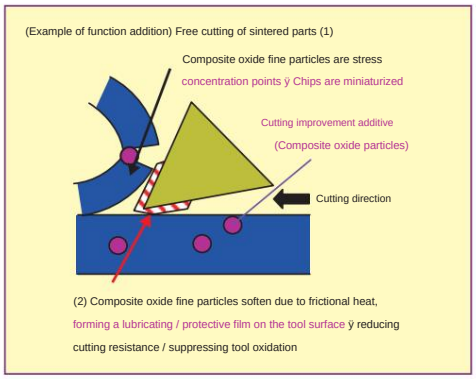
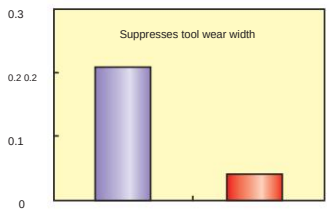
Iron powder / magnetic material

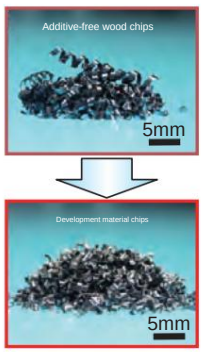
We are developing high-performance iron powder products as raw materials for powder metallurgy. We are a world leader in alloy design and segregation prevention technology.

Segregation prevention technology

We are developing "anti-segregation treated iron powder" in which graphite powder, copper powder, etc. with different specific densities are adhered to the surface of iron powder. We are designing iron powder for sintered parts with various functions by powder engineering techniques such as particle surface treatment technology and particle mixing technology.



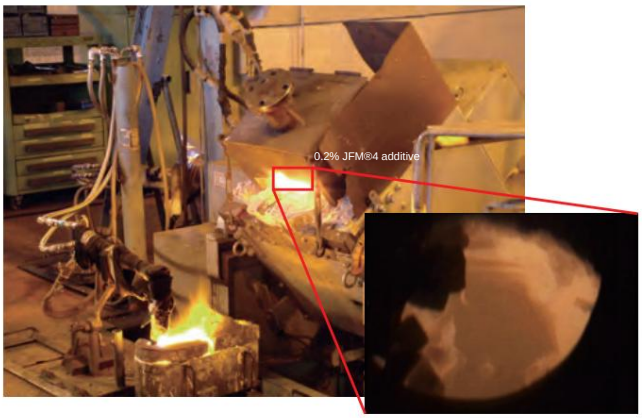




Chips and tool wear width and chip appearance during lathe cutting (500m turning) • Work material Fe-2% Cu-0.8% C sintered body • Cutting speed 200m / min, depth of cut 0.5mm, feed 0.1mm / rev

Iron powder manufacturing technology

We are developing manufacturing technologies for improving basic productivity and stabilizing quality, such as the sintering reaction of iron ore and the aeration analysis of sintered beds. By making full use of various simulation experimental equipment and model calculation, the knowledge of the laboratory is surely linked to the process.

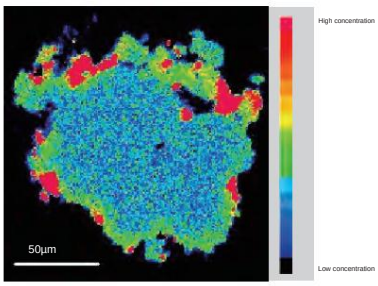


Water atomizing equipment capable of producing various alloy steel powders

Heat treatment furnace that can reproduce the actual finish reduction conditions

Alloy steel powder design technology

We are developing various alloy steel powders that realize the structure of high-performance sintered steel by making full use of alloying technology and particle design technology. Hybrid Mo-based alloy steel powder, which has a heterogeneous structure in which Mo is unevenly distributed on the particle surface, contributes to the manufacture of high-strength sintered parts by customers.



Mo concentration distribution of particle cross section of hybrid type Mo alloy steel powder