

# DIN 51222:2017-02 (E)

Materials testing machines - Impact test - Particular requirements on pendulum impact testing machines with a capacity of nominal energy  $< \text{kleiner} \Rightarrow 50 \text{ J}$  and verification

---

| <b>Contents</b>   | <b>Page</b> |
|---|-------------|
| Foreword .....  | 3           |
| Introduction .....  | 4           |
| 1 Scope .....   | 5           |
| 2 Normative references .....                                  | 5           |
| 3 Terms and definitions.....                                  | 5           |
| 4 Symbols and abbreviated terms.....                          | 5           |
| 5 Direct verification of the pendulum machine .....           | 5           |
| 5.1 General .....   | 5           |
| 5.2 Machine framework .....                                   | 6           |
| 5.3 Pendulum.....   | 6           |
| 5.4 Position of the framework/pendulum .....                  | 7           |
| 5.5 Supports and anvils for the test specimen .....           | 7           |
| 5.6 Clearance between the anvils and the pendulum .....       | 7           |
| 5.7 Position of the centre of percussion.....                 | 7           |
| 5.8 Device for indicating absorbed energy .....               | 8           |
| 5.8.1 Analogue indication.....                                | 8           |
| 5.8.2 Digital indication.....                                 | 8           |
| 5.9 Potential energy ( $K_p$ ).....                           | 8           |
| 5.10 Error in the indicated absorbed energy ( $K_S$ ) .....   | 8           |
| 5.11 Energy absorbed by friction .....                        | 8           |
| 5.12 Velocity at impact.....                                  | 9           |
| 6 Direct verification .....                                   | 9           |
| 7 Indirect verification of the pendulum testing machine ..... | 9           |
| 8 Frequency of verification.....                              | 9           |
| 9 Verification report.....                                    | 9           |
| 10 Designation .....  | 9           |
| Bibliography .....  | 10          |