## Press release: POKOLM-DuoPlug<sup>®</sup>

## HIGHEST RIDIGITY WITH OUTSTANDING RESULTS

Higher metal removal rates, extremely high process-safety for long processing times in extraordinary applications: these are the requests of every milling machine operator these days. One can only realize this in very rare cases. There are only few tools, which combine all these challenges.

The unique and patent protected **POKOLM-DuoPlug**<sup>®</sup> combination clamping system offers at this time the most matured solution for maching deep slots, pockets or cavities.

This system eases the daily challange of every mouldmaker to achieve a process-safe application, in order to obtain optimum concentricity and highest possible rigidity, even in



optimum concentricity and highest possible rigidity, even in overhang-situations of  $\geq$  10 times d. Using the varying thermal expansion of steel and solid carbide, our **DuoPlug<sup>®</sup>- System** is unsurpassed regarding flexibility, modularity and precision.

Jürgen Frenz, manager of the milling department of Bolesta Werkzeugbau GmbH in Marienfeld reports: "our milling jobs of many moulds for the automotive industry confront us every day with deep slots and cavities. By using the benefit of the rigidity of the **DuoPlug<sup>®</sup>-System**, we are able to achieve excellent surfaces in deep milling situations."

This application example: the cover of a rear silencer for a customer of the automotive industry has the following operation data:

Overhang: 243.5 mm = 15,2 times d Feed per minute: 4500 mm.

Even though, the cutting parameters are very bad, the use of a rigid and vibration-reducing combination of holder, cutter body and inserts is required to assure an excellent concentricity and long tool life.



"By using the **DuoPlug**<sup>®</sup>-**System** for finishing operations, we reduced our tool consumption by 20% compared with normal threaded shank end mill bodies." Jürgen Frenz from Bolesta reports and he also mentions, that Bolesta is never working without **Pokolm-DuoPlug**<sup>®</sup>-**Systems** in future.

## **EXAMPLE FROM PRACTICE:**

Machine:	DepoJet
Programmiing System: OpenMind	
Component:	cover of rear silencer
Material:	GGG 60
Holder:	HSK 80 A
Cutter:	3 16 200 SG (diam.16; r3,5; z3)
Insert:	02 07 835 (diam. 7; HSC 05)
Coating:	PVTi
Overhang:	243,5 mm
v <sub>c</sub> :	250 m/min
V <sub>f</sub> :	4.475 mm/min
S:	4.973 U/min
f <sub>z</sub> :	0,3 mm
a <sub>p</sub> :	0,25 mm
a <sub>e</sub> :	0,25 mm



After over 8 hours in use, inserts don't show any visible wear. The component can be finished without any interruption. If another finishing operation would be required, this could take place without changing inserts.

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