

F1 : COMPRESSION  
F2 : TENSION  
F3 : BACK TENSION

|       | MODEL      | CODE    | φD1 | L1  | l1  | φC1 | φC2 | φC3 | H1 | F1 | F2 | F3 | φD2    | D        | TAP COLLET CODE | N/W (kg) |
|-------|------------|---------|-----|-----|-----|-----|-----|-----|----|----|----|----|--------|----------|-----------------|----------|
| SBT40 | -ADC20-150 | 2220010 | 20  | 123 | 109 | 32  | 40  | 47  | 14 | 6  | 10 | 6  | 3~12.5 | M2.5~M16 | TC20-(D)        | 1.6      |
|       | -ADC29-195 | 2220012 | 29  | 163 | 143 | 45  | 55  | 63  | 20 | 8  | 15 | 10 | 8.5~20 | M12~M27  | TC29-(D)        | 2.6      |
| SBT50 | -ADC20-165 | 2221010 | 20  | 138 | 124 | 32  | 40  | 47  | 14 | 6  | 10 | 6  | 3~12.5 | M2.5~M16 | TC20-(D)        | 4.2      |
|       | -ADC29-195 | 2221012 | 29  | 163 | 143 | 45  | 55  | 63  | 20 | 8  | 15 | 10 | 8.5~20 | M12~M27  | TC29-(D)        | 4.9      |
|       | -ADC40-225 | 2221014 | 40  | 173 | 153 | 60  | 80  | 80  | 20 | 10 | 15 | 12 | 14~30  | M18~M39  | TC40-(D)        | 6.0      |

ご注文例 ORDERING EXAMPLE

|   |         |   |               |    |   |     |
|---|---------|---|---------------|----|---|-----|
| ① | SBT40   | - | ADC           | 20 | - | 150 |
| ① | シャックサイズ |   | Shank Size    |    |   |     |
| ② | 呼称      |   | Holder's Name |    |   |     |
| ③ | φD1     |   | φD1           |    |   |     |
| ④ | L1      |   | L1            |    |   |     |

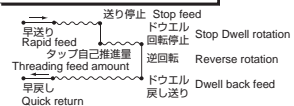
(ネジ深さ制限装置) 設定方法 (Depth limit device) How to set

- ADC形は、ネジ深さが自動的に決まる制限装置を組み込んでいる為、ネジ深さが正確に決まります。タップ立て深さのバラツキ精度±0.1。
- タップコレットは、トルクリミッターを取り除いたTC型タップコレットをご使用下さい。また、従来のTCCコレット(トルクリミッター付)もご使用できます。
- テンション、コンプレッションのフロート機構の働きによりタップピッチと機械送りの誤差を自動的に補正し、精度の高いネジ立てが出来ます。
- The ADC tapper, in which the limit device is incorporated to determine thread depth automatically, can decide thread depth accurately. Variations in accuracy of depth tapping is ±0.1.
- Please use TC type tap, which has no torque limiter. In addition, traditional TCC collet having torque limiter can be used.
- It automatically corrects the error in the machine and feed tap pitch by the action of the float mechanism (tension-compression), which can make it tapping with high accuracy.

通し穴プログラム例 Example: through-hole program



止り穴プログラム例 Example: blind hole program

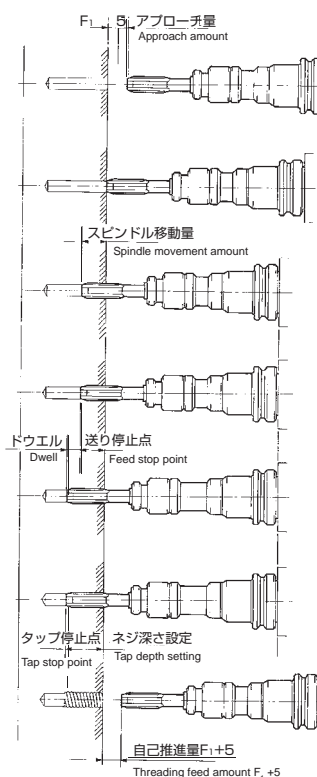


ドウェル時間の計算法 Calculation method of dwell time

[例] タッパー : ADC20(自己推進量6) [Example] tapper: ADC20 (threading feed amount 6)  
 タップ : M12×1.75 Tap: M12×1.75  
 回転数 : 180min<sup>-1</sup>(3RPS) Rotational speed: 180min<sup>-1</sup> (3RPS)

$$\text{ドウェル時間} = \frac{6}{1.75 \times 180 / 60} \times 2 = 2.3 \text{秒}$$

Dwell time = 2.3seconds

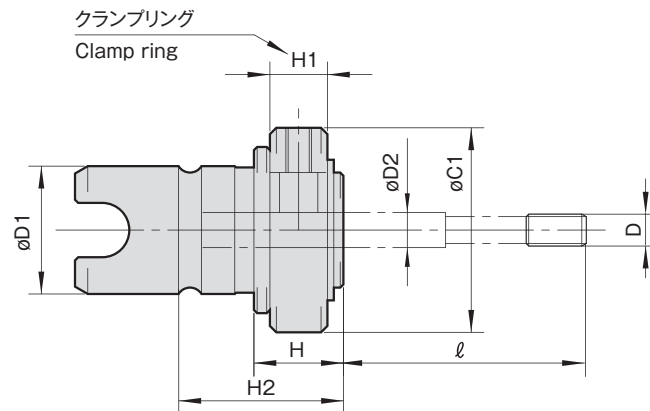


- ①アプローチ量設定 ① approach amount setting  
F1-5mmに設定の事、タップの進む速さと同じか若干遅めに設定して下さい。 Set to F1-5mm. Set slightly slower or equal to the speed of travel of the tap.
- ②ネジ立て開始 ② Start tapping
- ③スピンドル移動量 ③ Spindle movement amount  
ネジ深さ設定量により自己推進量F1を引いた寸法。 Amount obtained by subtracting the threading feed amount (F1) by the tap depth setting amount.
- ④送り停止点 ④ Feed stop point  
機械の送りを止め主軸回転のみ(ドウェル)を与える。 Stop the feed of the machine, and let only the spindle (Dwell) turn.
- ⑤ドウェル時間 ⑤ Dwell time  
ドウェル時間 =  $\frac{\text{タッパー自己推進量(mm)} \times 2}{\text{タップのP(mm)} \times \text{主軸回転数(R,P,S)}}$   
Dwell time =  $\frac{\text{Tapper threading feed amount (mm)}}{\text{Tap Pitch(mm)} \times \text{Rotation (R,P,S)}} \times 2$
- ⑥タップ停止点 ⑥ Tap stop point  
機械主軸回転停止、主軸逆回転(ドウェル)戻り送り(タップの戻り速さと同じに設定) Stop spindle rotation, reverse spindle rotation (Dwell), and feed back (setting to the same as the rate at which the tap is fed back.).
- ⑦ネジ立完了 ⑦ Tapping complete

# TC型タップコレット

TC<sup>①</sup>-L

TAP COLLET (Type TC)



| CODE     | øD1 | D       | øC1 | H  | H1 |
|----------|-----|---------|-----|----|----|
| TC20-(D) | 20  | M3~M16  | 32  | 14 | 9  |
| TC29-(D) | 29  | M12~M27 | 45  | 20 | 12 |
| TC40-(D) | 40  | M18~M39 | 60  | 20 | 15 |

## TC20タップコレット TAP COLLET

|    |       | TC20-(D) |      |      |      |       |     |      |    |      |     |      |      |     |    |      |    |     |   |
|----|-------|----------|------|------|------|-------|-----|------|----|------|-----|------|------|-----|----|------|----|-----|---|
| D  | M     | —        | ※M2  | M3   | M4   | M5    | M6  | —    | M8 | M10  | —   | M12  | —    | M14 | —  | M16  | —  |     |   |
|    | UNC   | —        | No.4 | —    | No.8 | No.10 | 1/4 | 5/16 | —  | 3/8  | —   | 7/16 | —    | 1/2 | —  | 9/16 | —  | 5/8 | — |
|    | PT・PF | —        | —    | —    | —    | —     | —   | —    | —  | P1/8 | —   | —    | —    | —   | —  | P1/4 | —  | —   | — |
| D2 | —     | 3        | 4    | 5    | 5.5  | 6     | 6.1 | 6.2  | 7  | 8    | 8.5 | 9    | 10.5 | 11  | 12 | 12.5 | —  | —   | — |
| H2 | —     | 20.5     | 21.5 | 22   | 23   | 24    | 25  | 26   | 27 | 28   | —   | —    | —    | —   | —  | —    | —  | —   | — |
| ℓ  | —     | 23.5     | 25.5 | 30.5 | 38   | 40    | 47  | 52   | 31 | 56   | 58  | 60   | 62   | 64  | 35 | 68   | 67 | —   | — |

## TC29タップコレット TAP COLLET

|    |       | TC29-(D) |      |     |      |      |     |    |      |    |     |    |      |    |      |    |    |  |
|----|-------|----------|------|-----|------|------|-----|----|------|----|-----|----|------|----|------|----|----|--|
| D  | M     | M12      | —    | M14 | —    | M16  | M18 | —  | M20  | —  | M22 | —  | M24  | —  | M27  | —  | —  |  |
|    | UNC   | —        | 1/2  | —   | 9/16 | —    | 5/8 | —  | 3/4  | —  | 7/8 | —  | —    | —  | —    | —  | 1  |  |
|    | PT・PF | —        | —    | —   | P1/4 | —    | —   | —  | P3/8 | —  | —   | —  | P1/2 | —  | P5/8 | —  | —  |  |
| D2 | 8.5   | 9        | 10.5 | 11  | 12   | 12.5 | 14  | 15 | 17   | 18 | 19  | 20 | —    | —  | —    | —  | —  |  |
| H2 | 29    | 30       | 31   | 32  | 33   | 34   | 35  | 36 | 37   | 38 | —   | —  | —    | —  | —    | —  | —  |  |
| ℓ  | 53    | 55       | 57   | 59  | 30   | 63   | 62  | 66 | 71   | 31 | 70  | 79 | 43   | 82 | 44   | 92 | 87 |  |

## TC40タップコレット TAP COLLET

|    |       | TC40-(D) |     |      |     |     |      |     |      |     |      |      |    |      |    |     |     |      |      |    |     |     |
|----|-------|----------|-----|------|-----|-----|------|-----|------|-----|------|------|----|------|----|-----|-----|------|------|----|-----|-----|
| D  | M     | M18      | —   | M20  | —   | M22 | —    | M24 | —    | M27 | —    | M30  | —  | M33  | —  | M36 | —   | M39  | —    |    |     |     |
|    | UNC   | —        | 3/4 | —    | 7/8 | —   | —    | —   | —    | 1   | P1/8 | —    | —  | 13/8 | —  | —   | —   | —    | 11/2 |    |     |     |
|    | PT・PF | —        | —   | P3/8 | —   | —   | P1/2 | —   | P5/8 | —   | —    | P3/4 | —  | P7/8 | —  | P1  | —   | P1/8 | —    |    |     |     |
| D2 | —     | 14       | 15  | 17   | 18  | 19  | 20   | 22  | 23   | 24  | 25   | 26   | 28 | 30   | —  | —   | —   | —    |      |    |     |     |
| H2 | —     | 34       | 35  | 36   | 42  | 43  | 45   | 47  | 49   | 51  | —    | —    | —  | —    | —  | —   | —   | —    |      |    |     |     |
| ℓ  | —     | 66       | 71  | 31   | 70  | 79  | 38   | 77  | 39   | 87  | 82   | 90   | 40 | 98   | 43 | 98  | 106 | 46   | 106  | 51 | 114 | 109 |

注: \*印は受注生産致します

NOTE: 1. For JIS standard taps only.

\* mark tap collet is manufactured to order.

### ご注文例 ORDERING EXAMPLE

① ② ③  
TC 20 - M5

|            |               |
|------------|---------------|
| ① 呼称       | Holder's Name |
| ② øD1      | øD1           |
| ③ タップサイズ D | Tap Size      |

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

Accessories

Data