

D423TX-3

Oil-Feed High Performance Drills

Code No. D423TX-3-Dc

MG
Carbide

AlTiSiN
TX


Work Material

| P | H | M | K | N | S |
|---|---|---|---|---|---|
| ● | ● | ● | ● | ○ | ○ |

| | |
|----------|-------|
| P | Steel |
|----------|-------|

| | |
|----------|--------------------------|
| H | <38HRC Hardened Steel |
|----------|--------------------------|

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|----------|--------------------------|
| H | <48HRC Hardened Steel |
|----------|--------------------------|

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|----------|--------------------------|
| H | <56HRC Hardened Steel |
|----------|--------------------------|

| | |
|----------|-----------------|
| M | Stainless Steel |
|----------|-----------------|

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|----------|-----------|
| K | Cast Iron |
|----------|-----------|

| | |
|----------|----------|
| S | Titanium |
|----------|----------|

| | |
|----------|--------|
| S | Nickel |
|----------|--------|

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| S | High Temp Alloys |
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Feature of product:

JIS 3XD Drills with Oil-Feed
140° S-shape drill tip design to
reduce axial force.

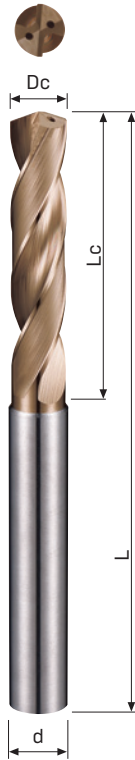
Design with groove shape to
provide higher chip removal rates.

Good wear resistance and
lubrication with Nano multilayer
coating.

Oil-feed design could reduce
temperature effectively and
increase chip removal rates
during cutting process.

Application for drilling with Steels
which is below HRC48, Cast Iron...
etc.

Suitable for drilling with 3XD
depth.



| Dc h7 | Lc mm | L mm | d h6 | AlTiSiN D423TX-3 | Dc h7 | Lc mm | L mm | d h6 | AlTiSiN D423TX-3 |
|----------|----------|---------|---------|---------------------|----------|----------|---------|---------|---------------------|
| 2 | 13 | 60 | 3 | ● | 7.6 | 40 | 91 | 8 | ● |
| 2.1 | 15 | 66 | 3 | ● | 7.7 | 40 | 91 | 8 | ● |
| 2.2 | 15 | 66 | 3 | ● | 7.8 | 40 | 91 | 8 | ● |
| 2.3 | 15 | 66 | 3 | ● | 7.9 | 40 | 91 | 8 | ● |
| 2.4 | 15 | 66 | 3 | ● | 8 | 40 | 91 | 8 | ● |
| 2.5 | 15 | 66 | 3 | ● | 8.1 | 43 | 100 | 9 | ● |
| 2.6 | 18 | 66 | 3 | ● | 8.2 | 43 | 100 | 9 | ● |
| 2.7 | 18 | 66 | 3 | ● | 8.3 | 43 | 100 | 9 | ● |
| 2.8 | 18 | 66 | 3 | ● | 8.4 | 43 | 100 | 9 | ● |
| 2.9 | 18 | 66 | 3 | ● | 8.5 | 43 | 100 | 9 | ● |
| 3 | 18 | 66 | 3 | ● | 8.6 | 45 | 100 | 9 | ● |
| 3.1 | 20 | 74 | 4 | ● | 8.7 | 45 | 100 | 9 | ● |
| 3.2 | 20 | 74 | 4 | ● | 8.8 | 45 | 100 | 9 | ● |
| 3.3 | 20 | 74 | 4 | ● | 8.9 | 45 | 100 | 9 | ● |
| 3.4 | 20 | 74 | 4 | ● | 9 | 45 | 100 | 9 | ● |
| 3.5 | 20 | 74 | 4 | ● | 9.1 | 48 | 103 | 10 | ● |
| 3.6 | 23 | 74 | 4 | ● | 9.2 | 48 | 103 | 10 | ● |
| 3.7 | 23 | 74 | 4 | ● | 9.3 | 48 | 103 | 10 | ● |
| 3.8 | 23 | 74 | 4 | ● | 9.4 | 48 | 103 | 10 | ● |
| 3.9 | 23 | 74 | 4 | ● | 9.5 | 48 | 103 | 10 | ● |
| 4 | 23 | 74 | 4 | ● | 9.6 | 50 | 103 | 10 | ● |
| 4.1 | 25 | 80 | 5 | ● | 9.7 | 50 | 103 | 10 | ● |
| 4.2 | 25 | 80 | 5 | ● | 9.8 | 50 | 103 | 10 | ● |
| 4.3 | 25 | 80 | 5 | ● | 9.9 | 50 | 103 | 10 | ● |
| 4.4 | 25 | 80 | 5 | ● | 10 | 50 | 103 | 10 | ● |
| 4.5 | 25 | 80 | 5 | ● | 10.1 | 53 | 116 | 12 | ● |
| 4.6 | 28 | 80 | 5 | ● | 10.2 | 53 | 116 | 12 | ● |
| 4.7 | 28 | 80 | 5 | ● | 10.3 | 53 | 116 | 12 | ● |
| 4.8 | 28 | 80 | 5 | ● | 10.4 | 53 | 116 | 12 | ● |
| 4.9 | 28 | 80 | 5 | ● | 10.5 | 53 | 116 | 11 | ● |
| 5 | 28 | 80 | 5 | ● | 10.6 | 55 | 116 | 11 | ● |
| 5.1 | 28 | 82 | 6 | ● | 10.7 | 55 | 116 | 11 | ● |
| 5.2 | 28 | 82 | 6 | ● | 10.8 | 55 | 116 | 11 | ● |
| 5.3 | 28 | 82 | 6 | ● | 10.9 | 55 | 116 | 11 | ● |
| 5.4 | 28 | 82 | 6 | ● | 11 | 55 | 116 | 11 | ● |
| 5.5 | 28 | 82 | 6 | ● | 11.1 | 58 | 118 | 12 | ● |
| 5.6 | 30 | 82 | 6 | ● | 11.2 | 58 | 118 | 12 | ● |
| 5.7 | 30 | 82 | 6 | ● | 11.3 | 58 | 118 | 12 | ● |
| 5.8 | 30 | 82 | 6 | ● | 11.4 | 58 | 118 | 12 | ● |
| 5.9 | 30 | 82 | 6 | ● | 11.5 | 58 | 118 | 12 | ● |
| 6 | 30 | 82 | 6 | ● | 11.6 | 60 | 118 | 12 | ● |
| 6.1 | 33 | 88 | 7 | ● | 11.7 | 60 | 118 | 12 | ● |
| 6.2 | 33 | 88 | 7 | ● | 11.8 | 60 | 118 | 12 | ● |
| 6.3 | 33 | 88 | 7 | ● | 11.9 | 60 | 118 | 12 | ● |
| 6.4 | 33 | 88 | 7 | ● | 12 | 60 | 118 | 12 | ● |
| 6.5 | 33 | 88 | 7 | ● | 12.5 | 63 | 128 | 13 | ● |
| 6.6 | 35 | 88 | 7 | ● | 13 | 65 | 128 | 13 | ● |
| 6.7 | 35 | 88 | 7 | ● | 13.5 | 68 | 134 | 14 | ● |
| 6.8 | 35 | 88 | 7 | ● | 14 | 70 | 134 | 14 | ● |
| 6.9 | 35 | 88 | 7 | ● | 14.5 | 73 | 140 | 15 | ● |
| 7 | 35 | 88 | 7 | ● | 15 | 75 | 140 | 15 | ● |
| 7.1 | 38 | 91 | 8 | ● | 15.5 | 78 | 146 | 16 | ● |
| 7.2 | 38 | 91 | 8 | ● | 16 | 80 | 146 | 16 | ● |
| 7.3 | 38 | 91 | 8 | ● | | | | | |
| 7.4 | 38 | 91 | 8 | ● | | | | | |
| 7.5 | 38 | 91 | 8 | ● | | | | | |

Borehole parameters

| Work Material | | GR.1 Carbon Steel | | GR.2 Low-alloyed Steel (~24HRC) | | GR.3 Hi-alloyed Steel (~30HRC) | | GR.4 Hardened Steel (30~38HRC) | | GR.5 Hardened Steel (38~48HRC) | | GR.8 Stainless Steel | | GR.9 Cast Iron | |
|---------------|------|----------------------|------------------|---------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|-------------------------|------------------|-------------------|------------------|
| Vc m/min | | 80~150 | | 80~150 | | 80~150 | | 40~70 | | 32~50 | | 50~80 | | 80~150 | |
| Code No. | Dc | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) | RPM (min-1) | Feed (mm/rev) |
| D423TX-3-2 | 2 | 19,000 | 0.07 | 19,000 | 0.07 | 19,000 | 0.07 | 9,550 | 0.07 | 7,960 | 0.05 | 9,550 | 0.07 | 19,000 | 0.07 |
| D423TX-3-2.5 | 2.5 | 15,300 | 0.08 | 15,300 | 0.08 | 15,300 | 0.08 | 7,600 | 0.08 | 6,370 | 0.06 | 7,650 | 0.08 | 15,300 | 0.08 |
| D423TX-3-3 | 3 | 13,000 | 0.09 | 13,000 | 0.09 | 13,000 | 0.09 | 6,400 | 0.09 | 5,300 | 0.07 | 6,300 | 0.09 | 13,000 | 0.09 |
| D423TX-3-3.5 | 3.5 | 11,250 | 0.09 | 11,250 | 0.09 | 11,250 | 0.09 | 5,600 | 0.09 | 4,600 | 0.07 | 5,500 | 0.09 | 11,250 | 0.09 |
| D423TX-3-4 | 4 | 9,500 | 0.10 | 9,500 | 0.10 | 9,500 | 0.10 | 4,800 | 0.10 | 4,000 | 0.08 | 4,700 | 0.10 | 9,500 | 0.10 |
| D423TX-3-4.5 | 4.5 | 8,550 | 0.11 | 8,550 | 0.11 | 8,550 | 0.11 | 4,300 | 0.11 | 3,600 | 0.09 | 4,250 | 0.11 | 8,550 | 0.11 |
| D423TX-3-5 | 5 | 7,600 | 0.12 | 7,600 | 0.12 | 7,600 | 0.12 | 3,800 | 0.12 | 3,200 | 0.10 | 3,800 | 0.12 | 7,600 | 0.12 |
| D423TX-3-5.5 | 5.5 | 7,000 | 0.13 | 7,000 | 0.13 | 7,000 | 0.13 | 3,500 | 0.13 | 2,900 | 0.11 | 3,500 | 0.13 | 7,000 | 0.13 |
| D423TX-3-6 | 6 | 6,400 | 0.14 | 6,400 | 0.14 | 6,400 | 0.14 | 3,200 | 0.14 | 2,650 | 0.12 | 3,200 | 0.14 | 6,400 | 0.14 |
| D423TX-3-6.5 | 6.5 | 6,000 | 0.14 | 6,000 | 0.14 | 6,000 | 0.14 | 3,000 | 0.14 | 2,450 | 0.12 | 3,000 | 0.14 | 6,000 | 0.14 |
| D423TX-3-7 | 7 | 5,600 | 0.15 | 5,600 | 0.15 | 5,600 | 0.15 | 2,800 | 0.15 | 1,300 | 0.13 | 2,800 | 0.15 | 5,600 | 0.15 |
| D423TX-3-7.5 | 7.5 | 5,200 | 0.15 | 5,200 | 0.15 | 5,200 | 0.15 | 2,600 | 0.15 | 1,250 | 0.13 | 2,600 | 0.15 | 5,200 | 0.15 |
| D423TX-3-8 | 8 | 4,800 | 0.16 | 4,800 | 0.16 | 4,800 | 0.16 | 2,400 | 0.16 | 2,000 | 0.14 | 2,400 | 0.16 | 4,800 | 0.16 |
| D423TX-3-8.5 | 8.5 | 4,550 | 0.16 | 4,550 | 0.16 | 4,550 | 0.16 | 2,275 | 0.16 | 1,900 | 0.14 | 2,275 | 0.16 | 4,550 | 0.16 |
| D423TX-3-9 | 9 | 4,300 | 0.17 | 4,300 | 0.17 | 4,300 | 0.17 | 2,150 | 0.17 | 1,800 | 0.15 | 2,150 | 0.17 | 4,300 | 0.17 |
| D423TX-3-9.5 | 9.5 | 4,050 | 0.17 | 4,050 | 0.17 | 4,050 | 0.17 | 2,025 | 0.17 | 1,700 | 0.15 | 2,025 | 0.17 | 4,050 | 0.17 |
| D423TX-3-10 | 10 | 3,800 | 0.18 | 3,800 | 0.18 | 3,800 | 0.18 | 1,900 | 0.18 | 1,600 | 0.15 | 1,900 | 0.18 | 3,800 | 0.18 |
| D423TX-3-10.5 | 10.5 | 3,650 | 0.18 | 3,650 | 0.18 | 3,650 | 0.18 | 1,825 | 0.18 | 1,525 | 0.15 | 1,825 | 0.18 | 3,650 | 0.18 |
| D423TX-3-11 | 11 | 3,500 | 0.19 | 3,500 | 0.19 | 3,500 | 0.19 | 1,750 | 0.19 | 1,450 | 0.16 | 1,750 | 0.19 | 3,500 | 0.19 |
| D423TX-3-11.5 | 11.5 | 3,350 | 0.19 | 3,350 | 0.19 | 3,350 | 0.19 | 1,675 | 0.19 | 1,375 | 0.16 | 1,675 | 0.19 | 3,350 | 0.19 |
| D423TX-3-12 | 12 | 3,200 | 0.20 | 3,200 | 0.20 | 3,200 | 0.20 | 1,600 | 0.20 | 1,300 | 0.17 | 1,600 | 0.20 | 3,200 | 0.20 |
| D423TX-3-12.5 | 12.5 | 3,075 | 0.20 | 3,075 | 0.20 | 3,075 | 0.20 | 1,535 | 0.20 | 1,275 | 0.17 | 1,535 | 0.20 | 3,075 | 0.20 |
| D423TX-3-13 | 13 | 2,950 | 0.21 | 2,950 | 0.21 | 2,950 | 0.21 | 1,475 | 0.21 | 1,250 | 0.18 | 1,475 | 0.21 | 2,950 | 0.21 |
| D423TX-3-13.5 | 13.5 | 2,775 | 0.21 | 2,775 | 0.21 | 2,775 | 0.21 | 1,400 | 0.21 | 1,225 | 0.18 | 1,400 | 0.21 | 2,775 | 0.21 |
| D423TX-3-14 | 14 | 2,700 | 0.22 | 2,700 | 0.22 | 2,700 | 0.22 | 1,350 | 0.22 | 1,200 | 0.18 | 1,350 | 0.22 | 2,700 | 0.22 |
| D423TX-3-14.5 | 14.5 | 2,625 | 0.23 | 2,625 | 0.23 | 2,625 | 0.23 | 1,310 | 0.23 | 1,150 | 0.18 | 1,310 | 0.23 | 2,625 | 0.23 |
| D423TX-3-15 | 15 | 2,550 | 0.24 | 2,550 | 0.24 | 2,550 | 0.24 | 1,275 | 0.24 | 1,100 | 0.19 | 1,275 | 0.24 | 2,550 | 0.24 |
| D423TX-3-15.5 | 15.5 | 2,475 | 0.24 | 2,475 | 0.24 | 2,475 | 0.24 | 1,235 | 0.24 | 1,050 | 0.19 | 1,235 | 0.24 | 2,475 | 0.24 |
| D423TX-3-16 | 16 | 2,400 | 0.25 | 2,400 | 0.25 | 2,400 | 0.25 | 1,200 | 0.25 | 1,000 | 0.20 | 1,200 | 0.25 | 2,400 | 0.25 |

1. Please work with good rigidity / high precision facilities and collet chuck.
2. Please choose proper cutting fluid.
3. The cutting data is reference value only. Please adjust it according to your real working conditions.
4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
5. If vibration occurs during cutting, please reduce cutting parameter.