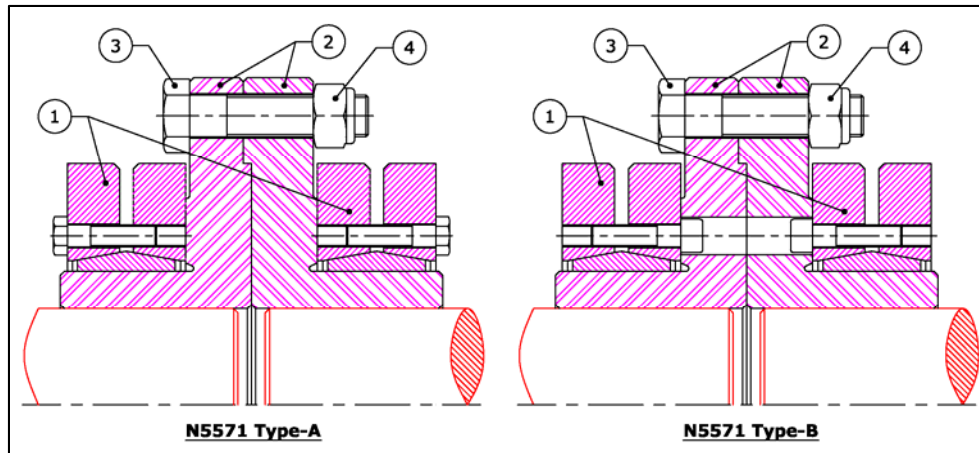


### 1.) About N5571 Coupling & Function:

- N5571 Coupling is N4071 shrink disc with Flanges pair in Mounting type A & B. N5571 mount on two differential shaft for transmit the torque one shaft to another shaft by N5571 shrink disc coupling.

### 2.) Nomenclature:



No.	Nomenclature
1	N4071 Shrink Disc
2	Flanges Pair
3	Hex Head Screw
4	Hex Nut

Note: N5571 Model in Type A and B Fully Pair Coupling

### 3.) Technical Requirement or Safe Operation:

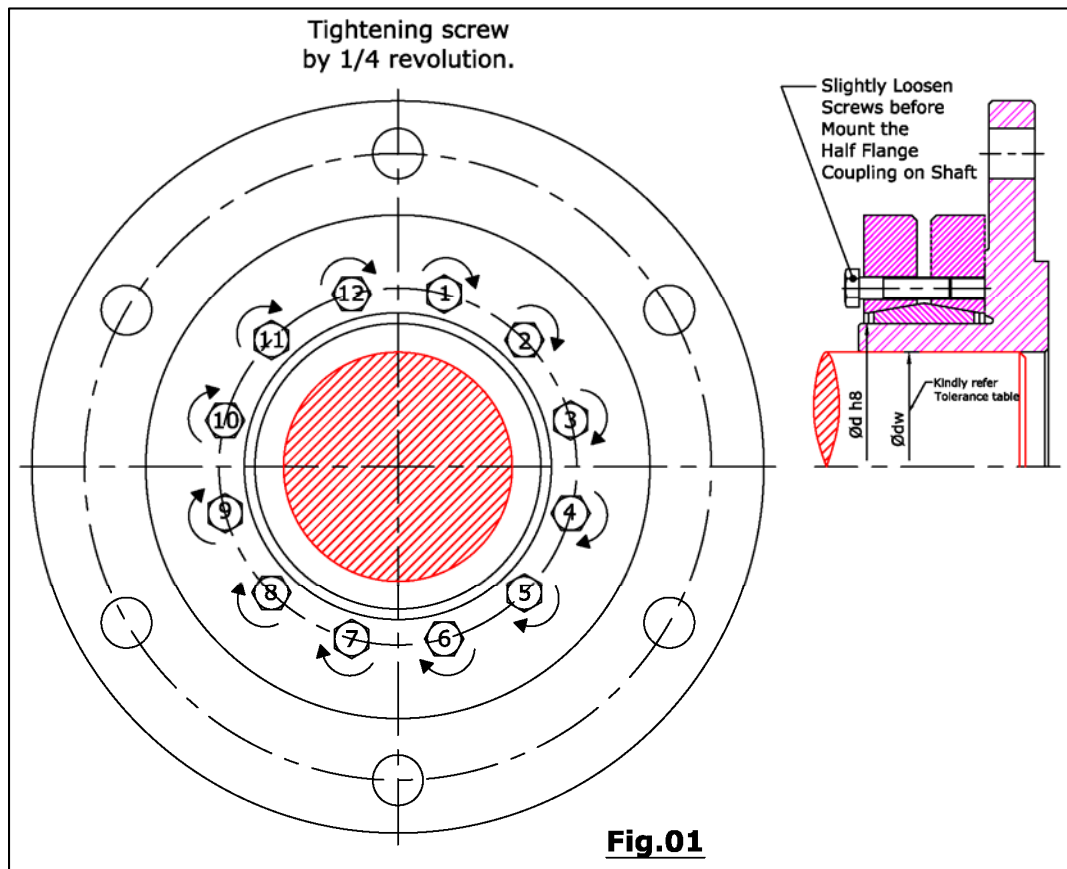
- A good surface finish by machine tool is sufficient. Maximum allowable surface finish: Ra max 3.2 $\mu$ m. Maximum permissible tolerances for Hollow Shaft h8. (Refer below Tolerance table)

$d_w$		ISO	Maximum Clearance S (mm)
Above	Upto		
10	18	H6/g6	0.014
15	30		0.017
30	50	H6/g6	0.032
50	80	H7/g6	0.048
80	120		0.069
120	180		0.079
180	250		0.090
250	315		0.101
315	400		0.111
400	500		0.123
500	630		0.136
630	800	0.154	

Where  $d_w$  = Solid shaft diameter, S = Clearance between Solid shaft & Hollow shaft

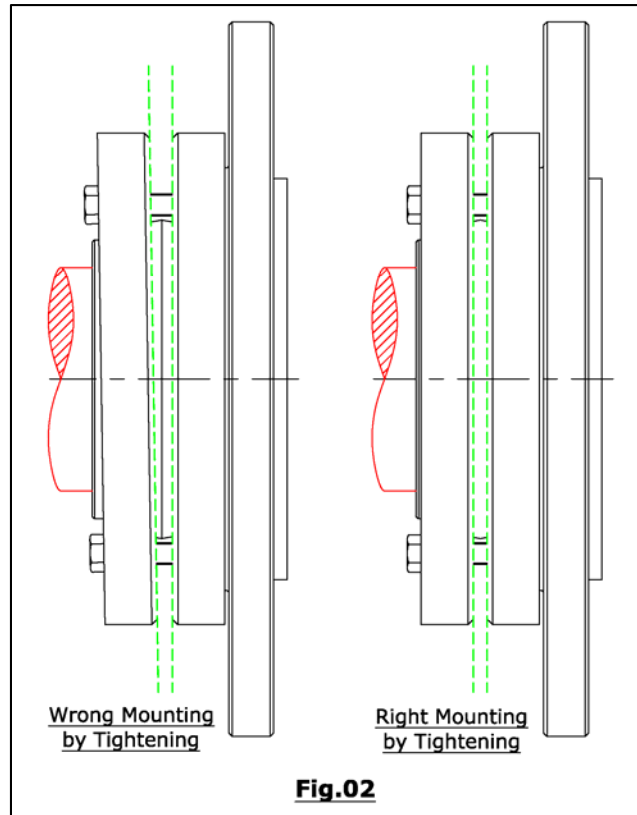
### 4.) Installation:

- Before Installation be ensure that Flange Inner Dia and shaft are properly clean (ro remove dust particles & free of grease and dry).
- By hand slightly loose clamping screw of shrink disc and push the half Flange Coupling with Shrink Disc onto the Solid Shaft (As shown in Fig.1).
- Once the axial position of shrink disc is fixed then tighten all screw by hand untill screw head face touch to side face of Shrink disc. Start tighten all screws one by one in diametrically circular sequence by using torque wrench (As shown in Fig.01).



- At a time tighten screws by 1/4 revolution with help of torque Wrench for several passes ( Set torque wrench for 1<sup>st</sup> pass : 1/3 Ta ; 2<sup>nd</sup> pass: 2/3 Ta ; 3<sup>rd</sup> pass : Full Ta ).  
**Where Ta = Recommended Tightening torque, please refer Ta as per NMTG drawing or NMTG Shrink Disc Catalogue (as per Model & Size).**

- By applying tightening torque to clamping screw, front nut and rear nut pulled together over inner ring. With the help of clamping force generated by clamping screw, friction connection between contact surface of hollow shaft and solid shaft generated.
- The tightening process is completed only when no one screw turn at specified tightening torque value.
- Be sure that, during installation position of inner ring with respect to hollow shaft remain unchanged.
- Same as follow above steps for N5571 B Type (Tightening of Screw through Flange Hole to Clamping Screw-Reference Fig. of Nomenclature Devision).



**For Apply Tightening Torque by Torque Wrench:**

Torque wrench torque	Pass	1 <sup>st</sup> attempt	Tightening of screws
1/3 Ta	1, 2, 3, 4, ... n	1,2,3,4, ...	By 1/4 Revolution
2/3 Ta	1, 2, 3, 4, ... n	1,2,3,4, ...	By 1/4 Revolution
Ta or 5% more	1, 2, 3, 4, ... n	1,2,3,4, ...	By 1/4 Revolution

**Tightening Torque for Shrink Disc part:**

Size of Screws	M8	M10	M12	M16	M20	M24	M27
Ta (Nm)	30	59	100	250	490	840	1250

- Above mention value of tightening torque is maximum. Please refer drawing for actual value of tightening torque as per your application.
- Replace missing or damaged clamping screw with screw of quality as per mentioned below
  - In N5571 Type-A : Hex Head Screws, DIN 913 – 10.9 Grade Only
  - In N5571 Type-B : Allencap Screw, DIN 912 – 10.9 Grade Only.
- Same as Above All step follow for Second half Flange coupling.
- Properly clean the Faces of both Flanges, free of Grease and dry.
- both Half Flange Coupling together, Clamp the Clamping Screws with Hex Nut to Joint the Both Flanges Coupling.

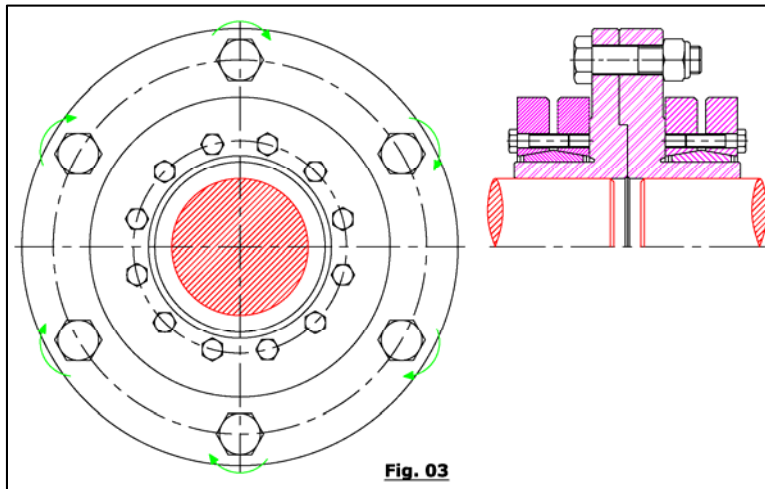
- Apply tightening torque of Flange Clamping screw as per below, one by one in diametrically opposed sequence by using **torque wrench**.

Size of Flange Clamping Screw	M16	M20	M24	M30
Tightening Torque Ta (Nm)	210	420	720	1450

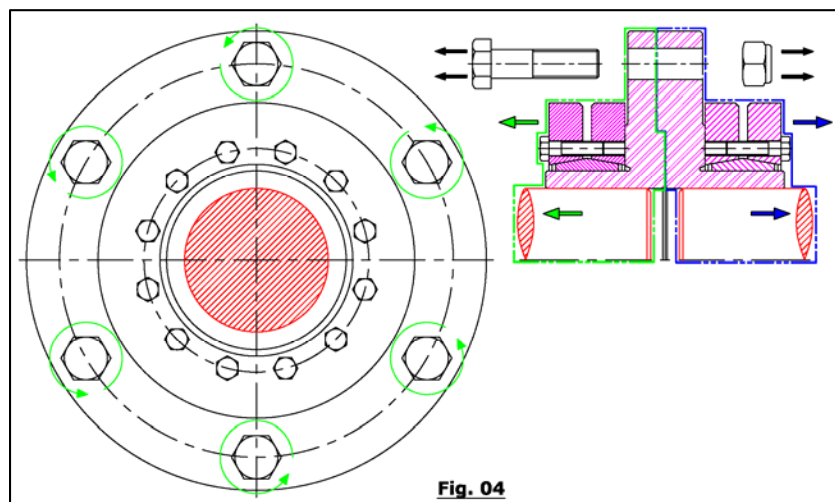
Note: The assembly of Coupling cannot compensate any misalignment of shafts.

The Max. Tightening torque of Flange screw may not be exceed.

- Replace missing or damaged clamping screw with screw of quality as per mentioned below**
  - **Hex Head Screw for Flange Screws, DIN 913 – 10.9 Grade.**
  - **Hexagonal Nut, DIN EN ISO 4032.**

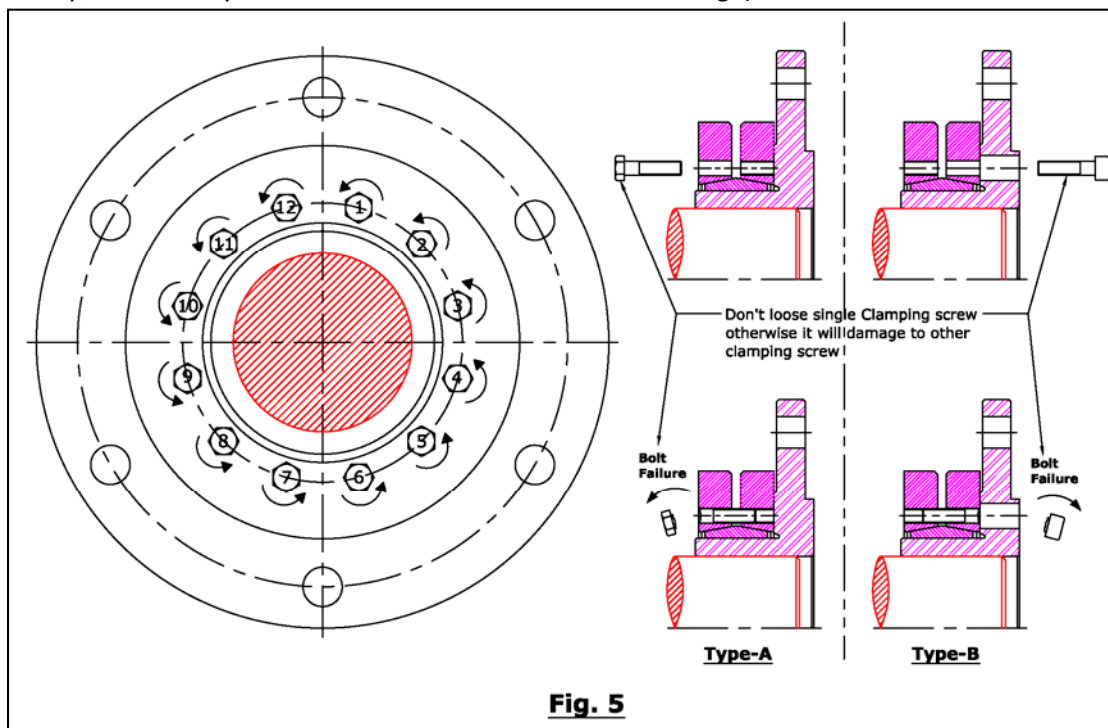


### 5.) Removal:



- Completely loosen the clamping screws & nuts of both flanges. Separate assembly from each other as shown in Fig.04.

- In similar manner loosen all screw one by one in diametrically circular sequence in anti clockwise direction by 1/4 revolution with help of torque wrench because of completely loosen of single screw at a time tilt Inner ring & outer ring may lead to damage of shrink disc(Fig.05).
- Fitted N4071 model is self-releasing so after loosening all screws shrink disc should automatically release.
- Remove the shrink disc assembly from flange and after remove the flange from shaft. (where necessary, remove any rust formed on the shaft in front of Flange).



#### 6.) Reuse:

- Completely dismantle the shrink disc and clean, re-lubricate inner ring, outer ring, flanges and clamping screws. If any damage found in parts of shrink disc then replacement of whole shrink disc required. Before reuse of shrink disc's screws or flange's screws please check screws length because of during operating condition if they have been elongated so they cannot be used further so replace with same size and grade.

#### 7.) Maintenance:

- Shrink Disc N4071 & Flange Assembly are maintenance free. We therefore recommend to check tightening torque of the clamping screws each time maintenance is performed on the machine.  
(All Figures shown in instructions are for easy understanding of installation and removal processes.)

### 8.) Storage Preservation and Instruction:

- NMTG Product is supplied with an oil film as Rust & Corrosion Protection as per below instruction for Short term storage.
- This protection is renewed at regular intervals which depends on Environmental condition at Storage site. (Temperature, Atmosphere, etc.)

#### **Maximum Storage period is 6 Months for Short-term Storage.**

Please follow Instruction for Preservation & Storage of NMTG Products:

- Once NMTG Product is used then clean all its parts with clean cloth.
- Lubricate all parts with rust preventive oil S-VCI 415 or equivalent & assemble as it was & packed in plastic bag.
- After wrapping in plastic bag, Material is packed by S-VCI 131 or equivalent rust preventive paper & store.
- Keep it in dry place and free from dust.
- Do not expose to open or corrosive environment.
- Keep away from direct Sunlight.
- Avoid Mechanical Shock & Vibration.
- Storage Temperature: -10 to +60°C.
- Relative Humidity: Maximum 95%, non-condensing.

#### **For Long term Storage (1 Year):**

Please follow Instruction for Preservation & Storage of NMTG Products:

- Once NMTG Product is used then clean all its parts with clean cloth.
- Lubricate all parts with rust preventive oil S-VCI 415 or equivalent & assemble as it was & packed in special Vacuum bag.
- After wrapping in Vacuum bag, Material is packed & store.
- Keep it in dry place and free from dust.
- Do not expose to open or corrosive environment.
- Keep away from direct Sunlight.
- Avoid Mechanical Shock & Vibration.
- Storage Temperature: -10 to +60°C.
- Relative Humidity: Maximum 95%, non-condensing.