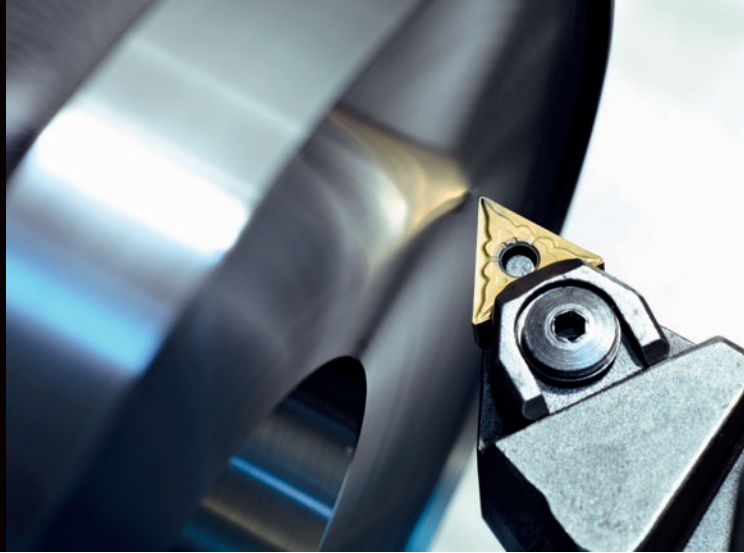


VITAC® BC

An alternative to Pb steels for the automotive and mechanical engineering markets



VITAC® BC is a solution developed specifically for a good fragmentation of chips whatever the machining operation

Areas of application

This variant can be used for automotive and OEM applications, screw machining and mechanical engineering applications.

Clean, Pb-free steels with a low carbon footprint.

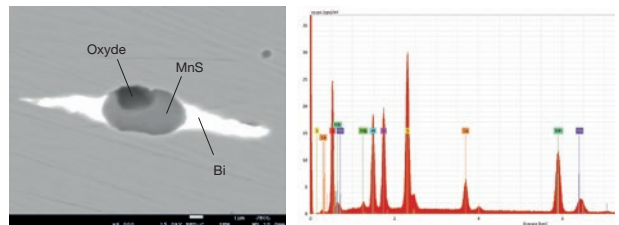
The VITAC® BC process has been designed to allow a substitution of Pb steels. The use of VITAC® BC grades guarantees compliance with European regulations concerning dangerous elements.

VITAC® BC steels are produced from a 100% electrical arc furnace (EAF) process in Hagondange (57), whose carbon footprint is one of the lowest in Europe (< 450 kg CO₂/t).



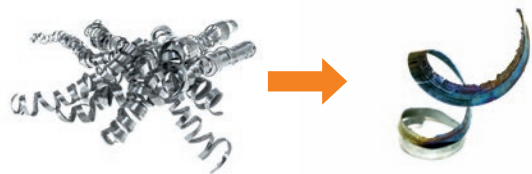
Characteristics

- Control of the inclusion population
- Applicable on a wide range of grades



Advantages

- Excellent chip fragmentation
- Excellent roughness after machining



Benefits

- Machinability identical to Pb grades
- Up to 100% productivity gain compared to a standard grade, through an improvement of the cutting speed, depending on the machining operations.



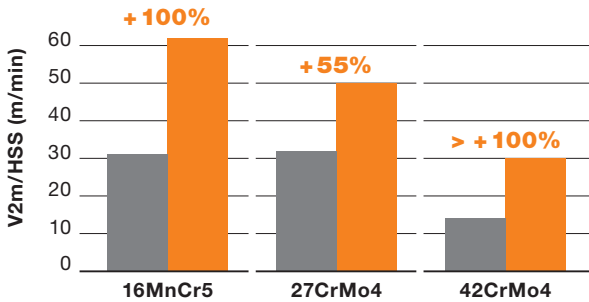
Ascometal

Member of Swiss Steel Group



Excellent performance for drilling operations Better chip fragmentation

Under laboratory conditions



Drilling performance measured on:

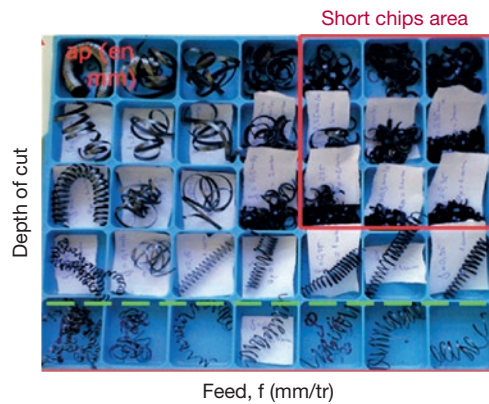
- Standard products
- Grade developed with the VITAC® BC process

The gains measured in the laboratory for the 3 grades concerned vary between + 55% and + 100%, compared to standard grades

In industrial conditions

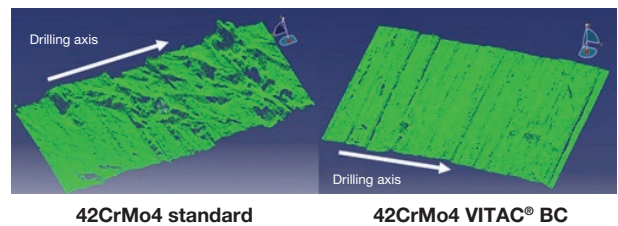
In the case of a deep drilling operation (120 mm), the results obtained with a drill diameter of 1.6 mm on a 42CrMo4 with a hardness of 300 HB at 200 m/min, are:

- Smaller chips
- The cutting force was divided by 2
- Deflection reduced by ½
- Productivity gain of 20%



The cutting conditions are chosen in such a way as to keep the chips small, and to keep the productivity the same or improved compared to the standard.

The surface quality of the components after machining is improved:



Capability

Process applied only on the elaborations in Hagondange for diameters from 16 to 80 mm.



Ascometal

The information in this brochure is not contractually binding, is subject to change without notice, and for which ASCOMETAL France Holding SAS and/or its subsidiaries are not liable.

ASCOMETAL
France Holding SAS
 Avenue de France
 57300 Hagondange
 contact@ascometal.com
 www.ascometal.com
 Member of Swiss Steel Group