

# Epoch Wonder Drills エポックワンダードリル

スタブ形

Stub

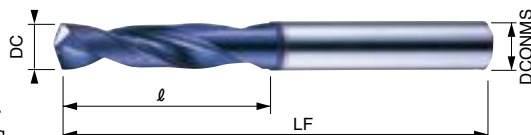


0~0.01

(mm)



平面二段  
S-X 形シンニング  
Plane, S-X thinning



EWSS○○.○

切削  
条件表  
E97  
Cutting Conditions

| 商品コード<br>Item code | 在庫<br>Stock              | 寸法 Size (mm)          |                         |                            |                               |
|--------------------|--------------------------|-----------------------|-------------------------|----------------------------|-------------------------------|
|                    |                          | 直径<br>Tool dia.<br>DC | 溝長<br>Flute length<br>ℓ | 全長<br>Overall length<br>LF | シャンク径<br>Shank dia.<br>DCONMS |
| EWSS3.0            | <input type="checkbox"/> | 3.0                   | 16                      | 46                         | 3                             |
| EWSS3.1            | <input type="checkbox"/> | 3.1                   | 18                      | 49                         | 4                             |
| EWSS3.2            | <input type="checkbox"/> | 3.2                   | 18                      | 49                         | 4                             |
| EWSS3.3            | <input type="checkbox"/> | 3.3                   | 18                      | 49                         | 4                             |
| EWSS3.4            | <input type="checkbox"/> | 3.4                   | 20                      | 52                         | 4                             |
| EWSS3.5            | <input type="checkbox"/> | 3.5                   | 20                      | 52                         | 4                             |
| EWSS3.6            | <input type="checkbox"/> | 3.6                   | 20                      | 52                         | 4                             |
| EWSS3.7            | <input type="checkbox"/> | 3.7                   | 20                      | 52                         | 4                             |
| EWSS3.8            | <input type="checkbox"/> | 3.8                   | 22                      | 55                         | 4                             |
| EWSS3.9            | <input type="checkbox"/> | 3.9                   | 22                      | 55                         | 4                             |
| EWSS4.0            | <input type="checkbox"/> | 4.0                   | 22                      | 55                         | 4                             |
| EWSS4.1            | <input type="checkbox"/> | 4.1                   | 22                      | 55                         | 5                             |
| EWSS4.2            | <input type="checkbox"/> | 4.2                   | 22                      | 55                         | 5                             |
| EWSS4.3            | <input type="checkbox"/> | 4.3                   | 24                      | 58                         | 5                             |
| EWSS4.4            | <input type="checkbox"/> | 4.4                   | 24                      | 58                         | 5                             |
| EWSS4.5            | <input type="checkbox"/> | 4.5                   | 24                      | 58                         | 5                             |
| EWSS4.6            | <input type="checkbox"/> | 4.6                   | 24                      | 58                         | 5                             |
| EWSS4.7            | <input type="checkbox"/> | 4.7                   | 24                      | 58                         | 5                             |
| EWSS4.8            | <input type="checkbox"/> | 4.8                   | 26                      | 62                         | 5                             |
| EWSS4.9            | <input type="checkbox"/> | 4.9                   | 26                      | 62                         | 5                             |
| EWSS5.0            | <input type="checkbox"/> | 5.0                   | 26                      | 62                         | 5                             |
| EWSS5.1            | <input type="checkbox"/> | 5.1                   | 26                      | 62                         | 6                             |
| EWSS5.2            | <input type="checkbox"/> | 5.2                   | 26                      | 62                         | 6                             |
| EWSS5.3            | <input type="checkbox"/> | 5.3                   | 26                      | 62                         | 6                             |
| EWSS5.4            | <input type="checkbox"/> | 5.4                   | 28                      | 66                         | 6                             |
| EWSS5.5            | <input type="checkbox"/> | 5.5                   | 28                      | 66                         | 6                             |
| EWSS5.6            | <input type="checkbox"/> | 5.6                   | 28                      | 66                         | 6                             |
| EWSS5.7            | <input type="checkbox"/> | 5.7                   | 28                      | 66                         | 6                             |
| EWSS5.8            | <input type="checkbox"/> | 5.8                   | 28                      | 66                         | 6                             |
| EWSS5.9            | <input type="checkbox"/> | 5.9                   | 28                      | 66                         | 6                             |
| EWSS6.0            | <input type="checkbox"/> | 6.0                   | 28                      | 66                         | 6                             |
| EWSS6.1            | <input type="checkbox"/> | 6.1                   | 31                      | 70                         | 7                             |
| EWSS6.2            | <input type="checkbox"/> | 6.2                   | 31                      | 70                         | 7                             |
| EWSS6.3            | <input type="checkbox"/> | 6.3                   | 31                      | 70                         | 7                             |
| EWSS6.4            | <input type="checkbox"/> | 6.4                   | 31                      | 70                         | 7                             |
| EWSS6.5            | <input type="checkbox"/> | 6.5                   | 31                      | 70                         | 7                             |
| EWSS6.6            | <input type="checkbox"/> | 6.6                   | 31                      | 70                         | 7                             |
| EWSS6.7            | <input type="checkbox"/> | 6.7                   | 31                      | 70                         | 7                             |
| EWSS6.8            | <input type="checkbox"/> | 6.8                   | 34                      | 74                         | 7                             |
| EWSS6.9            | <input type="checkbox"/> | 6.9                   | 34                      | 74                         | 7                             |
| EWSS7.0            | <input type="checkbox"/> | 7.0                   | 34                      | 74                         | 7                             |
| EWSS7.1            | <input type="checkbox"/> | 7.1                   | 34                      | 74                         | 8                             |
| EWSS7.2            | <input type="checkbox"/> | 7.2                   | 34                      | 74                         | 8                             |
| EWSS7.3            | <input type="checkbox"/> | 7.3                   | 34                      | 74                         | 8                             |

| 商品コード<br>Item code | 在庫<br>Stock              | 寸法 Size (mm)          |                         |                            |                               |
|--------------------|--------------------------|-----------------------|-------------------------|----------------------------|-------------------------------|
|                    |                          | 直径<br>Tool dia.<br>DC | 溝長<br>Flute length<br>ℓ | 全長<br>Overall length<br>LF | シャンク径<br>Shank dia.<br>DCONMS |
| EWSS7.4            | <input type="checkbox"/> | 7.4                   | 34                      | 74                         | 8                             |
| EWSS7.5            | <input type="checkbox"/> | 7.5                   | 34                      | 74                         | 8                             |
| EWSS7.6            | <input type="checkbox"/> | 7.6                   | 37                      | 79                         | 8                             |
| EWSS7.7            | <input type="checkbox"/> | 7.7                   | 37                      | 79                         | 8                             |
| EWSS7.8            | <input type="checkbox"/> | 7.8                   | 37                      | 79                         | 8                             |
| EWSS7.9            | <input type="checkbox"/> | 7.9                   | 37                      | 79                         | 8                             |
| EWSS8.0            | <input type="checkbox"/> | 8.0                   | 37                      | 79                         | 8                             |
| EWSS8.1            | <input type="checkbox"/> | 8.1                   | 37                      | 79                         | 9                             |
| EWSS8.2            | <input type="checkbox"/> | 8.2                   | 37                      | 79                         | 9                             |
| EWSS8.3            | <input type="checkbox"/> | 8.3                   | 37                      | 79                         | 9                             |
| EWSS8.4            | <input type="checkbox"/> | 8.4                   | 37                      | 79                         | 9                             |
| EWSS8.5            | <input type="checkbox"/> | 8.5                   | 37                      | 79                         | 9                             |
| EWSS8.6            | <input type="checkbox"/> | 8.6                   | 40                      | 84                         | 9                             |
| EWSS8.7            | <input type="checkbox"/> | 8.7                   | 40                      | 84                         | 9                             |
| EWSS8.8            | <input type="checkbox"/> | 8.8                   | 40                      | 84                         | 9                             |
| EWSS8.9            | <input type="checkbox"/> | 8.9                   | 40                      | 84                         | 9                             |
| EWSS9.0            | <input type="checkbox"/> | 9.0                   | 40                      | 84                         | 9                             |
| EWSS9.1            | <input type="checkbox"/> | 9.1                   | 40                      | 84                         | 10                            |
| EWSS9.2            | <input type="checkbox"/> | 9.2                   | 40                      | 84                         | 10                            |
| EWSS9.3            | <input type="checkbox"/> | 9.3                   | 40                      | 84                         | 10                            |
| EWSS9.4            | <input type="checkbox"/> | 9.4                   | 40                      | 84                         | 10                            |
| EWSS9.5            | <input type="checkbox"/> | 9.5                   | 40                      | 84                         | 10                            |
| EWSS9.6            | <input type="checkbox"/> | 9.6                   | 43                      | 89                         | 10                            |
| EWSS9.7            | <input type="checkbox"/> | 9.7                   | 43                      | 89                         | 10                            |
| EWSS9.8            | <input type="checkbox"/> | 9.8                   | 43                      | 89                         | 10                            |
| EWSS9.9            | <input type="checkbox"/> | 9.9                   | 43                      | 89                         | 10                            |
| EWSS10.0           | <input type="checkbox"/> | 10.0                  | 43                      | 89                         | 10                            |
| EWSS10.1           | <input type="checkbox"/> | 10.1                  | 43                      | 89                         | 11                            |
| EWSS10.2           | <input type="checkbox"/> | 10.2                  | 43                      | 89                         | 11                            |
| EWSS10.3           | <input type="checkbox"/> | 10.3                  | 43                      | 89                         | 11                            |
| EWSS10.4           | <input type="checkbox"/> | 10.4                  | 43                      | 89                         | 11                            |
| EWSS10.5           | <input type="checkbox"/> | 10.5                  | 43                      | 89                         | 11                            |
| EWSS10.6           | <input type="checkbox"/> | 10.6                  | 43                      | 89                         | 11                            |
| EWSS10.7           | <input type="checkbox"/> | 10.7                  | 47                      | 95                         | 11                            |
| EWSS10.8           | <input type="checkbox"/> | 10.8                  | 47                      | 95                         | 11                            |
| EWSS10.9           | <input type="checkbox"/> | 10.9                  | 47                      | 95                         | 11                            |
| EWSS11.0           | <input type="checkbox"/> | 11.0                  | 47                      | 95                         | 11                            |
| EWSS11.1           | <input type="checkbox"/> | 11.1                  | 47                      | 95                         | 12                            |
| EWSS11.2           | <input type="checkbox"/> | 11.2                  | 47                      | 95                         | 12                            |
| EWSS11.3           | <input type="checkbox"/> | 11.3                  | 47                      | 95                         | 12                            |
| EWSS11.4           | <input type="checkbox"/> | 11.4                  | 47                      | 95                         | 12                            |
| EWSS11.5           | <input type="checkbox"/> | 11.5                  | 47                      | 95                         | 12                            |
| EWSS11.6           | <input type="checkbox"/> | 11.6                  | 47                      | 95                         | 12                            |
| EWSS11.7           | <input type="checkbox"/> | 11.7                  | 47                      | 95                         | 12                            |

| 商品コード<br>Item code | 在庫<br>Stock              | 寸法 Size (mm)          |                         |                            |                               |
|--------------------|--------------------------|-----------------------|-------------------------|----------------------------|-------------------------------|
|                    |                          | 直径<br>Tool dia.<br>DC | 溝長<br>Flute length<br>ℓ | 全長<br>Overall length<br>LF | シャンク径<br>Shank dia.<br>DCONMS |
| EWSS11.8           | <input type="checkbox"/> | 11.8                  | 47                      | 95                         | 12                            |
| EWSS11.9           | <input type="checkbox"/> | 11.9                  | 51                      | 102                        | 12                            |
| EWSS12.0           | <input type="checkbox"/> | 12.0                  | 51                      | 102                        | 12                            |
| EWSS12.1           | <input type="checkbox"/> | 12.1                  | 51                      | 102                        | 13                            |
| EWSS12.2           | <input type="checkbox"/> | 12.2                  | 51                      | 102                        | 13                            |
| EWSS12.3           | <input type="checkbox"/> | 12.3                  | 51                      | 102                        | 13                            |
| EWSS12.4           | <input type="checkbox"/> | 12.4                  | 51                      | 102                        | 13                            |
| EWSS12.5           | <input type="checkbox"/> | 12.5                  | 51                      | 102                        | 13                            |
| EWSS12.6           | <input type="checkbox"/> | 12.6                  | 51                      | 102                        | 13                            |
| EWSS12.7           | <input type="checkbox"/> | 12.7                  | 51                      | 102                        | 13                            |
| EWSS12.8           | <input type="checkbox"/> | 12.8                  | 51                      | 102                        | 13                            |
| EWSS12.9           | <input type="checkbox"/> | 12.9                  | 51                      | 102                        | 13                            |
| EWSS13.0           | <input type="checkbox"/> | 13.0                  | 51                      | 102                        | 13                            |
| EWSS13.1           | <input type="checkbox"/> | 13.1                  | 51                      | 102                        | 14                            |
| EWSS13.2           | <input type="checkbox"/> | 13.2                  | 51                      | 102                        | 14                            |
| EWSS13.3           | <input type="checkbox"/> | 13.3                  | 54                      | 107                        | 14                            |
| EWSS13.4           | <input type="checkbox"/> | 13.4                  | 54                      | 107                        | 14                            |
| EWSS13.5           | <input type="checkbox"/> | 13.5                  | 54                      | 107                        | 14                            |
| EWSS13.6           | <input type="checkbox"/> | 13.6                  | 54                      | 107                        | 14                            |
| EWSS13.7           | <input type="checkbox"/> | 13.7                  | 54                      | 107                        | 14                            |
| EWSS13.8           | <input type="checkbox"/> | 13.8                  | 54                      | 107                        | 14                            |
| EWSS13.9           | <input type="checkbox"/> | 13.9                  | 54                      | 107                        | 14                            |
| EWSS14.0           | <input type="checkbox"/> | 14.0                  | 54                      | 107                        | 14                            |
| EWSS14.1           | <input type="checkbox"/> | 14.1                  | 56                      | 111                        | 15                            |
| EWSS14.2           | <input type="checkbox"/> | 14.2                  | 56                      | 111                        | 15                            |
| EWSS14.3           | <input type="checkbox"/> | 14.3                  | 56                      | 111                        | 15                            |
| EWSS14.4           | <input type="checkbox"/> | 14.4                  | 56                      | 111                        | 15                            |
| EWSS14.5           | <input type="checkbox"/> | 14.5                  | 56                      | 111                        | 15                            |
| EWSS14.6           | <input type="checkbox"/> | 14.6                  | 56                      | 111                        | 15                            |
| EWSS14.7           | <input type="checkbox"/> | 14.7                  | 56                      | 111                        | 15                            |
| EWSS14.8           | <input type="checkbox"/> | 14.8                  | 56                      | 111                        | 15                            |
| EWSS14.9           | <input type="checkbox"/> | 14.9                  | 56                      | 111                        | 15                            |
| EWSS15.0           | <input type="checkbox"/> | 15.0                  | 56                      | 111                        | 15                            |
| EWSS15.5           | <input type="checkbox"/> | 15.5                  | 58                      | 115                        | 16                            |
| EWSS16.0           | <input type="checkbox"/> | 16.0                  | 58                      | 115                        | 16                            |
| EWSS16.5           | <input type="checkbox"/> | 16.5                  | 60                      | 119                        | 17                            |
| EWSS17.0           | <input type="checkbox"/> | 17.0                  | 60                      | 119                        | 17                            |
| EWSS17.5           | <input type="checkbox"/> | 17.5                  | 62                      | 123                        | 18                            |
| EWSS18.0           | <input type="checkbox"/> | 18.0                  | 62                      | 123                        | 18                            |
| EWSS18.5           | <input type="checkbox"/> | 18.5                  | 64                      | 127                        | 19                            |
| EWSS19.0           | <input type="checkbox"/> | 19.0                  | 64                      | 127                        | 19                            |
| EWSS19.5           | <input type="checkbox"/> | 19.5                  | 66                      | 131                        | 20                            |
| EWSS20.0           | <input type="checkbox"/> | 20.0                  | 66                      | 131                        | 20                            |

## 対応被削材 Applicable work materia

| 軟鋼<br>Mild steel<br>SS   | 炭素鋼<br>Carbon steel<br>S○○○ | 合金鋼<br>Alloy steel<br>SCM, SCr | 調質鋼<br>Heat-treated steel<br>SKD SKS | 工具鋼<br>Tool steel<br>~40HRC | 焼入れ鋼<br>Hardened steel<br>~45HRC 45HRC~ | ステンレス鋼<br>Stainless steel<br>SUS | 耐熱鋼<br>Ti合金<br>Heat-resistant steel, Ti alloy<br>Inconel | 鋳鉄<br>Cast iron<br>FC    | ダクタイル鋳鉄<br>Ductile cast iron<br>FCD | アルミ合金<br>Aluminum alloy<br>Al | 銅合金<br>Copper alloy<br>Cu |
|--------------------------|-----------------------------|--------------------------------|--------------------------------------|-----------------------------|-----------------------------------------|----------------------------------|----------------------------------------------------------|--------------------------|-------------------------------------|-------------------------------|---------------------------|
| <input type="checkbox"/> | <input type="checkbox"/>    | <input type="checkbox"/>       | <input type="checkbox"/>             | <input type="checkbox"/>    | <input type="checkbox"/>                | <input type="checkbox"/>         | <input type="checkbox"/>                                 | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>      | <input type="checkbox"/>  |

## 再研磨対応外径範囲 Re-grinding compatibility range

| 商品コード Item code | エンド End (mm) |
|-----------------|--------------|
| EWSS            | 3 ~ 20       |

□印：特定代理店在庫です。弊社営業へお問い合わせください。 □：Stocked by specified distributor. Contact with our sales department.