

ISO 28080:2021-02 (E)

Hardmetals - Abrasion tests for hardmetals

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Materials	2
5.1	Test pieces	2
5.1.1	Overall sizes	2
5.1.2	Surface finish	2
5.2	Abrasive	2
5.3	Reference materials	2
5.4	Wheel	3
5.4.1	Material	3
5.4.2	Wheel size	3
6	Apparatus	3
6.1	Summary of apparatuses (test systems)	3
6.2	Abrasive-feed mechanism	4
6.3	Vacuum extraction	4
6.4	Control of wheel speed	5
6.5	Calibration of abrasive flow	5
6.6	Test load	5
6.7	Fluid flow	5
6.8	Instrumentation	5
7	Preparation of test piece	6
7.1	Test-piece cleaning	6
7.2	Test-piece weighing	6
7.3	Test-sample density	6
8	Procedure	7
8.1	General	7
8.2	Test-piece clamping	7
8.3	Typical operation conditions	7
8.4	Start of test	7
8.5	End of test or test stop	7
8.6	Interrupted tests	8
8.7	Use of a reference material	8
8.8	Number of repeat tests	8
9	Expression of results	8
9.1	Single-step test	8
9.2	Multiple-step test	8
9.2.1	Tabulation	8
9.2.2	Calculation of abrasion rate	9
9.3	Illustration of trends of wear, friction force and normal force	9
9.4	Illustration of comparative set of measurements using two abrasion materials	9
10	Uncertainty of measurement	10
11	Test report	11
Bibliography		13