

NEW HYBRID BOND

M404



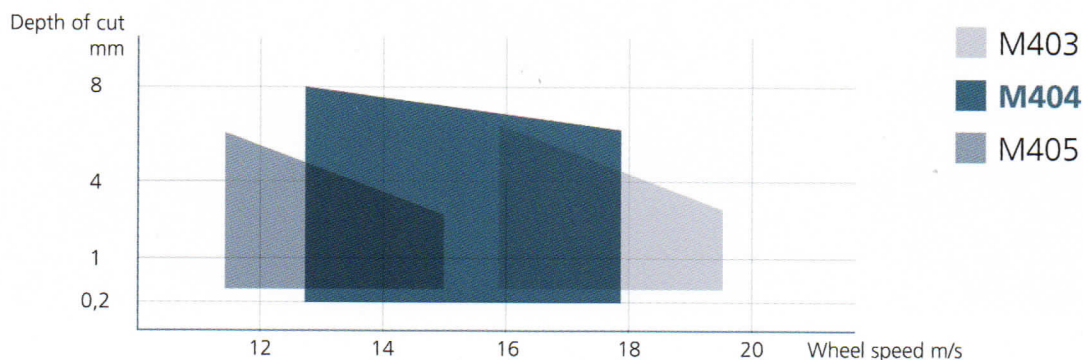
- High stock removal
- Fluting time reduction
- Longer dressing interval
- Good profile retention
- Low, constant power absorption

A new addition to CAFRO's hybrid bond family: the high-performance bond **M404**.

An innovative bond combining the high cutting ability of M403 with the profile retention of M405. Included in the new stocklist 2017 **the new hybrid bond M404** features a remarkable material removal ability, allowing for grinding time reduction and a longer dressing time; it ensures a good profile retention and a low and constant power absorption.

The suggested rotational wheel speed is 16 m/s (min 14 m/s, max 18 m/s).

Hybrid bonds performances:



Application example

In carbide mills and drills' manufacturing the main requirement is working time reduction, especially during the fluting operation; to do so, it is indispensable to use a Diamond Wheel with high removal ability, low power absorption and good profile retention.

Tests on CNC grinders proved that the new CAFRO hybrid bond M404 allows for higher stock removal with lower power absorption, longer dressing interval and a better surface finish than the market benchmarks.

Technical characteristics:

Machine	5-axes CNC, Spindle power 15 kW
Coolant	Neat oil, pressure 10 bar, with superfiltration and chiller
Tool	Endmill Ø20mm, Z3, grinding length 102mm, groove depth 5,5mm
Cafro wheel	1A1 100 15 10 15 20 D64 SQ125 M404 (Stocklist H.39)
Wheel speed	16 m/sec
Infeed	100 mm/min
Working time	Fluting in one pass, 9 minutes
Dressing	Stick every 10 pieces

During grinding the wheel is silent, there are no vibrations, both wheel and workpiece remain cold, power absorption at the spindle remains constant and there are no absorption peaks.

