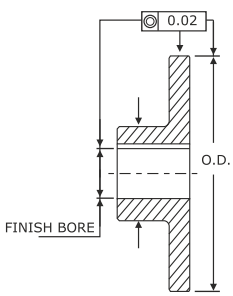
# COUPLING INSTALLATION

**Why a Flexible Coupling ?**

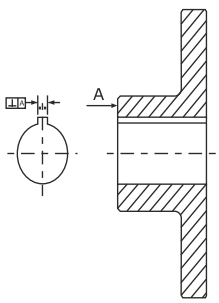
A flexible coupling connects two shafts, end-to-end in the same line, for two main purposes. The first is to transmit power (torque) from one shaft to the other, causing both to rotate in unison, at the same speed. The second is to compensate for minor amount of misalignment and random movement between the two shafts. Belt, chain, gear & clutch drives also transmit power from one shaft to another , but not necessarily at the same rpm and not with the shaft in approximately the same line

## FINISH BORE INSTRUCTION




- If coupling is supplied in pilot bore, finish bore must be done with respect to coupling outside diameter
- Generally bores are made to H7 tolerances
- For perfect alignment, dial reading should be same at 4 places 90° apart

## KEY-WAY INSTRUCTION



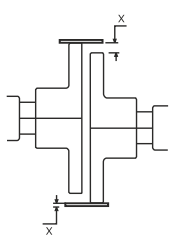

- The key-way must be in between the two adjacent holes or jaws of coupling
- Key-way to js9 tolerances

## ALIGNMENT PROCEDURE

- During alignment, hold a straight edge on both the hubs & see that there is no gap. Check the gap at least at three different positions
- The gap between hubs and body should be equal and as specified
- While aligning all the foundation bolts of machine & prime mover should be made tight at aligned position
- The coupling should be free to rotate after alignment
- Check periodically that all foundation bolts are tight properly and the gap between the jaws is maintained
- While removing coupling hubs (flange) a puller should be used instead of hammer

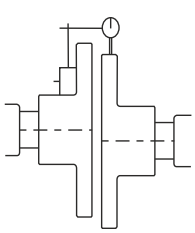
## PARALLEL MISALIGNMENT

USING STRIGHT EDGE




For perfect alignment, gap 'x' should be zero at 4 places 90° apart

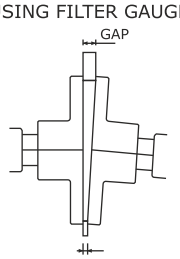
USING DIAL GAUGE



For perfect alignment, dial reading should be same at 4 places 90° apart

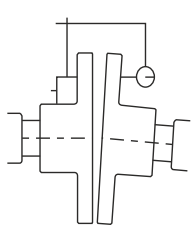
## ANGULAR MISALIGNMENT

USING FILTER GAUGE




For perfect alignment, gap should be equal at 4 places 90° apart

USING DIAL GAUGE



For perfect alignment, dial reading should be same at 4 places 90° apart

## Coupling construction

| | |
|---|---|
| All Cast Iron Coupling | Machined all over & coated with rust preventive coat |
| Cast Iron | Phosphatized |
| Al Spacers (UWS) | Powder coated |
| Fasteners (Bolts) | High Tensile Gr. 8.8 |
| Screws for (UWS) | S.S. 304 |
| Outer Rings (UWS) | Powder coated |