0485-8-K1	5146990
.318 x .238	5/16", M8 ANSI	STH5-0808X0605-20-K1	5146394
.323 x .242	7/16"	STH5-0820X0615-20-K1	5148034
.381 x .286	3/8", M10 ANSI	STH5-0968X0726-37-K1	5147052
.367 x .275	1/2", M12 ANSI	STH5-0932X0699-37-K1	5147049
.429 x .322	9/16", M14 ANSI	STH5-1090X0818-37-K1	5148035*
.480 x .360	5/8", M16 ANSI	STH5-1219X0914-37-K1	5148036*



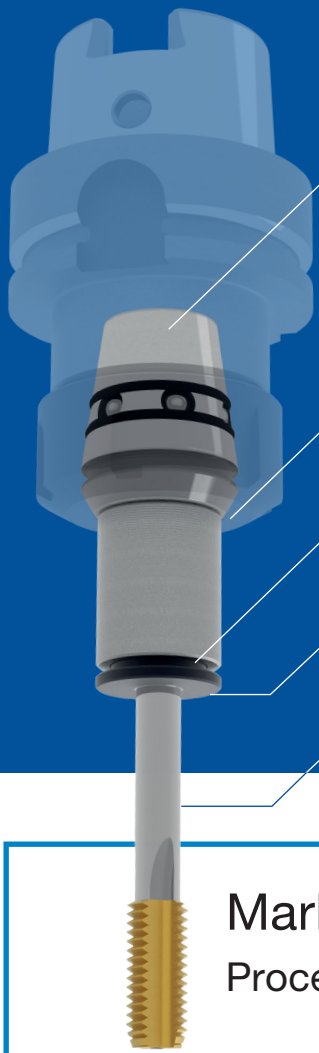
Size	D2
2	12.7mm
3	15.8mm
4	19.0mm
5	25.0mm

Note: The gauge lengths are shown in the part designation

\*For light machining only

\*For light machining only





Suitable for internal coolant 20 bar

Short design – low interference contour

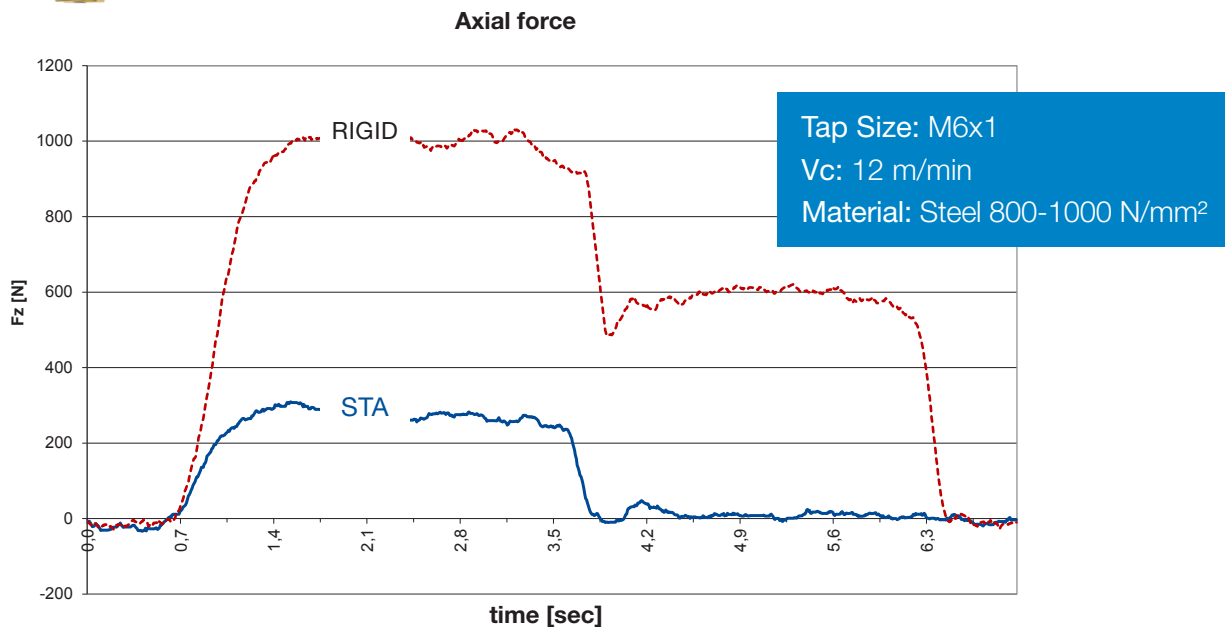
Modular design – low investment costs

Bilz quick change system – short setup times

Suitable for left and right threads, can be used for cut tapping and form tapping

## Market results STA vs. rigid tapping applications

Process optimization through reduction of axial forces



**bilz**

**Bilz Tool Company Inc**  
1140 N. Main Street  
Lombard, IL 60148  
Telephone 847-734-9390  
[www.bilzusa.com](http://www.bilzusa.com)