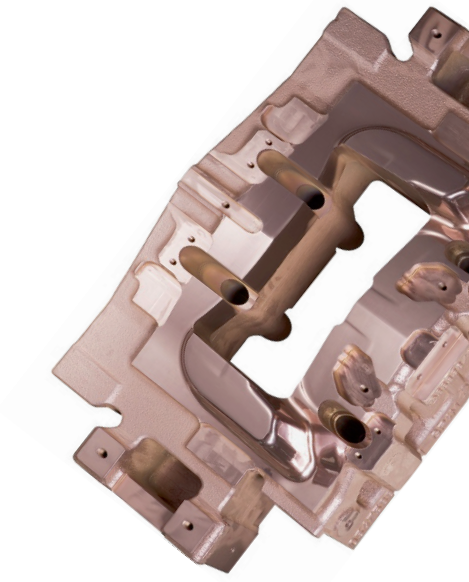
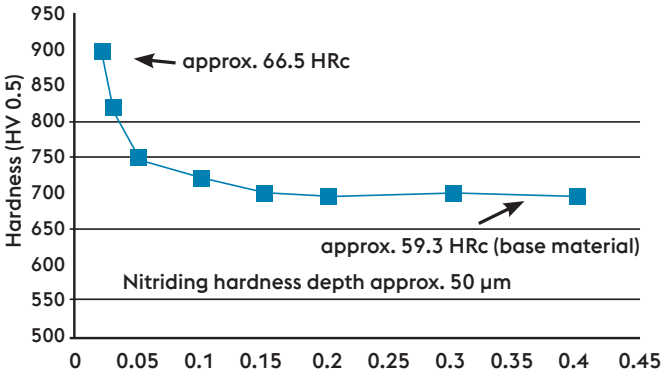
eifeler

DUPLEX-TREATMENT



Targeted microstructural transformation in the substrate – to increase load capacity and wear resistance

The PVD duplex treatment involves nitriding the tool surface using a specifically adapted plasma process immediately followed, without interruption of the vacuum process, by depositing a PVD coating. This combined process (two steps in one process) leads to a defined increase in the surface layer strength and load capacity of the tool or component with a subsequent targeted coating application.



Nitriding hardness, sample PN809, 1.2379

PRODUCT FEATURES

» A higher supportive effect for the hard coating, e.g. 1.2379 with 900 – 1200 HV under the hard coating. High-gloss polished finishes are preserved.

» The ability to withstand pressure loads is significantly increased. This is particularly an advantage when working high-strength sheet metals, for example.

» Due to a coating temperature of under 500 °C, the tools retain their high dimensional accuracy.

DUPLEX-COMBINATIONS

Duplex-VARIANTIC®
Duplex-CrCN
Duplex-TOPMATIC
Duplex-CROSAL®
DUMATIC

APPLICATIONS

Forming	Tools are an application emphasis for which this procedure is now selected regularly and successfully for the forming of high-strength sheet metal materials. Duplex-VARIANTIC® and DUMATIC are typical examples.

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ONE STEP AHEAD.