

## Mechanical indexer model selection specifications check sheet

### Table (direct/indirect) drive

- Desired model : ☐ ZRS
- Output shaft shape : ☐ S (straight shaft) ☐ F (flange shaft)
- Housing material : ☐ Fc
- Installation orientation : ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

#### ■ Operating conditions

1. Indexing No.:  $n =$

2. For table indirect drive

• Output axis deceleration ratio:  $io = \frac{D_1}{D_2} =$   • Number of stations:  $ns = \frac{n}{io} =$

3. Total allocation angle ( $\theta_t$ ) = allocation angle ( $\theta_h$ ) × Number of stops ( $z$ )

° =  ° ×

4. Cycle time

<input type="checkbox"/> Continuous drive	<p>Unit</p> <p>Cycle time (<math>t_0</math>) = indexing time (<math>t_1</math>) + stop time (<math>t_2</math>)</p> <p><input type="text"/> sec = <input type="text"/> sec + <input type="text"/> sec</p>
<input type="checkbox"/> For intermittent drive	<p>Machine unit</p> <p>Cycle time (<math>t_m</math>) = Cycle time (<math>t_0</math>) + Stop time (<math>t_s</math>)</p> <p><input type="text"/> sec = <input type="text"/> sec + <input type="text"/> sec</p> <p>* Time when the input shaft stopped due to <math>t_s</math>: C/B, etc.</p>

5. Input axis rotation speed:  $N$

$$N = \frac{60}{\text{Unit cycle time } (t_0) \times \text{No. of stops } (z)} = \text{  rpm}$$

6. Cam curve: ☐ MS (standard) ☐ Other ( )

7. Input axis drive method

- ☐ Direct connection to worm [HO, etc., mounting]
- ☐ Direct connection to worm [Mounted with coupling]
- ☐ Worm indirect [chain belt drive]
- ☐ Gear motor

8. Expected service life time

h

If not specified, it will be calculated as 10000h.



Company		Name	
Department / Division			
TEL		FAX	

[Option]

☐ Worm reducer: HO Series

• C/B ☐ Yes ☐ No

• Reduction ratio 1/

• Mounting direction

☐ Overload protection device: TSF/TGX

## Load conditions

### 1. Table

• Diameter :  $D_t = \varnothing$  mm

• Plate thickness :  $h_t =$  mm

• Material : ☐ Steel ☐ Al

☐ Other (material name) material density

### 2. Workpiece/jig

• Number of workpieces :  $n_w =$  pcs.

• Total weight of workpiece :  $m_2 =$   $\times n_w =$  kg

• Number of jigs :  $n_p =$  pcs

• Total jig weight :  $m_3 =$   $\times n_p =$  kg

• Workpiece/jig mounting center diameter:  $D_p = \text{P.C.D}$  mm

### 3. Table bottom instruction (Yes / No)

• Friction radius :  $R_f =$  mm

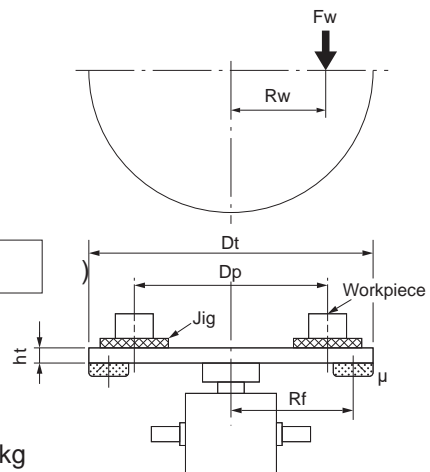
• Coefficient of friction :  $\mu =$

### 4. External load during indexing (output shaft operating)

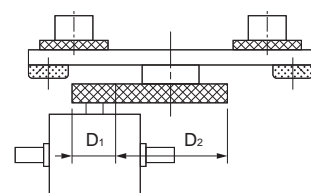
• External load :  $F_w =$  N or kgf

• Action radius :  $R_w =$  mm

■ If the conditions are not listed above, contact your CKD Sales representative.



■ Direct drive



■ Indirect drive

	Index side gear	Table side gear
P.C.D	$D_1 =$	$D_2 =$
Tooth width		

## Mechanical indexer model selection specifications check sheet

### Conveyor drive

Desired model : ☐ ZRS  
 Output shaft shape : ☐ S (straight shaft) ☐ F (flange shaft)  
 Housing material : ☐ Fc  
 Installation orientation : ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

#### ■ Operating conditions

- Indexing No.: n=
- Output shaft deceleration ratio:  $io = \frac{Z_d}{Z_c} =$
- Total allocation angle ( $\theta_t$ ) = allocation angle ( $\theta_h$ ) × Number of stops (z)  
 ° =  ° ×
- Cycle time

<input type="checkbox"/> Continuous drive	Unit Cycle time ( $t_0$ ) = indexing time ( $t_1$ ) + stop time ( $t_2$ )  <input type="text"/> sec = <input type="text"/> sec + <input type="text"/> sec
<input type="checkbox"/> For intermittent drive	Machine unit Cycle time ( $t_m$ ) = Cycle time ( $t_0$ ) + Stop time ( $t_s$ ) <input type="text"/> sec = <input type="text"/> sec + <input type="text"/> sec * Time when the input shaft stopped due to $t_s$ : C/B, etc.

- Input axis rotation speed: N

$$N = \frac{60}{\text{Unit cycle time } (t_0) \times \text{No. of stops } (z)} = \text{  rpm}$$

- Cam curve: ☐ MS (standard) ☐ Other ( )

- Input axis drive method

- ☐ Direct connection to worm [HO, etc., mounting]  
☐ Direct connection to worm [Mounted with coupling]  
☐ Worm indirect [chain belt drive]  
☐ Gear motor

- Expected service life time

h

If not specified, it will be calculated as 10000h.



Company		Name	
Department / Division			
TEL		FAX	

[Option]

☐ Worm reducer: HO Series

• C/B ☐ Yes ☐ No • Reduction ratio 1/  • Mounting direction

☐ Overload protection device: TSF/TGX  —

## Load conditions

1. Conveyor feed pitch: St =  mm

2. Chain Size#

• Chain model No.

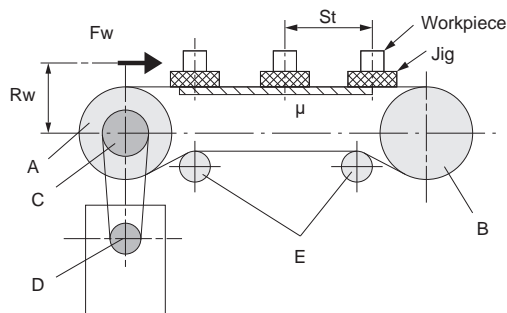
• Chain pitch : Sch =  mm

• Weight per unit : mch =

3. Number of chains: NB =  Section

4. Sprocket

	A (drive)	B	C	D	E
Number of teeth (Z)					
Pitch Diameter (D)					
Tooth width (h)					
number per bar	1	1			



5. Workpiece/jig

• Number of workpieces: nw =  individual • Total weight of workpieces: m<sub>2</sub> =  × nw =  kg

• Number of jigs: np =  pcs • Total weight of jigs: m<sub>3</sub> =  × np =  kg

• Coefficient of friction: μ =

6. External load during indexing (output shaft operating)

• External load: Fw =  N or  kgf • Action radius: Rw =  mm

■ If the conditions are not listed above, contact your CKD Sales representative.