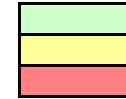


# Geschätzte Gefährdung bei Hand-Arm-Schwingungen

niedrige Gefährdung  
vertretbare Gefährdung, Auslösewert ist überschritten  
unvertretbar hohe Gefährdung, Grenzwert ist überschritten

Risiko  $\leq 100$   
 $100 < \text{Risiko} \leq 400$   
Risiko  $> 400$



| a <sub>hv</sub><br>in m/s <sup>2</sup> | Tägliche Expositionszeit in Minuten |     |     |       |       |       |       |       |       |       |        |        |        |        |        |        |        |
|--|-------------------------------------|-----|-----|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
|  | 10                                  | 20  | 30  | 40    | 60    | 90    | 120   | 180   | 240   | 300   | 360    | 420    | 480    | 540    | 600    | 660    | 720    |
| 30,0                                   | 300                                 | 600 | 900 | 1.200 | 1.800 | 2.700 | 3.600 | 5.400 | 7.200 | 9.000 | 10.800 | 12.600 | 14.400 | 16.200 | 18.000 | 19.800 | 21.600 |
| 25,0                                   | 208                                 | 417 | 625 | 833   | 1.250 | 1.875 | 2.500 | 3.750 | 5.000 | 6.250 | 7.500  | 8.750  | 10.000 | 11.250 | 12.500 | 13.750 | 15.000 |
| 20,0                                   | 133                                 | 267 | 400 | 533   | 800   | 1.200 | 1.600 | 2.400 | 3.200 | 4.000 | 4.800  | 5.600  | 6.400  | 7.200  | 8.000  | 8.800  | 9.600  |
| 19,0                                   | 120                                 | 241 | 361 | 481   | 722   | 1.083 | 1.444 | 2.166 | 2.888 | 3.610 | 4.332  | 5.054  | 5.776  | 6.498  | 7.220  | 7.942  | 8.664  |
| 18,0                                   | 108                                 | 216 | 324 | 432   | 648   | 972   | 1.296 | 1.944 | 2.592 | 3.240 | 3.888  | 4.536  | 5.184  | 5.832  | 6.480  | 7.128  | 7.776  |
| 17,0                                   | 96                                  | 193 | 289 | 385   | 578   | 867   | 1.156 | 1.734 | 2.312 | 2.890 | 3.468  | 4.046  | 4.624  | 5.202  | 5.780  | 6.358  | 6.936  |
| 16,0                                   | 85                                  | 171 | 256 | 341   | 512   | 768   | 1.024 | 1.536 | 2.048 | 2.560 | 3.072  | 3.584  | 4.096  | 4.608  | 5.120  | 5.632  | 6.144  |
| 15,0                                   | 75                                  | 150 | 225 | 300   | 450   | 675   | 900   | 1.350 | 1.800 | 2.250 | 2.700  | 3.150  | 3.600  | 4.050  | 4.500  | 4.950  | 5.400  |
| 14,0                                   | 65                                  | 131 | 196 | 261   | 392   | 588   | 784   | 1.176 | 1.568 | 1.960 | 2.352  | 2.744  | 3.136  | 3.528  | 3.920  | 4.312  | 4.704  |
| 13,0                                   | 56                                  | 113 | 169 | 225   | 338   | 507   | 676   | 1.014 | 1.352 | 1.690 | 2.028  | 2.366  | 2.704  | 3.042  | 3.380  | 3.718  | 4.056  |
| 12,0                                   | 48                                  | 96  | 144 | 192   | 288   | 432   | 576   | 864   | 1.152 | 1.440 | 1.728  | 2.016  | 2.304  | 2.592  | 2.880  | 3.168  | 3.456  |
| 11,0                                   | 40                                  | 81  | 121 | 161   | 242   | 363   | 484   | 726   | 968   | 1.210 | 1.452  | 1.694  | 1.936  | 2.178  | 2.420  | 2.662  | 2.904  |
| 10,0                                   | 33                                  | 67  | 100 | 133   | 200   | 300   | 400   | 600   | 800   | 1.000 | 1.200  | 1.400  | 1.600  | 1.800  | 2.000  | 2.200  | 2.400  |
| 9,5                                    | 30                                  | 60  | 90  | 120   | 181   | 271   | 361   | 542   | 722   | 903   | 1.083  | 1.264  | 1.444  | 1.625  | 1.805  | 1.986  | 2.166  |
| 9,0                                    | 27                                  | 54  | 81  | 108   | 162   | 243   | 324   | 486   | 648   | 810   | 972    | 1.134  | 1.296  | 1.458  | 1.620  | 1.782  | 1.944  |
| 8,5                                    | 24                                  | 48  | 72  | 96    | 145   | 217   | 289   | 434   | 578   | 723   | 867    | 1.012  | 1.156  | 1.301  | 1.445  | 1.590  | 1.734  |
| 8,0                                    | 21                                  | 43  | 64  | 85    | 128   | 192   | 256   | 384   | 512   | 640   | 768    | 896    | 1.024  | 1.152  | 1.280  | 1.408  | 1.536  |
| 7,5                                    | 19                                  | 38  | 56  | 75    | 113   | 169   | 225   | 338   | 450   | 563   | 675    | 788    | 900    | 1.013  | 1.125  | 1.238  | 1.350  |
| 7,0                                    | 16                                  | 33  | 49  | 65    | 98    | 147   | 196   | 294   | 392   | 490   | 588    | 686    | 784    | 882    | 980    | 1.078  | 1.176  |
| 6,5                                    | 14                                  | 28  | 42  | 56    | 85    | 127   | 169   | 254   | 338   | 423   | 507    | 592    | 676    | 761    | 845    | 930    | 1.014  |
| 6,0                                    | 12                                  | 24  | 36  | 48    | 72    | 108   | 144   | 216   | 288   | 360   | 432    | 504    | 576    | 648    | 720    | 792    | 864    |
| 5,5                                    | 10                                  | 20  | 30  | 40    | 61    | 91    | 121   | 182   | 242   | 303   | 363    | 424    | 484    | 545    | 605    | 666    | 726    |
| 5,0                                    | 8                                   | 17  | 25  | 33    | 50    | 75    | 100   | 150   | 200   | 250   | 300    | 350    | 400    | 450    | 500    | 550    | 600    |
| 4,5                                    | 7                                   | 14  | 20  | 27    | 41    | 61    | 81    | 122   | 162   | 203   | 243    | 284    | 324    | 365    | 405    | 446    | 486    |
| 4,0                                    | 5                                   | 11  | 16  | 21    | 32    | 48    | 64    | 96    | 128   | 160   | 192    | 224    | 256    | 288    | 320    | 352    | 384    |
| 3,5                                    | 4                                   | 8   | 12  | 16    | 25    | 37    | 49    | 74    | 98    | 123   | 147    | 172    | 196    | 221    | 245    | 270    | 294    |
| 3,0                                    | 3                                   | 6   | 9   | 12    | 18    | 27    | 36    | 54    | 72    | 90    | 108    | 126    | 144    | 162    | 180    | 198    | 216    |
| 2,5                                    | 2                                   | 4   | 6   | 8     | 13    | 19    | 25    | 38    | 50    | 63    | 75     | 88     | 100    | 113    | 125    | 138    | 150    |
| 2,0                                    | 1                                   | 3   | 4   | 5     | 8     | 12    | 16    | 24    | 32    | 40    | 48     | 56     | 64     | 72     | 80     | 88     | 96     |
| 1,5                                    | 1                                   | 2   | 2   | 3     | 5     | 7     | 9     | 14    | 18    | 23    | 27     | 32     | 36     | 41     | 45     | 50     | 54     |
| 1,0                                    | 0                                   | 1   | 1   | 1     | 2     | 3     | 4     | 6     | 8     | 10    | 12     | 14     | 16     | 18     | 20     | 22     | 24     |