

# DIN EN ISO 8256:2024-03 (E)

## Plastics - Determination of tensile-impact strength (ISO 8256: 2023)

---

| Contents  | Page      |
|---|-----------|
| European foreword .....   | 3         |
| Foreword .....  | 4         |
| <b>1 Scope</b> .....  | <b>5</b>  |
| <b>2 Normative references</b> .....   | <b>5</b>  |
| <b>3 Terms and definitions</b> .....  | <b>6</b>  |
| <b>4 Principle</b> .....  | <b>6</b>  |
| <b>5 Apparatus</b> .....  | <b>6</b>  |
| 5.1 Test machine .....  | 6         |
| 5.2 Pendulum and striker .....  | 6         |
| 5.3 Crosshead .....   | 7         |
| 5.4 Clamping devices/jaws .....   | 7         |
| 5.5 Micrometers and gauges .....  | 7         |
| <b>6 Test specimens</b> .....   | <b>7</b>  |
| 6.1 Shape and dimensions .....  | 7         |
| 6.2 Preparation .....   | 9         |
| 6.2.1 Moulding and extrusion compounds .....  | 9         |
| 6.2.2 Sheets .....  | 10        |
| 6.2.3 Fibre-reinforced resins .....   | 10        |
| 6.3 Notching of specimens .....   | 10        |
| 6.4 Number of test specimens .....  | 10        |
| 6.5 Anisotropy .....  | 10        |
| 6.6 Conditioning .....  | 11        |
| <b>7 Procedure</b> .....  | <b>11</b> |
| <b>8 Determination of energy corrections</b> .....  | <b>12</b> |
| 8.1 Method A — Correction $E_q$ due to the plastic deformation and the kinetic energy<br>of the crosshead ..... | 12        |
| 8.2 Method B — Crosshead-bounce energy $E_b$ .....  | 12        |
| <b>9 Calculation and expression of results</b> .....  | <b>12</b> |
| 9.1 Calculation of corrected tensile-impact energy .....  | 12        |
| 9.1.1 General .....   | 12        |
| 9.1.2 Energy correction for method A .....  | 12        |
| 9.1.3 Energy correction for method B .....  | 13        |
| 9.2 Calculation of tensile-impact strength .....  | 13        |
| 9.3 Statistical parameters .....  | 13        |
| 9.4 Number of significant figures .....   | 13        |
| <b>10 Precision</b> .....   | <b>13</b> |
| <b>11 Test report</b> .....   | <b>14</b> |
| <b>Annex A (normative) Determination of correction factor for method A</b> .....                                | <b>15</b> |
| <b>Annex B (normative) Determination of bounce-correction factor for method B</b> .....                         | <b>18</b> |
| <b>Bibliography</b> .....   | <b>20</b> |