

EHRZ

Roll Taps for
Extra-Hard
Materials

High performance roll tap for carbon steels and alloy steels (~40 HRC)

09. 2025

EHRZ Roll Taps for Extra-Hard Materials

Z-PRO
Ultimate Machine Tap Series



EHRZ (M3÷M16, MF8x1÷MF16x1.5)



Roll tap for steel ~40 HRC and stainless steel

- The combination of a unique thread relief and a coating that maximizes the benefits of surface treatment ensure torque reduction and improved welding-resistance.
- Wider flutes allow for greater lubricant supply, resulting in improved lubricity and cooling abilities.
- Thanks to optimized substrate material in combination with a special coating, EHRZ shows extraordinary performances on medium-hard steels up to 40 HRC as well as stainless steels.

Product features

Recommended tapping conditions

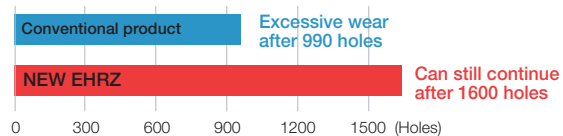
Workpiece materials	Vc (m/min)
P2 Carbon and low alloy steel	10÷40
P3 Medium alloy steel	10÷40
P4 High alloy steel	10÷35
P3-P4 Heat treated steel <40 HRC	10÷25

Workpiece materials	Vc (m/min)
P7 Ferritic - Martensitic stainless steel	10÷15
M Austenitic stainless steel (good machinability)	10÷15

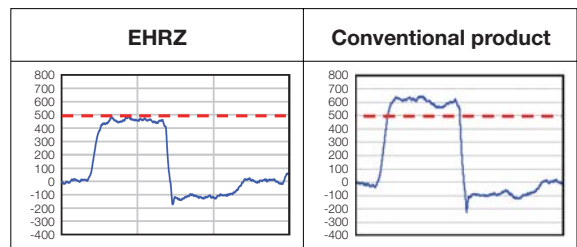
Process data

Tapping conditions: EHRZ ISO2X(6HX) M6x1 2P

Workpiece material	42CrMo4 (40 HRC)
Bored length	5.55 mm
Tapping length	12 mm
Tapping speed	20 m/min
Machine	Vertical Machining Center
Tapping fluid	Water soluble tapping fluid (1:20 solution)
Feed	Fully synchronized feed



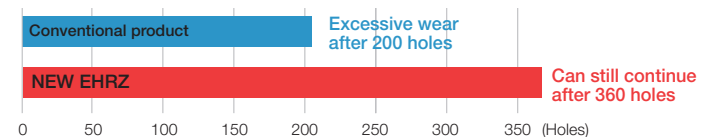
Initial torque data



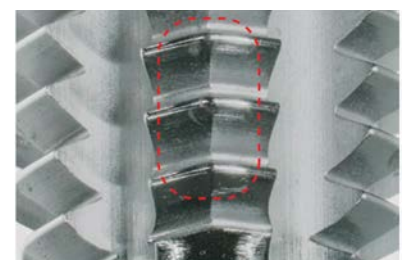
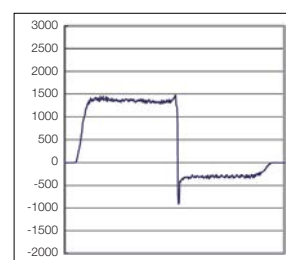
EHRZ has a 20% lower torque compared to conventional product!

Tapping conditions: EHRZ ISO2X(6HX) M12x1 .25 2P

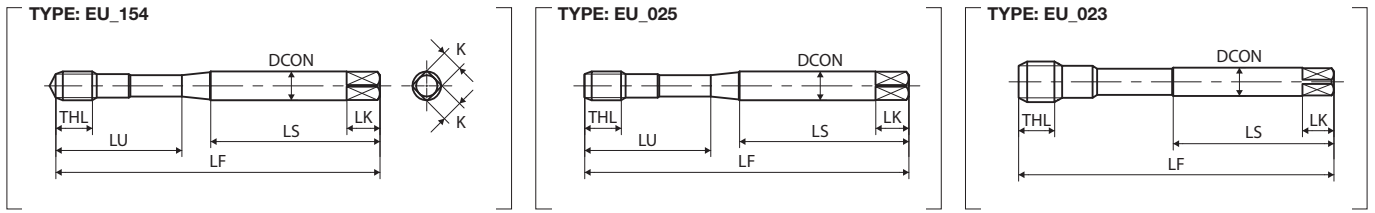
Workpiece material	42CrMo4 (40 HRC)
Bored hole size	Ø 11.4 mm
Tapping length	24 mm
Tapping speed	20 m/min
Machine	Vertical Machining Center
Tapping fluid	Water soluble tapping fluid (1:20 solution)
Feed	Fully synchronized feed



Torque data and wear after 360 holes tapped



EHRZ (DIN)



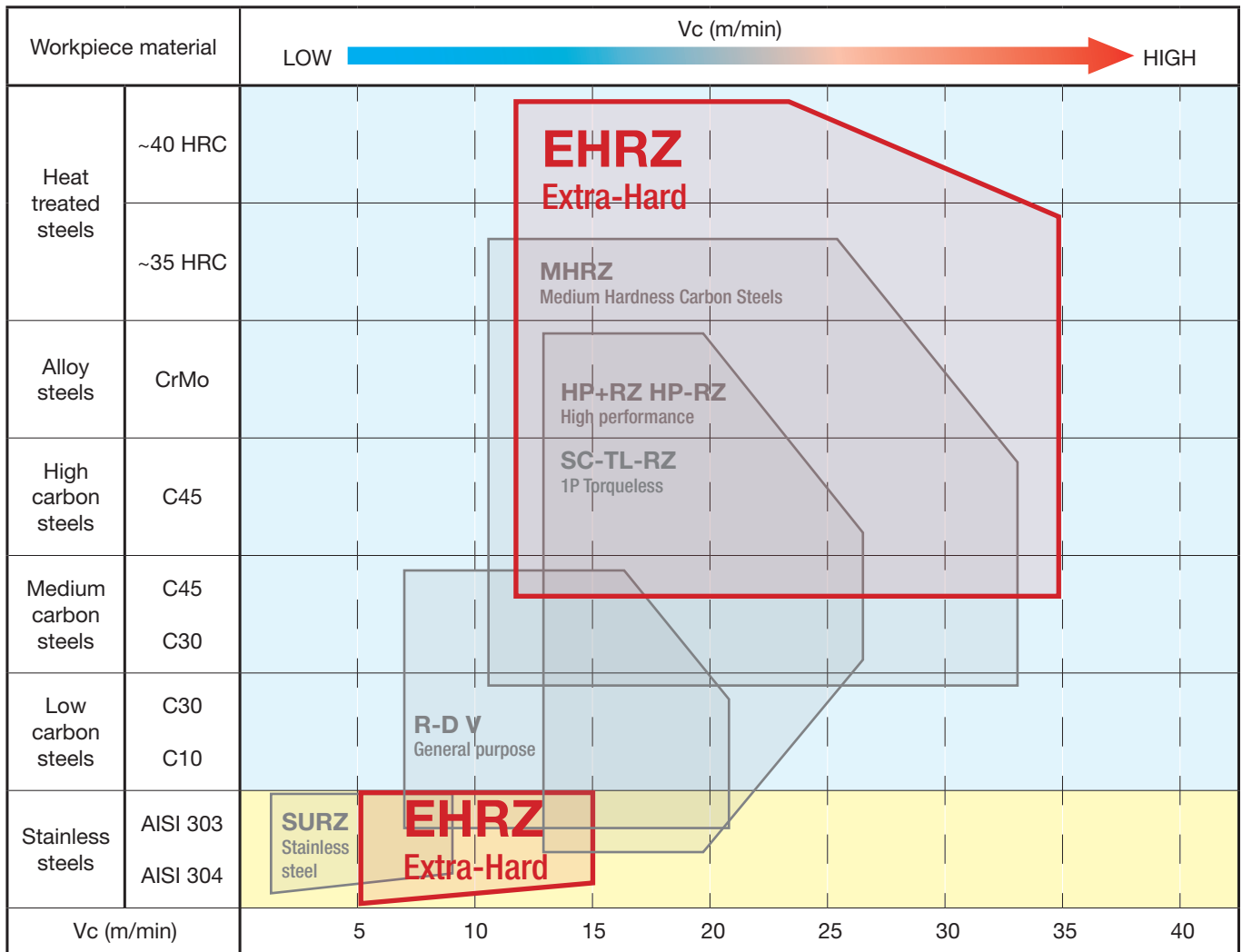
● stock standard, ◎ non-stock standard (no MOQ), ○ non-stock standard (MOQ), ● check stock EU

M	TCTR (tolerance)	Bored Hole Ø (mm)		Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
		Max	Min												
DIN 371															
M3X0.5	ISO2X(6HX)	2.83	2.76	3120101035	4P	56	5	18	34	3.5	2.7	6	5(5)	154	●
M3X0.5	ISO2X(6HX)	2.83	2.76	3121101035	2P	56	5	18	34	3.5	2.7	6	5(5)	025	●
M4X0.7	ISO2X(6HX)	3.75	3.66	3120101042	4P	63	7	21	38	4.5	3.4	6	5(5)	154	●
M4X0.7	ISO2X(6HX)	3.75	3.66	3121101042	2P	63	7	21	38	4.5	3.4	6	5(5)	025	●
M5X0.8	ISO2X(6HX)	4.70	4.60	3120101049	4P	70	9	25	39	6	4.9	8	5(5)	154	●
M5X0.8	ISO2X(6HX)	4.70	4.60	3121101049	2P	70	9	25	39	6	4.9	8	5(5)	025	●
M6X1	ISO2X(6HX)	5.61	5.5	3120101055	4P	80	11	30	45	6	4.9	8	5(5)	154	●
M6X1	ISO2X(6HX)	5.61	5.5	3121101055	2P	80	11	30	45	6	4.9	8	5(5)	025	●
M8X1.25	ISO2X(6HX)	7.52	7.38	3120101064	4P	90	12	35	47	8	6.2	9	6(6)	025	●
M8X1.25	ISO2X(6HX)	7.52	7.38	3121101064	2P	90	12	35	47	8	6.2	9	6(6)	025	●
M10X1.5	ISO2X(6HX)	9.41	9.26	3120101078	4P	100	13	39	52	10	8	11	8(8)	025	●
M10X1.5	ISO2X(6HX)	9.41	9.26	3121101078	2P	100	13	39	52	10	8	11	8(8)	025	●

M	TCTR (tolerance)	Bored Hole Ø (mm)		Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
		Max	Min												
DIN 376															
M12X1.75	ISO2X(6HX)	11.3	11.13	3120101088	4P	110	15	-	56	9	7	10	8(8)	023	●
M12X1.75	ISO2X(6HX)	11.3	11.13	3121101088	2P	110	15	-	56	9	7	10	8(8)	023	●
M14X2	ISO2X(6HX)	13.19	13	3120101100	4P	110	18	-	56	11	9	12	8(8)	023	○
M14X2	ISO2X(6HX)	13.19	13	3121101100	2P	110	18	-	56	11	9	12	8(8)	023	●
M16X2	ISO2X(6HX)	15.19	15	3120101114	4P	110	18	-	56	12	9	12	8(8)	023	○
M16X2	ISO2X(6HX)	15.19	15	3121101114	2P	110	18	-	56	12	9	12	8(8)	023	●

MF	TCTR (tolerance)	Bored Hole Ø (mm)		Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
		Max	Min												
DIN 374															
MF8X1	ISO2X(6HX)	7.61	7.49	3120101065	4P	90	12	-	46	6	6.2	8	6(6)	023	○
MF8X1	ISO2X(6HX)	7.61	7.49	3121101065	2P	90	12	-	46	6	6.2	8	6(6)	023	●
MF10X1.25	ISO2X(6HX)	9.51	9.38	3120101079	4P	100	13	-	51	7	5.5	8	8(8)	023	○
MF10X1.25	ISO2X(6HX)	9.51	9.38	3121101079	2P	100	13	-	51	7	5.5	8	8(8)	023	●
MF10X1	ISO2X(6HX)	9.61	9.55	3120101080	4P	90	13	-	46	7	5.5	8	8(8)	023	○
MF10X1	ISO2X(6HX)	9.61	9.55	3121101080	2P	90	13	-	46	7	5.5	8	8(8)	023	●
MF12X1.5	ISO2X(6HX)	11.39	11.24	3120101089	4P	100	15	-	51	9	7	10	8(8)	023	○
MF12X1.5	ISO2X(6HX)	11.39	11.24	3121101089	2P	100	15	-	51	9	7	10	8(8)	023	●
MF12X1.25	ISO2X(6HX)	11.51	11.38	3120101090	4P	100	15	-	51	9	7	10	8(8)	023	○
MF12X1.25	ISO2X(6HX)	11.51	11.38	3121101090	2P	100	15	-	51	9	7	10	8(8)	023	●
MF12X1	ISO2X(6HX)	11.62	11.50	3120101091	4P	100	15	-	51	9	7	10	8(8)	023	○
MF12X1	ISO2X(6HX)	11.62	11.5	3121101091	2P	100	15	-	51	9	7	10	8(8)	023	●
MF14X1.5	ISO2X(6HX)	13.39	13.24	3120101102	4P	100	18	-	51	11	9	12	8(8)	023	○
MF14X1.5	ISO2X(6HX)	13.39	13.24	3121101102	2P	100	18	-	51	11	9	12	8(8)	023	●
MF14X1.25	ISO2X(6HX)	13.51	13.38	3120101103	4P	100	18	-	51	11	9	12	8(8)	023	○
MF14X1.25	ISO2X(6HX)	13.51	13.38	3121101103	2P	100	18	-	51	11	9	12	8(8)	023	●
MF16X1.5	ISO2X(6HX)	15.38	15.23	3120101116	4P	100	18	-	51	12	9	12	8(8)	023	○
MF16X1.5	ISO2X(6HX)	15.38	15.23	3121101116	2P	100	18	-	51	12	9	12	8(8)	023	●

Roll Taps system chart



Watch the EHRZ video

WARNING

- Tools may shatter. Wear cover or eye glass to avoid injury during tapping.
- Tools may shatter. Use tools under the proper tapping condition.
- Never wear gloves during turning operations as the gloves may get caught with the tools.
- Wear safety shoes to avoid injuring yourself by the falling tools.
- On attaching tools to the machine, fasten firmly to avoid shattering and run-out.
- Fasten the workpieces firmly so that they never move during operation. Never use worn tools or damaged tools with chipping.
- Take a special care to fire trouble. High temperature during machining may cause fire.



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JQA-QMA14664

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SEHRZ

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