Machinability of powder metallurgy steels
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This text is an excellent review by the authors: important for powder metallurgists, since 40-50% of powder metallurgy (PM) parts are subjected to machining. There are 362 references cited, which cover all aspects of machining of PM ferrous steels and this is evaluated and compared to wrought steel machining. The authors have done an exceptional job in assembling a comprehensive text, in particular to present all factors deleterious to machinability of PM steels and factors which can improve the effectiveness of the machining processes.

This book should find its way to most companies associated with PM, whether engaged in steel research and development or in part manufacturing, but especially to machining specialists, also of wrought steels, and to cutting tool manufacturers. The text is suitable for teaching in general PM courses up to the university level; this widens consideration of powder metallurgy in term of machinability.

The text is divided in 9 chapters and follows a logical progression into machining of ferrous PM parts. The first chapter is an introduction and, although short, it sets out the problem regarding fundamentals which are covered in subsequent chapters. It shows that poor machinability of PM steels is associated with all factors involved in PM parts production and that it can be enhanced by adapting all factors determining machinability, i.e. material, tool and cutting conditions.

In summary, the book was a joy to read, because it reported on all the new things which are mentioned in the beginning of this review. Even I, only with experience of machining of conventional ferrous and non-ferrous materials, found a very interesting detailed view of machining of sintered materials. These are a special group of metals which should be included also in teaching of the general ″metal cutting operations”.

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