

DIN 743-1

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**Calculation of load capacity of shafts and axles –
Part 1: General,
English translation of DIN 743-1:2012-12**

Tragfähigkeitsberechnung von Wellen und Achsen –
Teil 1: Grundlagen,
Englische Übersetzung von DIN 743-1:2012-12

Calcul de la capacité des arbres et axes –
Partie 1: Base,
Traduction anglaise de DIN 743-1:2012-12

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In case of doubt, the German-language original shall be considered authoritative.



A comma is used as the decimal marker.

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Foreword

This standard has *been prepared* by Working Committee NA 060-34-32 AA *Wellen- und Welle-Nabe-Verbindungen* of Section *Antriebstechnik* of the *Normenausschuss Maschinenbau* (Mechanical Engineering Standards Committee) in DIN.

DIN 743, *Calculation of load capacity of shafts and axles* comprises:

- *Part 1: General*
- *Part 2: Theoretical stress concentration factors and fatigue notch factors*
- *Part 3: Strength of materials*
- *Part 4: Fatigue limit, endurance limit — Equivalently damaging continuous stress*
- *Supplement 1: Examples to part 1 to 3*
- *Supplement 2: Examples to part 4*

Amendments

This standard differs from DIN 743-1:2000-10 as follows:

- a) Clause 5 has been revised:
 - for the verification of structural strength, a distinction has been made between proof of avoidance of permanent deformation and proof of avoidance of incipient cracks in hard surfaces;
 - additions have been made to the determination of the component incipient crack limit;
- b) editorial changes have been made.

Previous editions

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