

ALL-ROUNDER FOR **NON-FERROUS METALS**

Our most versatile taps for through and blind holes with BNE-coating.

Almost three times as hard as TIN, but only a fraction as thick – and as colorful as a rainbow. That is our **BNE**-coating.

It was specially developed for use in non-ferrous metals such as aluminum, magnesium, bronze, copper, titanium and lead-free brass.

The very smooth coating **reduces material adhesion and cold welding** and guarantees **very sharp cutting edges** thanks to its low thickness. Ideal for soft materials such as aluminum, which tend to form built-up edges and thus cause cutting edge breakage.

BNE not only reduces tool wear, but also ensures **high surface quality and dimensional accuracy of the thread**.

The sharp cutting edge of the tap ensures **optimum chip formation**, while the smooth surface **ensures reliable chip evacuation**.

In addition, the high smoothness of the BNE-coating reduces the torque, which enables machining at **higher cutting speeds**. Its extreme hardness also **drastically reduces abrasive wear**.

This innovative coating is now combined with our best-selling cutting taps: DOMINANT VA45 for blind holes up to 3xD and VARIANT VA for through holes up to 3xD. The new series completes our broad catalog range of more than 280 versions of the VARIANT and over 600 versions of the DOMINANT, and is available at short notice.



TECH CHECK BNE

	TIN	HL	BNE
Hardness HV	2,300	3,000	6,500
Friction coefficient steel	0.4	0.2	<0.1
Thickness	2-4 µm	4 µm	0.3 µm
Coating structure	titanium nitride	TiAlN + WC/C	hard carbon

CATALOG PROGRAM

- » Chamfer form:
DOMINANT C / 2-3
VARIANT B / 3-5,5
- » Coating: BNE
- » Thread tolerance: 6HX*
- » Shank tolerance: h9
- » Material: HSSE-PM

DOMINANT VA45 BNE

Ød ₁	P	DIN	ID
M 2	0.4	371	095957
M 2.5	0.45	371	095718
M 3	0.5	371	094838
M 4	0.7	371	094473
M 5	0.8	371	095188
M 6	1	371	095189
M 8	1.25	371	095228
M 10	1.5	371	098477
M 12	1.75	376	098478

VARIANT VA BNE

Ød ₁	P	DIN	ID
M 2	0.4	371	098422
M 2.5	0.45	371	098423
M 3	0.5	371	098427
M 4	0.7	371	098428
M 5	0.8	371	098429
M 6	1	371	098425
M 8	1.25	371	098426
M 10	1.5	371	098430
M 12	1.75	376	098431

* The geometry types VARIANT VA and DOMINANT VA45 will be adjusted to x-tolerances in order to improve tool lives. During the transition phase, tools without x-tolerances may still be stocked.

