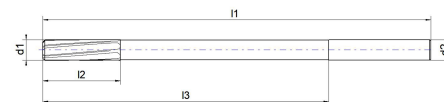


## HSSE-Maschinenreibahlen HSSE machine reamers



| Artikelnummer<br>Article-No. | d1 0/+0,003 | l1 | l2  | l3   | d2 h6 | flutes |
|------------------------------|-------------|----|-----|------|-------|--------|
| E.4616.0.0090-0095           | -           | 38 | 12  | 14   | 1,0   | -      |
| E.4616.0.0097                | 0.97        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0098                | 0.98        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0099                | 0.99        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0100                | 1           | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0101                | 1.01        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0102                | 1.02        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0103                | 1.03        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0104                | 1.04        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0105                | 1.05        | 34 | 5.5 | 15   | 1,0   | 3      |
| E.4616.0.0106-0144           | -           | -  | -   | -    | 1,0   | -      |
| E.4616.0.0110                | 1.1         | 36 | 6.5 | 15.5 | 1,0   | 3      |
| E.4616.0.0120                | 1.2         | 38 | 8   | 16.5 | 2,0   | 3      |
| E.4616.0.0130                | 1.3         | 38 | 8   | 16.5 | 2,0   | 3      |
| E.4616.0.0140                | 1.4         | 40 | 8   | 18   | 2,0   | 3      |
| E.4616.0.0145-0179           | -           | -  | -   | -    | 2,0   | -      |
| E.4616.0.0150                | 1.5         | 40 | 8   | 18   | 2,0   | 3      |
| E.4616.0.0160                | 1.6         | 43 | 9   | 20   | 2,0   | 4      |
| E.4616.0.0170                | 1.7         | 43 | 9   | 20   | 2,0   | 4      |
| E.4616.0.0180                | 1.8         | 46 | 10  | 22   | 2,0   | 4      |
| E.4616.0.0180-0195           | -           | 46 | 10  | 28   | 2,0   | 4      |
| E.4616.0.0196                | 1.96        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0197                | 1.97        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0198                | 1.98        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0199                | 1.99        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0200                | 2           | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0201                | 2.01        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0202                | 2.02        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0203                | 2.03        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0204                | 2.04        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0205                | 2.05        | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0210                | 2.1         | 49 | 11  | 24   | 2,0   | 4      |
| E.4616.0.0220                | 2.2         | 53 | 12  | 25   | 3,0   | 4      |
| E.4616.0.0230                | 2.3         | 53 | 12  | 25   | 3,0   | 4      |
| E.4616.0.0231-0295           | -           | -  | -   | -    | 3,0   | -      |

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| Artikelnummer<br>Article-No. | d1 0/+0,003 | I1 | I2 | I3 | d2 h6 | flutes |
|------------------------------|-------------|----|----|----|-------|--------|
| E.4616.0.0240                | 2.4         | 57 | 14 | 29 | 3,0   | 4      |
| E.4616.0.0250                | 2.5         | 57 | 14 | 29 | 3,0   | 4      |
| E.4616.0.0260                | 2.6         | 57 | 14 | 29 | 3,0   | 4      |
| E.4616.0.0270                | 2.7         | 61 | 15 | 33 | 3,0   | 4      |
| E.4616.0.0280                | 2.8         | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0290                | 2.9         | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0296                | 2.96        | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0297                | 2.97        | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0298                | 2.98        | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0299                | 2.99        | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0300                | 3           | 61 | 15 | 33 | 3,0   | 6      |
| E.4616.0.0301                | 3.01        | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0302                | 3.02        | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0303                | 3.03        | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0304                | 3.04        | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0305                | 3.05        | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0310                | 3.1         | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0320                | 3.2         | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0330                | 3.3         | 65 | 16 | 37 | 4,0   | 6      |
| E.4616.0.0336-0375           | -           | -  | -  | -  | 4,0   | -      |
| E.4616.0.0340                | 3.4         | 70 | 18 | 42 | 4,0   | 6      |
| E.4616.0.0350                | 3.5         | 70 | 18 | 42 | 4,0   | 6      |
| E.4616.0.0360                | 3.6         | 70 | 18 | 42 | 4,0   | 6      |
| E.4616.0.0370                | 3.7         | 70 | 18 | 42 | 4,0   | 6      |
| E.4616.0.0376-0395           | -           | -  | -  | -  | 4,0   | -      |
| E.4616.0.0380                | 3.8         | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0390                | 3.9         | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0396                | 3.96        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0397                | 3.97        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0398                | 3.98        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0399                | 3.99        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0400                | 4           | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0401                | 4.01        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0402                | 4.02        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0403                | 4.03        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0404                | 4.04        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0405                | 4.05        | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0406-0425           | -           | -  | -  | -  | 4,0   | -      |
| E.4616.0.0410                | 4.1         | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0420                | 4.2         | 75 | 19 | 47 | 4,0   | 6      |
| E.4616.0.0426-0475           | -           | -  | -  | -  | 4,0   | -      |
| E.4616.0.0430                | 4.3         | 80 | 21 | 52 | 5,0   | 6      |
| E.4616.0.0440                | 4.4         | 80 | 21 | 52 | 5,0   | 6      |
| E.4616.0.0450                | 4.5         | 80 | 21 | 52 | 5,0   | 6      |
| E.4616.0.0460                | 4.6         | 80 | 21 | 52 | 5,0   | 6      |
| E.4616.0.0470                | 4.7         | 80 | 21 | 52 | 5,0   | 6      |
| E.4616.0.0480                | 4.8         | 86 | 23 | 52 | 5,0   | 6      |
| E.4616.0.0490                | 4.9         | 86 | 23 | 52 | 5,0   | 6      |
| E.4616.0.0496                | 4.96        | 86 | 23 | 52 | 5,0   | 6      |
| E.4616.0.0497                | 4.97        | 86 | 23 | 52 | 5,0   | 6      |
| E.4616.0.0498                | 4.98        | 86 | 23 | 52 | 5,0   | 6      |

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| Artikelnummer<br>Article-No. | d1 0/+0,003 | I1  | I2 | I3 | d2 h6 | flutes |
|------------------------------|-------------|-----|----|----|-------|--------|
| E.4616.0.0499                | 4.99        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0500                | 5           | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0501                | 5.01        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0502                | 5.02        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0503                | 5.03        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0504                | 5.04        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0505                | 5.05        | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0510                | 5.1         | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0520                | 5.2         | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0530                | 5.3         | 86  | 23 | 52 | 5,0   | 6      |
| E.4616.0.0531-0580           | -           | -   | -  | -  | 5,0   | -      |
| E.4616.0.0540                | 5.4         | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0550                | 5.5         | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0560                | 5.6         | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0580                | 5.8         | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0590                | 5.9         | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0596                | 5.96        | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0597                | 5.97        | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0598                | 5.98        | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0599                | 5.99        | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0600                | 6           | 93  | 26 | 57 | 6,0   | 6      |
| E.4616.0.0601                | 6.01        | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0602                | 6.02        | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0603                | 6.03        | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0604                | 6.04        | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0605                | 6.05        | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0606-0670           | -           | 101 | 28 | 63 | 6,0   | 6      |
| E.4616.0.0610                | 6.1         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0620                | 6.2         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0630                | 6.3         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0640                | 6.4         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0650                | 6.5         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0660                | 6.6         | 101 | 28 | 65 | 6,0   | 6      |
| E.4616.0.0671-0695           | -           | -   | -  | -  | 6,0   | -      |
| E.4616.0.0680                | 6.8         | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0697                | 6.97        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0698                | 6.98        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0699                | 6.99        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0700                | 7           | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0701                | 7.01        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0702                | 7.02        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0703                | 7.03        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0705                | 7.05        | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0706-0755           | -           | -   | -  | -  | 8,0   | -      |
| E.4616.0.0710                | 7.1         | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0730                | 7.3         | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0740                | 7.4         | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0750                | 7.5         | 109 | 31 | 73 | 8,0   | 6      |
| E.4616.0.0756-0795           | -           | -   | -  | -  | 8,0   | -      |
| E.4616.0.0760                | 7.6         | 117 | 33 | 81 | 8,0   | 6      |
| E.4616.0.0770                | 7.7         | 117 | 33 | 81 | 8,0   | 6      |

# PRODUCT DATA SHEET



| Artikelnummer<br>Article-No. | d1 0/+0,003 | I1  | I2 | I3  | d2 h6 | flutes |
|------------------------------|-------------|-----|----|-----|-------|--------|
| E.4616.0.0780                | 7.8         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0796                | 7.96        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0797                | 7.97        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0798                | 7.98        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0799                | 7.99        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0800                | 8           | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0801                | 8.01        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0802                | 8.02        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0803                | 8.03        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0804                | 8.04        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0805                | 8.05        | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0810                | 8.1         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0820                | 8.2         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0830                | 8.3         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0840                | 8.4         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0850                | 8.5         | 117 | 33 | 81  | 8,0   | 6      |
| E.4616.0.0856-0895           | -           | -   | -  | -   | 8,0   | -      |
| E.4616.0.0860                | 8.6         | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0870                | 8.7         | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0880                | 8.8         | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0890                | 8.9         | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0896                | 8.96        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0897                | 8.97        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0898                | 8.98        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0899                | 8.99        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0900                | 9           | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0901                | 9.01        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0902                | 9.02        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0903                | 9.03        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0904                | 9.04        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0905                | 9.05        | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0906-0955           | -           | -   | -  | -   | 10,0  | -      |
| E.4616.0.0950                | 9.5         | 125 | 36 | 85  | 10,0  | 6      |
| E.4616.0.0970                | 9.7         | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.0980                | 9.8         | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.0996                | 9.96        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.0997                | 9.97        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.0998                | 9.98        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.0999                | 9.99        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1000                | 10          | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1001                | 10.01       | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1002                | 10.02       | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1003                | 10.03       | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1004                | 10.04       | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1005                | 10.05       | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1010                | 10.1        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1020                | 10.2        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1030                | 10.3        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1050                | 10.5        | 133 | 38 | 93  | 10,0  | 6      |
| E.4616.0.1056-1095           | -           | -   | -  | -   | 10,0  | -      |
| E.4616.0.1090                | 10.9        | 142 | 41 | 102 | 10,0  | 6      |

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| Artikelnummer<br>Article-No. | d1 0/+0,003 | I1  | I2 | I3  | d2 h6 | flutes |
|------------------------------|-------------|-----|----|-----|-------|--------|
| E.4616.0.1096                | 10.96       | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1098                | 10.98       | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1099                | 10.99       | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1100                | 11          | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1101                | 11.01       | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1102                | 11.02       | 142 | 41 | 102 | 10,0  | 6      |
| E.4616.0.1106-1155           | -           | -   | -  | -   | 10,0  | -      |
| E.4616.0.1156-1195           | -           | -   | -  | -   | 10,0  | -      |
| E.4616.0.1198                | 11.98       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1199                | 11.99       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1200                | 12          | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1201                | 12.01       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1202                | 12.02       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1203                | 12.03       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1204                | 12.04       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1205                | 12.05       | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1206-1320           | -           | 151 | 44 | 111 | 10,0  | 6      |
| E.4616.0.1297                | 12.97       | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1298                | 12.98       | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1299                | 12.99       | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1300                | 13          | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1301                | 13.01       | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1302                | 13.02       | 151 | 44 | 111 | 10,0  | 8      |
| E.4616.0.1321-1396           | -           | -   | -  | -   | -     | -      |
| E.4616.0.1370                | 13.7        | 160 | 47 | 114 | 13,7  | 8      |
| E.4616.0.1406-1496           | -           | 162 | 50 | 117 | -     | -      |
| E.4616.0.1470                | 14.7        | 162 | 50 | 115 | 14,7  | -      |
| E.4616.0.1497                | 14.97       | 162 | 50 | 115 | 14,97 | -      |
| E.4616.0.1498                | 14.98       | 162 | 50 | 115 | 14,98 | -      |
| E.4616.0.1501                | 15.01       | 162 | 50 | 115 | 15,01 | -      |
| E.4616.0.1540                | 15.4        | 170 | 52 | 120 | 15,4  | -      |
| E.4616.0.1560                | 15.6        | 170 | 52 | 120 | 15,6  | -      |
| E.4616.0.1570                | 15.7        | 170 | 52 | 120 | 15,7  | -      |
| E.4616.0.1580                | 15.8        | 170 | 52 | 120 | 15,8  | -      |
| E.4616.0.1590                | 15.9        | 170 | 52 | 120 | 15,9  | -      |
| E.4616.0.1606-1696           | -           | 175 | 54 | 130 | -     | -      |
| E.4616.0.1640                | 16.4        | 182 | 56 | 132 | 16,4  | -      |
| E.4616.0.1660                | 16.6        | 182 | 56 | 132 | 16,6  | -      |
| E.4616.0.1670                | 16.7        | 182 | 56 | 132 | 16,7  | -      |
| E.4616.0.1680                | 16.8        | 182 | 56 | 132 | 16,8  | -      |
| E.4616.0.1690                | 16.9        | 182 | 56 | 132 | 16,9  | -      |
| E.4616.0.1697                | 16.97       | 195 | 60 | 150 | 16,97 | -      |
| E.4616.0.1698                | 16.98       | 195 | 60 | 150 | 16,98 | -      |
| E.4616.0.1699                | 16.99       | 195 | 60 | 150 | 16,99 | -      |
| E.4616.0.1700                | 17          | 195 | 60 | 150 | 17,0  | -      |
| E.4616.0.1701                | 17.01       | 195 | 60 | 150 | 17,01 | -      |
| E.4616.0.1702                | 17.02       | 195 | 60 | 150 | 17,02 | -      |
| E.4616.0.1703                | 17.03       | 195 | 60 | 150 | 17,03 | -      |
| E.4616.0.1704                | 17.04       | 195 | 60 | 150 | 17,04 | -      |
| E.4616.0.1706-1796           | -           | 195 | 60 | 150 | -     | -      |
| E.4616.0.1797                | 17.97       | 195 | 60 | 150 | 17,97 | -      |

# PRODUCT DATA SHEET



| Artikelnummer<br>Article-No. | d1 0/+0,003 | I1  | I2 | I3  | d2 h6 | flutes |
|------------------------------|-------------|-----|----|-----|-------|--------|
| E.4616.O.1799                | 17.99       | 195 | 60 | 150 | 17,99 | -      |
| E.4616.O.1800                | 18          | 195 | 60 | 150 | 18,0  | -      |
| E.4616.O.1801                | 18.01       | 195 | 60 | 150 | 18,01 | -      |
| E.4616.O.1802                | 18.02       | 195 | 60 | 150 | 18,02 | -      |
| E.4616.O.1804                | 18.04       | 195 | 60 | 150 | 18,04 | -      |
| E.4616.O.1805                | 18.05       | 195 | 60 | 150 | 18,05 | -      |
| E.4616.O.1806-1896           | -           | 195 | 60 | 150 | -     | -      |
| E.4616.O.1898                | 18.98       | 195 | 60 | 150 | 18,98 | -      |
| E.4616.O.1900                | 19          | 195 | 60 | 150 | 19,0  | -      |
| E.4616.O.1901                | 19.01       | 195 | 60 | 150 | 19,01 | -      |
| E.4616.O.1902                | 19.02       | 195 | 60 | 150 | 19,02 | -      |
| E.4616.O.1903                | 19.03       | 195 | 60 | 150 | 19,03 | -      |
| E.4616.O.1904                | 19.04       | 195 | 60 | 150 | 19,04 | -      |
| E.4616.O.1906-1996           | -           | 195 | 60 | 150 | -     | -      |
| E.4616.O.1950                | 19.5        | 195 | 60 | 150 | 19,5  | -      |
| E.4616.O.1997                | 19.97       | 195 | 60 | 150 | 19,97 | -      |
| E.4616.O.1999                | 19.99       | 195 | 60 | 150 | 19,99 | -      |
| E.4616.O.2000                | 20          | 195 | 60 | 150 | 20,0  | -      |
| E.4616.O.2001                | 20.01       | 195 | 60 | 150 | 20,01 | -      |



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| Materialbezeichnung<br>material description   | Bearbeitung<br>Process     | Vc<br>m/min | fz             |                |                |                |                |                |                  |                  |
|---|----------------------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|
|   |                            |             | Ø<br>0.97-1.99 | Ø<br>2.00-2.99 | Ø<br>3.00-3.99 | Ø<br>4.00-5.99 | Ø<br>6.00-7.99 | Ø<br>8.00-9.99 | Ø<br>10.00-11.99 | Ø<br>12.00-20.01 |
| PA<br>allg. Stähle<br>General steels  | Reibahlen und Senker HSS/E | 11.00       | 0.080          | 0.090          | 0.100          | 0.110          | 0.120          | 0.140          | 0.160            | 0.180            |
|   | Reibahlen und Senker HSS/E | 10.00       | 0.080          | 0.090          | 0.100          | 0.110          | 0.120          | 0.140          | 0.160            | 0.180            |
|   | Reibahlen und Senker HSS/E | 9.00        | 0.080          | 0.090          | 0.100          | 0.110          | 0.120          | 0.140          | 0.160            | 0.180            |
|   | Reibahlen und Senker HSS/E | 6.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
|   | Reibahlen und Senker HSS/E | 3.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
| PV<br>Vergütungsstähle < 850N/mm <sup>2</sup><br>Tempering steel < 850N/mm <sup>2</sup> | Reibahlen und Senker HSS/E | 9.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
|   | Reibahlen und Senker HSS/E | 6.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
|   | Reibahlen und Senker HSS/E | 3.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
|   | Reibahlen und Senker HSS/E | 3.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
| M<br>Rost und säurebeständige Stähle<br>Stainless steels                                | Reibahlen und Senker HSS/E | 6.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |
|   | Reibahlen und Senker HSS/E | 5.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.140            | 0.160            |

# PRODUCT DATA SHEET



| Materialbezeichnung<br>material description |   | Bearbeitung<br>Process            | Vc<br>m/min | fz             |                |                |                |                |                |                  |                  |
|---|---|-----------------------------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|
|   |   |                                   |             | ∅<br>0.97-1.99 | ∅<br>2.00-2.99 | ∅<br>3.00-3.99 | ∅<br>4.00-5.99 | ∅<br>6.00-7.99 | ∅<br>8.00-9.99 | ∅<br>10.00-11.99 | ∅<br>12.00-20.01 |
| K   | <b>Gusseisen</b><br>Cast iron   | <b>Reibahlen und Senker HSS/E</b> | 10.00       | 0.120          | 0.150          | 0.180          | 0.190          | 0.200          | 0.220          | 0.230            | 0.250            |
|   | <b>Temperguss</b><br>Malleable cast iron                                    | <b>Reibahlen und Senker HSS/E</b> | 8.00        | 0.100          | 0.110          | 0.120          | 0.140          | 0.160          | 0.170          | 0.180            | 0.200            |
|   | <b>Gusseisen mit Kugelgraphit</b><br>Nodular cast iron                      | <b>Reibahlen und Senker HSS/E</b> | 5.00        | 0.080          | 0.090          | 0.100          | 0.120          | 0.140          | 0.150          | 0.160            | 0.180            |
| N   | <b>AL- und AL-Legierungen</b><br>AL und AL-alloys                           | <b>Reibahlen und Senker HSS/E</b> | 18.00       | 0.120          | 0.160          | 0.180          | 0.190          | 0.200          | 0.210          | 0.230            | 0.250            |
|   | <b>AL- und AL-Legierungen</b><br>AL und AL-alloys                           | <b>Reibahlen und Senker HSS/E</b> | 15.00       | 0.120          | 0.160          | 0.180          | 0.190          | 0.200          | 0.210          | 0.230            | 0.250            |
|   | <b>AL- und AL-Legierungen &gt;12% Si</b><br>AL und AL-alloys >12% Si        | <b>Reibahlen und Senker HSS/E</b> | 13.00       | 0.120          | 0.160          | 0.180          | 0.190          | 0.200          | 0.210          | 0.230            | 0.250            |
|   | <b>Kupfer, Messing, Bronze, Rotguss</b><br>Copper, brass, bronze, red brass | <b>Reibahlen und Senker HSS/E</b> | 13.00       | 0.150          | 0.180          | 0.200          | 0.220          | 0.250          | 0.280          | 0.320            | 0.340            |
| S   | <b>Nickelbasierende Stähle</b><br>Nickel based alloys                       | <b>Reibahlen und Senker HSS/E</b> | 6.00        | 0.060          | 0.080          | 0.110          | 0.150          | 0.200          | 0.225          |                  |                  |
|   | <b>Titan</b><br>Titanium  | <b>Reibahlen und Senker HSS/E</b> | 5.00        | 0.060          | 0.070          | 0.080          | 0.090          | 0.100          | 0.120          | 0.150            | 0.170            |