

ICS 25.100.70

CCS J 43



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

GB/T 47927-2026

**Diamond discs for dressing the chemical mechanical polishing
(CMP) pad of semiconductor chips**

半导体芯片化学机械抛光垫修整用金刚石盘

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Foreword

This document was issued on 30 July 2026 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 February 2027.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies.

It is classified under ICS 25.100.70 and Chinese classification J 43.

The document runs to 19 pages. The identification, the dates, the classification and the table of contents on this page are taken from the cover and the printed contents of the standard itself.

This document was drafted in accordance with GB/T 1.1-2020 "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

Attention is drawn to the possibility that some elements of this document may be the subject of patent rights. The issuing body assumes no responsibility for identifying them.

This document was proposed by the China Machinery Industry Federation.

It is under the jurisdiction of the National Technical Committee on Abrasives and Grinding Tools of Standardization Administration of China (SAC/TC 139).

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1 Scope

GB/T 47927 covers the diamond conditioning discs that dress the polishing pads used in semiconductor chemical mechanical planarisation. CMP is the step that makes a wafer flat enough for the next layer of lithography, and the polyurethane pad it uses glazes as it works: the diamond disc scores the pad continuously to keep it cutting. The disc therefore governs pad life, removal-rate stability and, if diamonds pull out of the bond, scratch defects on wafers worth far more than the consumable. The document sets the classification and designation of such discs, the requirements they have to meet, the test methods that verify them, the inspection rules and the marking, packaging, transport and storage.

Semiconductor consumables are a declared priority for domestic substitution in China, which is why this class now has a national standard.