

Carbide inserts with material-specific attributes

Four distinct geometries are available with the HT 800 WP drilling system, and they are completely interchangeable with any style drill body. The unique locating post and set screw design assures quick and accurate tool changes. The high performance insert designs allow for maximum penetration rates that far exceed conventional spade drills or dual insert drill designs.

① Choose your diameter (metric or inch)

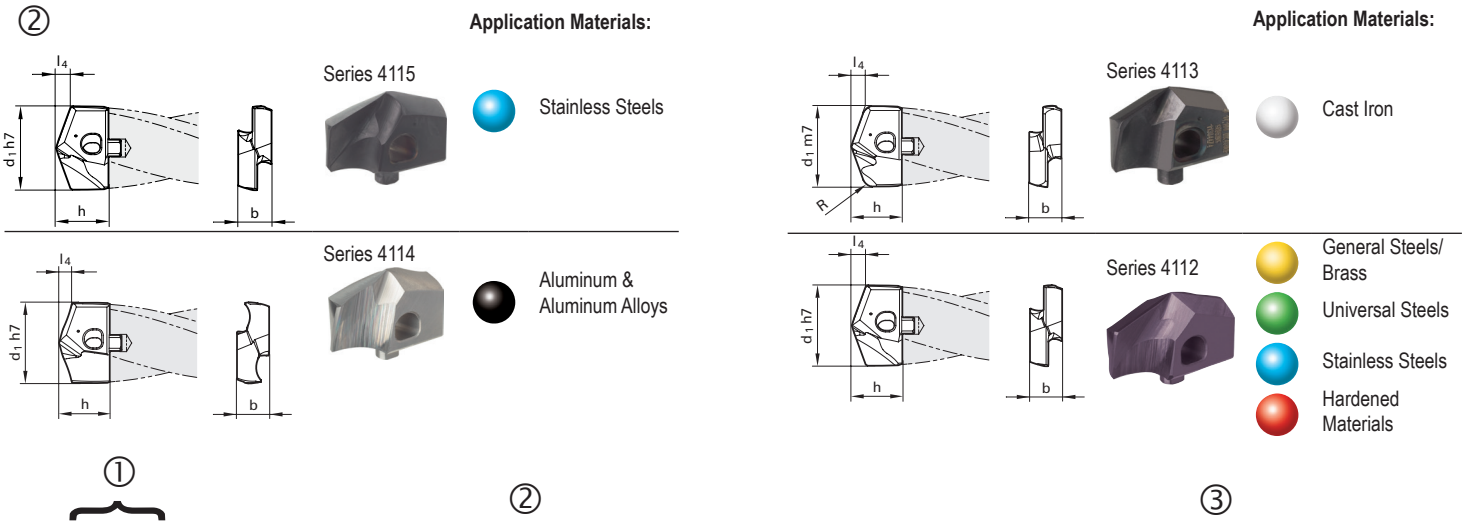
② Choose the appropriate insert for your workpiece material

③ Note the holder size for that insert diameter; select a holder (1.5xD to 10xD) from the holder pages.

| ① | | | | | ② | | | | ③ | |
|---------------|---|---------|---------|---------------------------------|---|---|---|---|----------------------|----------------------------|
| Dia fract. | Dia mm | h mm | b mm | l4 mm | Series 4115 nano-A EDP No. | Series 4114 bright EDP No. | Series 4113 FIREX® EDP No. | Series 4112 nano-FIREX® EDP No. | Drill Holder Size | Pilot Drill Holder Size |
| | 11.00 11.20 | 7.5 | 4.5 | 2.1 | 9041150110000 9041150112000 | 9041140110000 9041140112000 | 9041130110000 9041130112000 | 9041120110000 9041120112000 | 110 | 110 |
| 29/64 | 11.50 11.51 11.70 11.80 | 7.5 | 4.5 | 2.1 2.1 2.1 2.1 | 9041150115000 9041150115100 9041150117000 9041150118000 | 9041140115000 9041140115100 9041140117000 9041140118000 | 9041130115000 9041130115100 9041130117000 9041130118000 | 9041120115000 9041120115100 9041120117000 9041120118000 | 115 | 110 |
| 15/32 | 11.91 | | | 2.2 | 9041150119100 | 9041140119100 | 9041130119100 | 9041120119100 | | |
| 31/64 | 12.00 12.10 12.20 12.30 | 7.7 | 5.0 | 2.2 2.2 2.2 2.2 | 9041150120000 9041150121000 9041150122000 9041150123000 | 9041140120000 9041140121000 9041140122000 9041140123000 | 9041130120000 9041130121000 9041130122000 9041130123000 | 9041120120000 9041120121000 9041120122000 9041120123000 | 120 | 120 |
| 1/2 | 12.50 12.60 12.70 12.80 12.90 | 7.7 | 5.0 | 2.3 2.3 2.3 2.3 2.3 | 9041150125000 9041150126000 9041150127000 9041150128000 9041150129000 | 9041140125000 9041140126000 9041140127000 9041140128000 9041140129000 | 9041130125000 9041130126000 9041130127000 9041130128000 9041130129000 | 9041120125000 9041120126000 9041120127000 9041120128000 9041120129000 | 125 | 120 |
| 33/64 | 13.00 13.10 | 8.5 | 5.5 | 2.4 2.4 | 9041150130000 9041150131000 | 9041140130000 9041140131000 | 9041130130000 9041130131000 | 9041120130000 9041120131000 | 130 | 130 |
| 17/32 | 13.49 | | | 2.4 | 9041150134900 | 9041140134900 | 9041130134900 | 9041120134900 | | |
| 35/64 | 13.50 13.60 13.70 13.80 13.89 | 8.5 | 5.5 | 2.4 2.4 2.4 2.5 2.5 | 9041150135000 9041150136000 9041150137000 9041150138000 9041150138900 | 9041140135000 9041140136000 9041140137000 9041140138000 9041140138900 | 9041130135000 9041130136000 9041130137000 9041130138000 9041130138900 | 9041120135000 9041120136000 9041120137000 9041120138000 9041120138900 | 135 | 130 |
| 9/16 | 14.00 14.10 14.29 14.40 | 9.6 | 6.0 | 2.5 2.5 2.6 2.6 | 9041150140000 9041150141000 9041150142900 9041150144000 | 9041140140000 9041140141000 9041140142900 9041140144000 | 9041130140000 9041130141000 9041130142900 9041130144000 | 9041120140000 9041120141000 9041120142900 9041120144000 | 140 | 140 |
| 37/64 | 14.50 14.60 14.68 14.70 14.80 | 9.6 | 6.0 | 2.6 2.7 2.7 2.7 2.7 | 9041150145000 9041150146000 9041150146800 9041150147000 9041150148000 | 9041140145000 9041140146000 9041140146800 9041140147000 9041140148000 | 9041130145000 9041130146000 9041130146800 9041130147000 9041130148000 | 9041120145000 9041120146000 9041120146800 9041120147000 9041120148000 | 145 | 140 |
| 19/32 | 15.00 15.08 15.10 15.20 15.30 | 9.8 | 6.0 | 2.7 2.7 2.7 2.8 2.8 | 9041150150000 9041150150800 9041150151000 9041150152000 9041150153000 | 9041140150000 9041140150800 9041140151000 9041140152000 9041140153000 | 9041130150000 9041130150800 9041130151000 9041130152000 9041130153000 | 9041120150000 9041120150800 9041120151000 9041120152000 9041120153000 | 150 | 140 |
| 39/64 | 15.48 | | | 2.8 | 9041150154800 | 9041140154800 | 9041130154800 | 9041120154800 | | |
| 5/8 | 15.50 15.60 15.70 15.80 15.87 | 9.8 | 6.0 | 2.8 2.9 2.9 2.9 2.9 | 9041150155000 9041150156000 9041150157000 9041150158000 9041150158700 | 9041140155000 9041140156000 9041140157000 9041140158000 9041140158700 | 9041130155000 9041130156000 9041130157000 9041130158000 9041130158700 | 9041120155000 9041120156000 9041120157000 9041120158000 9041120158700 | 155 | 140 |
| 41/64 | 16.00 16.27 | 11.0 | 7.0 | 2.9 3.0 | 9041150160000 9041150162700 | 9041140160000 9041140162700 | 9041130160000 9041130162700 | 9041120160000 9041120162700 | 160 | 160 |

Inserts are always supplied with clamping screw, Guhring no. 4071.

HT 800 WP Interchangeable Inserts For Machining Stainless Steel



| Dia fract. | Dia mm | h mm | b mm | l4 mm | Series 4115 nano-A | Series 4114 bright | Series 4113 FIREX® | Series 4112 nano-FIREX® | Drill Holder Size | Pilot Drill Holder Size |
|----------------|-----------|---------|---------|----------|-----------------------|-----------------------|-----------------------|----------------------------|----------------------|----------------------------|
| | | | | | EDP No. | EDP No. | EDP No. | EDP No. | | |
| 21/32 | 16.50 | 11.0 | 7.0 | 3.0 | 9041150165000 | 9041140165000 | 9041130165000 | 9041120165000 | 165 | 160 |
| | 16.67 | | | | 9041150166700 | 9041140166700 | 9041130166700 | 9041120166700 | | |
| 43/64 11/16 | 17.00 | 11.0 | 7.0 | 3.1 | 9041150170000 | 9041140170000 | 9041130170000 | 9041120170000 | 170 | 160 |
| | 17.07 | | | 3.1 | 9041150170700 | 9041140170700 | 9041130170700 | 9041120170700 | | |
| | 17.46 | | | 3.1 | 9041150174600 | 9041140174600 | 9041130174600 | 9041120174600 | | |
| 45/64 | 17.50 | 11.0 | 7.0 | 3.2 | 9041150175000 | 9041140175000 | 9041130175000 | 9041120175000 | 175 | 160 |
| | 17.60 | | | 3.2 | 9041150176000 | 9041140176000 | 9041130176000 | 9041120176000 | | |
| | 17.86 | | | 3.3 | 9041150178600 | 9041140178600 | 9041130178600 | 9041120178600 | | |
| 23/32 | 18.00 | 12.6 | 8.0 | 3.3 | 9041150180000 | 9041140180000 | 9041130180000 | 9041120180000 | 180 | 180 |
| | 18.26 | | | 3.3 | 9041150182600 | 9041140182600 | 9041130182600 | 9041120182600 | | |
| | 18.50 | | | 3.4 | 9041150185000 | 9041140185000 | 9041130185000 | 9041120185000 | | |
| 47/64 | 18.65 | 12.6 | 8.0 | 3.4 | 9041150186500 | 9041140186500 | 9041130186500 | 9041120186500 | 185 | 180 |
| | 19.00 | | | 3.5 | 9041150190000 | 9041140190000 | 9041130190000 | 9041120190000 | | |
| 3/4 49/64 | 19.05 | 12.6 | 8.0 | 3.5 | 9041150190500 | 9041140190500 | 9041130190500 | 9041120190500 | 190 | 180 |
| | 19.45 | | | 3.5 | 9041150194500 | 9041140194500 | 9041130194500 | 9041120194500 | | |
| | 19.50 | | | 3.5 | 9041150195000 | 9041140195000 | 9041130195000 | 9041120195000 | | |
| 25/32 | 19.60 | 12.6 | 8.0 | 3.6 | 9041150196000 | 9041140196000 | 9041130196000 | 9041120196000 | 195 | 180 |
| | 19.84 | | | 3.6 | 9041150198400 | 9041140198400 | 9041130198400 | 9041120198400 | | |
| | 20.00 | | | 3.6 | 9041150200000 | 9041140200000 | 9041130200000 | 9041120200000 | | |
| 51/64 | 20.24 | 13.9 | 9.0 | 3.6 | 9041150202400 | 9041140202400 | 9041130202400 | 9041120202400 | 200 | 200 |
| | 20.50 | | | 3.7 | 9041150205000 | 9041140205000 | 9041130205000 | 9041120205000 | | |
| 13/16 | 20.64 | 13.9 | 9.0 | 3.8 | 9041150206400 | 9041140206400 | 9041130206400 | 9041120206400 | 205 | 200 |
| | 21.00 | | | 3.8 | 9041150210000 | 9041140210000 | 9041130210000 | 9041120210000 | | |
| | 21.03 | | | 3.8 | 9041150210300 | 9041140210300 | 9041130210300 | 9041120210300 | | |
| 53/64 | 21.10 | 13.9 | 9.0 | 3.9 | 9041150211000 | 9041140211000 | 9041130211000 | 9041120211000 | 210 | 200 |
| | 21.43 | | | 3.9 | 9041150214300 | 9041140214300 | 9041130214300 | 9041120214300 | | |
| | 21.50 | | | 3.9 | 9041150215000 | 9041140215000 | 9041130215000 | 9041120215000 | | |
| 55/64 | 21.83 | 13.9 | 9.0 | 4.0 | 9041150218300 | 9041140218300 | 9041130218300 | 9041120218300 | 215 | 200 |
| | 22.00 | | | 4.0 | 9041150220000 | 9041140220000 | 9041130220000 | 9041120220000 | | |
| 7/8 | 22.22 | 15.3 | 10.0 | 4.0 | 9041150222200 | 9041140222200 | 9041130222200 | 9041120222200 | 220 | 220 |
| | 22.50 | | | 4.1 | 9041150225000 | 9041140225000 | 9041130225000 | 9041120225000 | | |
| 57/64 | 22.62 | 15.3 | 10.0 | 4.1 | 9041150226200 | 9041140226200 | 9041130226200 | 9041120226200 | 225 | 220 |
| | 23.00 | | | 4.2 | 9041150230000 | 9041140230000 | 9041130230000 | 9041120230000 | | |
| 29/32 59/64 | 23.02 | 15.3 | 10.0 | 4.2 | 9041150230200 | 9041140230200 | 9041130230200 | 9041120230200 | 230 | 220 |
| | 23.42 | | | 4.3 | 9041150234200 | 9041140234200 | 9041130234200 | 9041120234200 | | |
| | 23.50 | | | 4.3 | 9041150235000 | 9041140235000 | 9041130235000 | 9041120235000 | | |
| 15/16 | 23.81 | 15.3 | 10.0 | 4.3 | 9041150238100 | 9041140238100 | 9041130238100 | 9041120238100 | 235 | 220 |
| | 24.00 | | | 4.4 | 9041150240000 | 9041140240000 | 9041130240000 | 9041120240000 | | |
| 61/64 | 24.10 | 15.8 | 11.0 | 4.4 | 9041150241000 | 9041140241000 | 9041130241000 | 9041120241000 | 240 | 240 |
| | 24.21 | | | 4.4 | 9041150242100 | 9041140242100 | 9041130242100 | 9041120242100 | | |
| | 24.50 | | | 4.5 | 9041150245000 | 9041140245000 | 9041130245000 | 9041120245000 | | |
| 31/32 | 24.61 | 15.8 | 11.0 | 4.5 | 9041150246100 | 9041140246100 | 9041130246100 | 9041120246100 | 245 | 240 |
| | 25.00 | | | 4.5 | 9041150250000 | 9041140250000 | 9041130250000 | 9041120250000 | | |
| 1 | 25.40 | 15.8 | 11.0 | 4.6 | 9041150254000 | 9041140254000 | 9041130254000 | 9041120254000 | 250 | 240 |
| | 25.50 | | | 4.6 | 9041150255000 | 9041140255000 | 9041130255000 | 9041120255000 | | |
| | 25.50 | | | 4.6 | 9041150255000 | 9041140255000 | 9041130255000 | 9041120255000 | | |

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Carbide inserts with material-specific attributes



| Dia fract. | Dia mm | h mm | b mm | l4 mm | Series 4115 nano-A | Series 4114 bright | Series 4113 FIREX® | Series 4112 nano-FIREX® | Drill Holder Size | Pilot Drill Holder Size |
|---------------|-----------|---------|---------|----------|-----------------------|-----------------------|-----------------------|----------------------------|----------------------|----------------------------|
| | | | | | EDP No. | EDP No. | EDP No. | EDP No. | | |
| 1 1/32 | 26.00 | 20.00 | 12.00 | 4.80 | 9041150260000 | 9041140260000 | 9041130260000 | 9041120260000 | 260 | 260 |
| | 26.19 | 20.00 | 12.00 | 4.80 | 9041150261900 | 9041140261900 | 9041130261900 | 9041120261900 | | |
| 1 3/64 | 26.50 | 20.00 | 12.00 | 4.90 | 9041150265000 | 9041140265000 | 9041130265000 | 9041120265000 | 265 | 260 |
| | 26.59 | 20.00 | 12.00 | 4.90 | 9041150265900 | 9041140265900 | 9041130265900 | 9041120265900 | | |
| 1 3/32 | 27.00 | 20.00 | 12.00 | 5.00 | 9041150270000 | 9041140270000 | 9041130270000 | 9041120270000 | 270 | 260 |
| | 27.50 | 20.00 | 12.00 | 5.10 | 9041150275000 | 9041140275000 | 9041130275000 | 9041120275000 | | |
| | 27.70 | 20.00 | 12.00 | 5.10 | 9041150277000 | 9041140277000 | 9041130277000 | 9041120277000 | | |
| | 27.78 | 20.00 | 12.00 | 5.10 | 9041150277800 | 9041140277800 | 9041130277800 | 9041120277800 | | |
| 1 7/64 | 28.00 | 20.70 | 13.00 | 5.10 | 9041150280000 | 9041140280000 | 9041130280000 | 9041120280000 | 275 | 260 |
| | 28.18 | 20.70 | 13.00 | 5.20 | 9041150281800 | 9041140281800 | 9041130281800 | 9041120281800 | | |
| 1 1/8 | 28.50 | 20.70 | 13.00 | 5.20 | 9041150285000 | 9041140285000 | 9041130285000 | 9041120285000 | 280 | 280 |
| | 28.58 | 20.70 | 13.00 | 5.30 | 9041150285800 | 9041140285800 | 9041130285800 | 9041120285800 | | |
| 1 5/32 | 29.00 | 20.70 | 13.00 | 5.30 | 9041150290000 | 9041140290000 | 9041130290000 | 9041120290000 | 285 | 280 |
| | 29.37 | 20.70 | 13.00 | 5.40 | 9041150293700 | 9041140293700 | 9041130293700 | 9041120293700 | | |
| 1 11/64 | 29.50 | 20.70 | 13.00 | 5.40 | 9041150295000 | 9041140295000 | 9041130295000 | 9041120295000 | 290 | 280 |
| | 29.60 | 20.70 | 13.00 | 5.50 | 9041150296000 | | | 9041120296000 | | |
| | 29.77 | 20.70 | 13.00 | 5.50 | 9041150297700 | 9041140297700 | 9041130297700 | 9041120297700 | | |
| 1 3/16 | 30.00 | 22.30 | 14.00 | 5.50 | 9041150300000 | 9041140300000 | 9041130300000 | 9041120300000 | 295 | 280 |
| | 30.16 | 22.30 | 14.00 | 5.60 | 9041150301600 | 9041140301600 | 9041130301600 | 9041120301600 | | |
| 1 7/32 | 30.50 | 22.30 | 14.00 | 5.70 | 9041150305000 | 9041140305000 | 9041130305000 | 9041120305000 | 300 | 300 |
| | 30.96 | 22.30 | 14.00 | 5.70 | 9041150309600 | 9041140309600 | 9041130309600 | 9041120309600 | | |
| | 31.00 | 22.30 | 14.00 | 5.80 | 9041150310000 | 9041140310000 | 9041130310000 | 9041120310000 | | |
| 1 1/4 | 31.50 | 22.30 | 14.00 | 5.80 | 9041150315000 | 9041140315000 | 9041130315000 | 9041120315000 | 305 | 300 |
| | 31.75 | 22.30 | 14.00 | 5.90 | 9041150317500 | 9041140317500 | 9041130317500 | 9041120317500 | | |
| 1 9/32 | 32.00 | 23.10 | 15.00 | 6.00 | 9041150320000 | 9041140320000 | 9041130320000 | 9041120320000 | 310 | 300 |
| | 32.50 | 23.10 | 15.00 | 6.00 | 9041150325000 | 9041140325000 | 9041130325000 | 9041120325000 | | |
| | 32.54 | 23.10 | 15.00 | 6.00 | 9041150325400 | 9041140325400 | 9041130325400 | 9041120325400 | | |
| | 32.94 | 23.10 | 15.00 | 6.10 | 9041150329400 | 9041140329400 | 9041130329400 | 9041120329400 | | |
| 1 19/64 | 33.00 | 23.10 | 15.00 | 6.10 | 9041150330000 | 9041140330000 | 9041130330000 | 9041120330000 | 315 | 300 |
| | 33.34 | 23.10 | 15.00 | 6.10 | 9041150333400 | 9041140333400 | 9041130333400 | 9041120333400 | | |
| | 33.50 | 23.10 | 15.00 | 6.20 | 9041150335000 | 9041140335000 | 9041130335000 | 9041120335000 | | |
| 1 5/16 | 34.00 | 23.10 | 15.00 | 6.30 | 9041150340000 | 9041140340000 | 9041130340000 | 9041120340000 | 320 | 320 |
| | 34.13 | 23.10 | 15.00 | 6.30 | 9041150341300 | 9041140341300 | 9041130341300 | 9041120341300 | | |
| | 34.50 | 23.10 | 15.00 | 6.40 | 9041150345000 | 9041140345000 | 9041130345000 | 9041120345000 | | |
| 1 3/8 | 34.93 | 23.10 | 15.00 | 6.40 | 9041150349300 | 9041140349300 | 9041130349300 | 9041120349300 | 320 | 320 |
| | 35.00 | 23.10 | 15.00 | 6.50 | 9041150350000 | 9041140350000 | 9041130350000 | 9041120350000 | | |
| 1 13/32 | 35.50 | 23.10 | 15.00 | 6.60 | 9041150355000 | 9041140355000 | 9041130355000 | 9041120355000 | 330 | 320 |
| | 35.72 | 23.10 | 15.00 | 6.60 | 9041150357200 | 9041140357200 | 9041130357200 | 9041120357200 | | |
| | 36.00 | 23.10 | 15.00 | 6.70 | 9041150360000 | 9041140360000 | 9041130360000 | 9041120360000 | | |
| 1 7/16 | 36.50 | 23.90 | 16.00 | 6.70 | 9041150365000 | 9041140365000 | 9041130365000 | 9041120365000 | 335 | 320 |
| | 36.51 | 23.90 | 16.00 | 6.80 | 9041150365100 | 9041140365100 | 9041130365100 | 9041120365100 | | |
| 1 15/32 | 37.00 | 23.90 | 16.00 | 6.80 | 9041150370000 | 9041140370000 | 9041130370000 | 9041120370000 | 340 | 360 |
| | 37.31 | 23.90 | 16.00 | 6.90 | 9041150373100 | 9041140373100 | 9041130373100 | 9041120373100 | | |
| | 37.50 | 23.90 | 16.00 | 7.00 | 9041150375000 | 9041140375000 | 9041130375000 | 9041120375000 | | |
| 1 1/2 | 38.00 | 23.90 | 16.00 | 7.00 | 9041150380000 | 9041140380000 | 9041130380000 | 9041120380000 | 345 | 360 |
| | 38.10 | 23.90 | 16.00 | 7.00 | 9041150381000 | 9041140381000 | 9041130381000 | 9041120381000 | | |
| 1 33/64 | 38.50 | 23.90 | 16.00 | 7.10 | 9041150385000 | 9041140385000 | 9041130385000 | 9041120385000 | 350 | 360 |
| 1 13/16 | 39.00 | 23.90 | 16.00 | 7.10 | 9041150390000 | 9041140390000 | 9041130390000 | 9041120390000 | 355 | 360 |
| | 39.50 | 23.90 | 16.00 | 7.20 | 9041150395000 | 9041140395000 | 9041130395000 | 9041120395000 | | |
| | 40.00 | 23.90 | 16.00 | 7.30 | 9041150400000 | 9041140400000 | 9041130400000 | 9041120400000 | | |

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