



**MACHSYNC CUTTER TOOL HOLDER IS PRECISION MADE OF STAINLESS STEEL IN BT/HSK/SK/ISO/CAT FORMATS. CAN BE CUSTOMIZED**

**SENSOR MODULE IS MILSPEC GRADE. FIT FOR HARSH ENVIRONMENTS:HIGH TEMP. SAFETY SHIELDED. HIGH PRECISION AND HIGH SPEED WIRELESS TRANSMITTER:2.4GHZ**

**RECHARGEABLE HIGH ENDURANCE BATTERY IS HEAT & VIBRATION RESILLIENT. BUILT TO PERFORM IN STANDARD CNC MACHINING CONDITIONS**

**OUR TRI-AXIAL VIBRATION NEEDLE CAN DO HIGH SPEED CONVERSION OF SPEED AND VIBRATION INCREASE MONITORING AND CONTROL FOR MAINTAINING OPTIMAL CUTTER SHARPNESS AND CUTTING QUALITY**

**MACHRADAR SOFTWARE: DASHBOARD INTERFACE IS INTUITIVE AND EASY TO USE FOR MONITORING REAL TIME CUTTER CONDITIONS. AT A GLANCE PROCESSING INTERFACE. INSTANT GRASP OF UNSTABLE CUTTING CONDITIONS FOR INSTANT DECISION MAKING ON CUTTER.**

**USES AI AND INCORPORATES MACHINE LEARNING. RECORDS PERFORMANCE AND DATA FROM EACH JOB INPUT. LIVE SCREEN MODEL OF CUTTING TOOL CAN BE MANIPULATED BY MOUSE OR BY HAND FOR THE BEST VIEW**

**LOOKING FOR AGENTS; DISTRIBUTORS/MACHINE MAKERS/RESELLERS.**

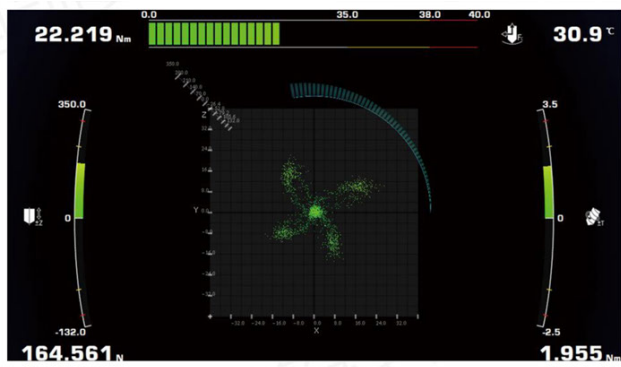


Marlin & Sons  
Catch the best!

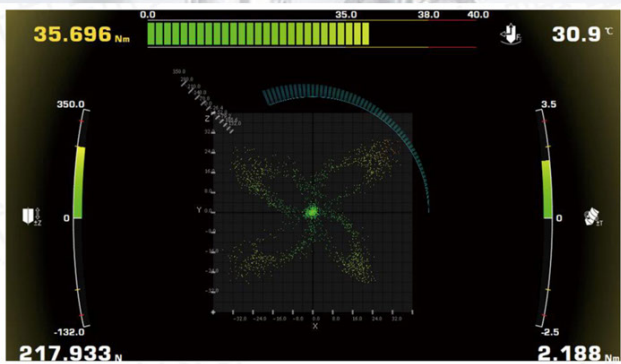
What is the most effective method of maximizing profits on high volume regular production orders, costly material orders, difficult material/stick to cutter blade orders, or technically difficult orders? The correct answer is to use Mach Sensing AI Cutter Sharpness Control System for all CNC cutting sharpening systems. Stop guessing when cutter is out of spec and performing sub-par! Mach Sensing with MachRagar software gives you real time tracking and control for maintaining optimal precision QC!



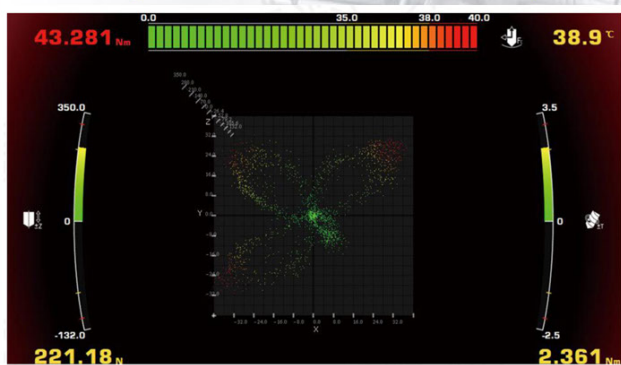
*For Best Safety/Visibility/Ease of Use for Machine Operators: MachSensing can be connected to the **machine warning lights, audible alarm, and even machine cutoff** and parameters you set!*



The MachSensing Smart Tool Holder is covered with a MS Series wireless sensor, which provides live feedback on the bending moment force, axial force, torsion force, and temperature applied to the tool in any direction. The data is transmitted enabling users to collect precise machining data, evaluate the sharpness and condition of the cutter, and exercise control based on your parameters. Green for sharp/fresh cutters!



MachSensing provides high-precision sensing even in harsh detection environments with high-speed rotation of machining operations, high temperatures, and humidity. Yellow for less than peak condition!



Once the cutter reaches pre-determined unacceptable condition red begins to appear letting you know it's close to cutter changing time! In addition to dashboard levels and colors changing you can also set machine lights to match color alert level, set audible alarm and even pre-set auto machine shutoff when acceptable sharpness lost!



**MachSynch Suite**  
 Consists of the following:  
 1 Smart Tool Holder  
 (BT30,40 or 50) or HSK-S  
 at slightly higher cost!  
 For CNC Machining  
 Factories/Shops  
 MachRadar/MachStream  
 Software Bundle (1 year  
 renewable License)  
 For Education/Research  
 Facility: Mach Radar Pro  
 Software

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**MachSensing: Suitable for  
 CNC Milling, Turning, Drilling,  
 Tapping, Grinding, Gear  
 Hobbing and Skiving!**



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## Mach Sensing Sharpness Diagnostic Cutter Holder Options

規格項目	BT30	BT40	BT50	HSK40E	HSK50E/A	HSK63A	HSK100A	ISO/SK30	SK40	SK50	CAT40	CAT50
Length mm(L)	90~135	100~160	110~180	100~135	100~160	105~160	120~180	90~135	100~160	110~180	100~160	110~180
(R.P.M.)	26,000	21,000	18,000	30,000	26,000	24,000	18,000	26,000	21,000	18,000	21,000	18,000
Dynamic Balancing 25,000/(G)	2.5G	2.5G	2.5G	1.0G	2.5G	2.5G	2.5G	2.5G	2.5G	2.5G	2.5G	2.5G
Data Sampling Rate (Hz)	10k	5k	5k	10k	10k	5k	5k	10k	5k	5k	5k	5k
Wireless Transmission Protocol (Hz)	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G	2.45G
Battery Charge Duration	12 hours	12 hours	18 hours	12 hours	12 hours	12 hours	18 hours	12 hours	12 hours	18 hours	12 hours	18 hours
# Transmission Channels	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH	10 CH
Firmware Updatable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Center Outlet Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Other Specifications such as Capto C4-C10 or turning tool VDI powered tool holder, etc. or special lengths possible upon review.

## Spring Collet ER20/25

ER20 (Unit : mm)		ER25 (Unit : mm)	
No.	Range	No.	Range
ER20-01	1.0-0.5	ER25-02	2.0-1.0
ER20-1.5	1.5-1.0	ER25-03	3.0-2.0
ER20-02	2.0-1.0	ER25-04	4.0-3.0
ER20-2.5	2.5-2.0	ER25-05	5.0-4.0
ER20-03	3.0-2.0	ER25-06	6.0-5.0
ER20-3.5	3.5-3.0	ER25-07	7.0-6.0
ER20-04	4.0-3.0	ER25-08	8.0-7.0
ER20-4.5	4.5-4.0	ER25-09	9.0-8.0
ER20-05	5.0-4.0	ER25-10	10-9.0
ER20-5.5	5.5-5.0	ER25-11	11-10
ER20-06	6.0-5.0	ER25-12	12-11
ER20-6.5	6.5-6.0	ER25-13	13-12
ER20-07	7.0-6.0	ER25-14	14-13
ER20-7.5	7.5-7.0	ER25-15	15-14
ER20-08	8.0-7.0	ER25-16	16-15
ER20-8.5	8.5-8.0		
ER20-09	9.0-8.0		
ER20-9.5	9.5-9.0		
ER20-10	10-9.0		
ER20-10.5	10.5-10		
ER20-11	11-10		
ER20-11.5	11.5-11		
ER20-12	12-11		
ER20-12.5	12.5-12		
ER20-13	13-12		



## Collet For End Mill

SK10E (Unit : mm)				
Model No.	d	E	D	L
SK10E-03	3	15	15.6	31
SK10E-3.175	3.175	15		
SK10E-04	4	20		
SK10E-05	5	20		
SK10E-06	6	24		
SK10E-08	8	24		
SK10E-10	10	30.5		

