

# DIN 743-3:2024-07 (E)

## Calculation of load capacity of shafts and axles - Part 3: Strength of materials

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
1 Scope .....		4
2 Normative references .....		4
3 Terms and definitions .....		4
4 Symbols .....		5
5 Strength of materials .....		5
5.1 General .....		5
5.2 Fatigue strength .....		6
5.3 Yield strength .....		7
Annex A (normative) Strength values .....		8
Annex B (informative) List of former designations of structural steel for comparison .....		11
Bibliography .....		12
Tables Table A.1 -- Strength values for non-alloy structural steels according to DIN EN 10025-2 .....		8
Table A.2 -- Strength values for weldable fine grain structural steels according to DIN EN 10025-3 ....		8
Table A.3 -- Core strength values for case hardening steels (corresponding to blank-hardened condition) according to DIN EN ISO 683-3 (excerpt) .....		9
Table A.4 -- Strength values for quenched and tempered steels according to DIN EN ISO 683-1 (excerpt) and DIN EN ISO 683-2 (excerpt) .....		9
Table A.5 -- Strength values for nitriding steels according to DIN EN ISO 683-5 .....		10
Table B.1 -- Designations for structural steel .....		11