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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5163-2006

**Sintered metal materials, excluding hard metals -- Permeable
sintered metal materials -- Determination of density, oil content,
and open porosity**

烧结金属材料(不包括硬质合金)可渗性烧结金属材料 密度、含油率和开孔率的测定

(English Translation)

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1 Scope

This Standard specifies methods of determining the density, oil content and open porosity of permeable sintered metal materials.

This Standard applies in particular to porous metal bearings and to mechanical parts produced by pressing and sintering metal powders.

2 Normative References

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 8643-2002/ISO 13944.1996 Lubricated Metal-Powder Mixes -

Determination of Lubricant Content - Modified Soxhlet Extraction Method (ISO 13944.1996, IDT)

ISO 758 Liquid Chemical Products for Industrial Use - Determination of Density at 20°C

3 Symbols and Designations

Table 1 - Symbols and Designations

Symbols	Designations	Unit
m1	Initial mass of test piece	g
m2	Mass of the test piece after oil extraction and drying	g
m3	Mass of the fully impregnated test piece	g
ma	Mass of the fully or partially impregnated test piece plus supporting device	g

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