

Quelle: <https://www.arbeitssicherheit.de//document/fdd80770-f353-3c24-9452-65c1b77fb2a>

Bibliografie

| | |
|---------------------------|---|
| Titel | Prüfbuch für den Kran (bisher: BGG/GUV-G 943) |
| Amtliche Abkürzung | DGUV Grundsatz 309-006 |
| Normtyp | Satzung |
| Normgeber | Bund |
| Gliederungs-Nr. | [keine Angabe] |

Anhang 7 - Einstufung von Hubwerken und deren Lebensdauer (BGG/GUV-G 943-7)

BGG/GUV-G 943-7

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|---|------|---|-------|---|------|---|-------|---|---|----------------|---|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-------|
| Fabrik Nr. | | Einstufung von Hubwerken und deren Lebensdauer | | | | | | | | Blatt Nr. | | | | | | | | | | | | | | | | | |
| nach BGV/ GUV-V D8, DIN 15 020-1, FEM 9.511 und FEM 9.755 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Projekt: | | | | | | Datum: | | | | | | | | | | | | | | | | | | | | | |
| Hubwerk | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Typ: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tragfähigkeit | | τ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Triebswerkgruppe | | | | <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td>1 Dm</td><td>1 Cm</td><td>1 Bm</td><td>1 Am</td><td>2 m</td><td>3 m</td><td>4 m</td><td>5 m</td> </tr> <tr> <td>100</td><td>200</td><td>400</td><td>800</td><td>1600</td><td>3200</td><td>6300</td><td>12500</td> </tr> </table> | | | | | | | | 1 Dm | 1 Cm | 1 Bm | 1 Am | 2 m | 3 m | 4 m | 5 m | 100 | 200 | 400 | 800 | 1600 | 3200 | 6300 | 12500 |
| 1 Dm | 1 Cm | 1 Bm | 1 Am | 2 m | 3 m | 4 m | 5 m | | | | | | | | | | | | | | | | | | | | |
| 100 | 200 | 400 | 800 | 1600 | 3200 | 6300 | 12500 | | | | | | | | | | | | | | | | | | | | |
| Vollastlebensdauer | | D | h | | | | | | | | | | | | | | | | | | | | | | | | |
| Arbeitstage pro Jahr | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Überprüfungszeitraum von | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Überprüfungszeitraum bis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arbeitstage | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hubgeschwindigkeit | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| schnell | | v | m/min | | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeit pro Tag | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | | | | | | |
| Hakenweg, Heben | | m | | | | | | | | | | | | | | | | | | | | | | | | | |
| Senken | | m | | | | | | | | | | | | | | | | | | | | | | | | | |
| Summe | | H | m | | | | | | | | | | | | | | | | | | | | | | | | |
| Last | | τ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anzahl pro Tag | | Z | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeit | | t | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeitverhältnis | | ti | % 100 | | | | | | | | | | | | | | | | | | | | | | | | |
| Belastungsverhältnis | | β | | | | | | | | | | | | | | | | | | | | | | | | | |
| kubischer Mittelwert | | k | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gesamtauzeit, täglich | | tg | h | | | | | | | | | | | | | | | | | | | | | | | | |
| Lebensdauer | | | | nach FEM 9.755 | | | | | | | | | | | | | | | | | | | | | | | |
| Belastungsspektrum | | km | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeit im Überprüfungszeitraum | | T | h | | | | | | | | | | | | | | | | | | | | | | | | |
| Protokollier-Faktor | | F | | f = 1 z. B. Lastkollektivspeicher | | | | | | | | | | | | | | | | | | | | | | | |
| Volllaststunden | | S | | f = 1,1 z. B. Betriebsstundenzähler | | | | | | | | | | | | | | | | | | | | | | | |
| Summe Volllaststunden bisher | | h | | f = 1,2 ohne Zähler | | | | | | | | | | | | | | | | | | | | | | | |
| Summe Volllaststunden | | h | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auswertung S/D | | | | S/D > 0,9 GÜ veranlassen | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeit pro Jahr | | h | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volllaststunden pro Jahr | | h | | | | | | | | | | | | | | | | | | | | | | | | | |
| Verbleibender theoretischer Nutzungszeitraum | | | | | | Jahre bei der zur Zeit vorliegenden Beanspruchung | | | | | | | | | | | | | | | | | | | | | |
| Die Generalüberholung ist gemäß § 37 Abs. 5 Nr. 1 (BGV/ GUV-V D8) unverzüglich zu veranlassen | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vorgaben des Herstellers in Betriebsanleitungen bezüglich Wartung, Kontrollen und Prüfungen sind einzuhalten. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Berechnung: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Laufzeit | | $t = \frac{H \cdot Z}{v \cdot 60}$ | | kub. Mittelwert | | $k = \sqrt[3]{\sum (\beta_i^3 \cdot t_i)}$ | | | | | | | | | | | | | | | | | | | | | |
| Laufzeitverhältnis | | $t_i = \frac{t}{t_g}$ | | Belastungsspektrum | | $km = k^2 = \sum (\beta_i^2 \cdot t_i)$ | | | | | | | | | | | | | | | | | | | | | |
| tägl. Gesamtauzeit | | $t_g = \sum t$ | | Laufzeit pro Jahr | | $T = t_g \times \text{Arbeitstage pro Jahr}$ | | | | | | | | | | | | | | | | | | | | | |
| Belastungsverhältnis | | $\beta = \frac{\text{Last}}{\text{Tragfähigkeit}}$ | | Volllaststunden | | $S = f \times km \times T$ | | | | | | | | | | | | | | | | | | | | | |
| Auswertung: | | Bedingung | | $\frac{S}{D} \leq 1$ | | | | | | | | | | | | | | | | | | | | | | | |