

| Core Diameter | Effective Dimension, mm | volume metre | kg mass/metre of core length | | | | WiBM WiRM WiC SMC SAGDesign | | | | | SPI/SGL | JK DWT | Comments | |
|---|-------------------------|--------------|------------------------------|---------------------------|--------------------------|---------------------------|-----------------------------|------------|------------|------------------|------------|------------|--|---|----------------------|
| | | | 2.5 t/m ³ ore | 2.75 t/m ³ ore | 3.0 t/m ³ ore | 3.25 t/m ³ ore | 3.3 | 12.7 | 51 | 21.25 | 20 | 32 | 85 | | minimum top size, mm |
| | | | 10 | 15 | 20 | 20 | 15 | 10 | 100 | minimum mass, kg | | | | | |
| Suitable core lengths (m), assuming 2.75 t/m ³ | | | | | | | | | | | | | Comments | | |
| AQ | 27.0 | 0.000573 | 1.4 | 1.6 | 1.7 | 1.9 | 6.4 | 9.5 | | 12.7 | 9.5 | ** | | | |
| 1/2 AQ | 13.5 | 0.000286 | 0.7 | 0.8 | 0.9 | 0.9 | 12.7 | 19.1 | | | | ** | | | |
| 1/4 AQ | 6.8 | 0.000143 | 0.4 | 0.4 | 0.4 | 0.5 | 25.4 | | | | | | | | |
| BQ | 36.5 | 0.001046 | 2.6 | 2.9 | 3.1 | 3.4 | 3.5 | 5.2 | | 7.0 | 5.2 | 3.5 | ** - SGI & SPI tests can be done, but not CI | | |
| 1/2 BQ | 18.3 | 0.000523 | 1.3 | 1.4 | 1.6 | 1.7 | 7.0 | 10.4 | | | | ** | | | |
| 1/4 BQ | 9.1 | 0.000262 | 0.7 | 0.7 | 0.8 | 0.9 | 13.9 | | | | | | | | |
| NQ | 47.6 | 0.001780 | 4.4 | 4.9 | 5.3 | 5.8 | 2.0 | 3.1 | * | 4.1 | 3.1 | 2.0 | * - certain NQ diameter core may be suitable | | |
| 1/2 NQ | 23.8 | 0.000890 | 2.2 | 2.4 | 2.7 | 2.9 | 4.1 | 6.1 | | 8.2 | 6.1 | ** | | | |
| 1/4 NQ | 11.9 | 0.000445 | 1.1 | 1.2 | 1.3 | 1.4 | 8.2 | | | | | | | | |
| HQ | 63.5 | 0.003167 | 7.9 | 8.7 | 9.5 | 10.3 | 1.1 | 1.7 | 2.3 | 2.3 | 1.7 | 1.1 | | | |
| 1/2 HQ | 31.8 | 0.001583 | 4.0 | 4.4 | 4.8 | 5.1 | 2.3 | 3.4 | | 4.6 | 3.4 | ** | | | |
| 1/4 HQ | 15.9 | 0.000792 | 2.0 | 2.2 | 2.4 | 2.6 | 4.6 | 6.9 | | | | ** | | | |
| HQ3 | 61.1 | 0.002932 | 7.3 | 8.1 | 8.8 | 9.5 | 1.2 | 1.9 | 2.5 | 2.5 | 1.9 | 1.2 | | | |
| 1/2 HQ3 | 30.6 | 0.001466 | 3.7 | 4.0 | 4.4 | 4.8 | 2.5 | 3.7 | | 5.0 | 3.7 | ** | | | |
| 1/4 HQ3 | 15.3 | 0.000733 | 1.8 | 2.0 | 2.2 | 2.4 | 5.0 | 7.4 | | | | ** | | | |
| PQ | 85.0 | 0.005675 | 14.2 | 15.6 | 17.0 | 18.4 | 0.6 | 1.0 | 1.3 | 1.3 | 1.0 | 0.6 | 6.4 | * - certain 1/2PQ diameter core may be suitable | |
| 1/2 PQ | 42.5 | 0.002837 | 7.1 | 7.8 | 8.5 | 9.2 | 1.3 | 1.9 | * | 2.6 | 1.9 | 1.3 | | | |
| 1/4 PQ | 21.3 | 0.001419 | 3.5 | 3.9 | 4.3 | 4.6 | 2.6 | 3.8 | | 5.1 | 3.8 | ** | | | |
| PQ3 | 83.0 | 0.005411 | 13.5 | 14.9 | 16.2 | 17.6 | 0.7 | 1.0 | 1.3 | 1.3 | 1.0 | 0.7 | | | |
| 1/2 PQ3 | 41.5 | 0.002705 | 6.8 | 7.4 | 8.1 | 8.8 | 1.3 | 2.0 | | 2.7 | 2.0 | 1.3 | | | |
| 1/4 PQ3 | 20.8 | 0.001353 | 3.4 | 3.7 | 4.1 | 4.4 | 2.7 | 4.0 | | | 4.0 | ** | | | |
| CHD 76 | 43.5 | 0.001486 | 3.7 | 4.1 | 4.5 | 4.8 | 2.4 | 3.7 | | 4.9 | 3.7 | 2.4 | | | |
| 1/2 CHD 76 | 21.8 | 0.000743 | 1.9 | 2.0 | 2.2 | 2.4 | 4.9 | 7.3 | | 9.8 | 7.3 | ** | | | |
| 1/4 CHD 76 | 10.9 | 0.000372 | 0.9 | 1.0 | 1.1 | 1.2 | 9.8 | | | | | | | | |
| CHD 101 | 63.5 | 0.003167 | 7.9 | 8.7 | 9.5 | 10.3 | 1.1 | 1.7 | 2.3 | 2.3 | 1.7 | 1.1 | | | |
| 1/2 CHD 101 | 31.8 | 0.001583 | 4.0 | 4.4 | 4.8 | 5.1 | 2.3 | 3.4 | | 4.6 | 3.4 | ** | | | |
| 1/4 CHD 101 | 15.9 | 0.000792 | 2.0 | 2.2 | 2.4 | 2.6 | 4.6 | 6.9 | | | | ** | | | |
| CHD 134 | 85.0 | 0.005675 | 14.2 | 15.6 | 17.0 | 18.4 | 0.6 | 1.0 | 1.3 | 1.3 | 1.0 | 0.6 | 6.4 | | |
| 1/2 CHD 134 | 42.5 | 0.002837 | 7.1 | 7.8 | 8.5 | 9.2 | 1.3 | 1.9 | | 2.6 | 1.9 | 1.3 | | | |
| 1/4 CHD 134 | 21.3 | 0.001419 | 3.5 | 3.9 | 4.3 | 4.6 | 2.6 | 3.8 | | 5.1 | 3.8 | ** | | | |

Sources

<https://en.wikipedia.net/Exploration diamond drilling>

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Legend:

Wi BM Bond ball mill work index

Wi RM Bond rod mill work index

Wi C Bond low-energy crushing work index

JK DWT JK Drop Weight Test