Neobyss

GREENRING UNI Plus Grulo UNIVERSAL THREADING TAP

Grulo UNI Plus is an upgrade of our proven universal threading tap Grulo UNI (Greenring). By means of geometric adaptation, a special flute design and a 50° helical pitch, we have succeeded in optimising chip evacuation and, thus, increasing procedural safety and tool life. Chip-based issues occasioned by thread depth (3xd) and long chipping materials (e.g. 1.0116 or 1.0570) are a thing of the past.

High-grade PM steel, used as a core material for optimal coverage of all materials and a multi-layer sliding coat (TIALN-GLT) round off UNI Plus as a premium tool, ensure significant enhancement of tool life and also make deployment in dry machining and minimal lubrication settings feasible.

GREENRING UNI Plus Rapid UNIVERSAL THREADING TAP

The new straight fluted tap– an ideal add-on that is model-consistent (material and surface): PM steel and TIALN-GLT / multi-layer coating. Ideally suited for inner threads in through holes.

GRULO UNI-Plus

DIN 371 item no. 4343/69 DIN 376 item no. 6343/69

RAPID UNI-Plus

DIN 371 item no. 7263/69 DIN 376 item no. 7273/69

Advantages:

- for the machining of unalloyed steels up to 1200 N/mm²
- --> with multi-layer sliding coat (TIALN-GLT)
- suitable for grey cast iron, nodular graphite cast iron, stainless steels, aluminium and aluminium alloys

Neoboss product range:

- --> metric ISO standard thread
- --> metric ISO fine thread
- --> UNC thread/UNF thread compliant with ANSI B 1.1
- --> pipe thread DIN ISO 228

Neoboss Greenring UNI PLus – for optimal chip evacuation

A SELECTION OF THE MOST IMPORTANT MATERIALS:

UNI PLUS is a universal tap for steels of up to 1200 N/mm² tensile strength, nodular graphite cast iron, grey cast iron, stainless steels and aluminium and aluminium alloys.

	Standard designation	DIN no.	Tensile strength in N/mm²	Hardness HB	AISI/SAE/ASTM
Structural steel	St37-3	1.0116	370-450	110-130	A262
Structural steel	St52-3	1.0570	450-680	140-210	
Heat treatable steel	C45	1.0503	650-850	190-250	1045
Heat treatable steel	42CrMo4	1.7225	800-1.000	240-300	4140
Cementation steel	16MnCr5	1.7131	500-700	160-210	5115
Free-cutting steel	95Mn28	1.0715	390-580	110-170	1213
Fine-grained steel	StE500	1.8907	560-800	166-238	
Stainless steel	X12CrS13	1.4005			416
Stainless steel	X5CrNi189	1.4301	500-700	160-210	304
Nodular cast iron	GGG50	0.7050	500	160	EN-GJS-500-7
Aluminium alloy	G-AlSi6Cu	3.2151	160-200	50-60	

COMPARISON OF 'BEFORE AND AFTER' PERFORMANCE SCENARIOS:



--> The 'before' scenario:

Performance exemplified by a simple commercial product. After just a few threaded hole operations, chips accumulate around the tool. The operative must interrupt the process and actively intervene. If the process continues unchecked, tool failure may result and the piece being worked may even be damaged.

Result: No procedural safety, a high risk posed to the piece being worked (in terms of quality and deployment), time wastage, additional set-up time and tool costs and, ultimately, no calculable costs per unit/piece (cpp)



The 'after' scenario:

Outstanding performance using the new UNI Plus/Grulo TIALN-GLT. The combination of 50-degree helical pitch and the special groove design enables chips to be evacuated laterally and at a higher angle.

Result: No chip shavings, no procedural disruption, calculable service life (target/actual), predictable and shorter fabrication times and, thus, improved competitiveness.

Neobyss

Neoboss GmbH · Im Brühl 12 · D-72406 Bisingen · Phone +49 (0)7476 9451-0 Fax +49 (0)7476 9451-45 · www.neoboss.de · sales@neoboss.de