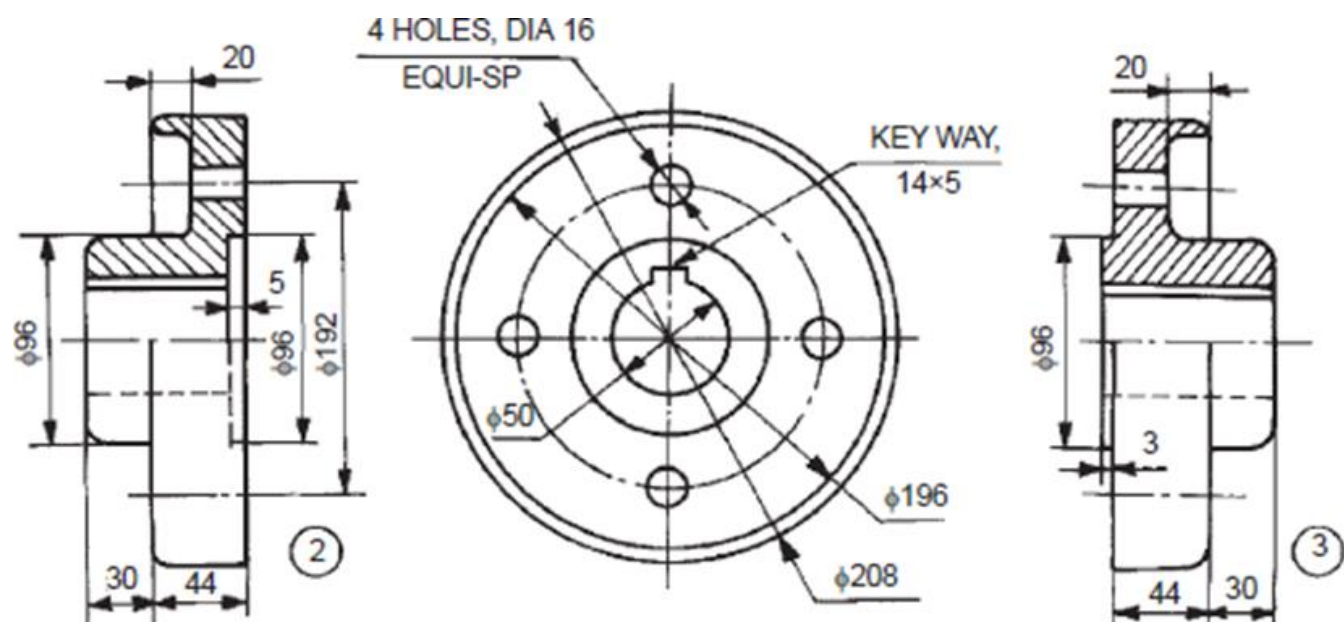


Instructions

1. Each group should draw the work pieces in Solidworks and submit a PDF converted file through BBlearn.
2. The following entries shall be taken into consideration in the drawings.
 - a) Dimensional tolerance (except holes) : ± 0.025 mm (CLO 1)
 - b) GD&T (CLO 1 ~ CLO 5) : All possible Geometric Dimensioning and Tolerance Symbols (with the datum) should be drawn and labelled in the drawing with the given conditions below;
 - *Form* : 0.08 mm
 - *Orientation* : 0.15 mm
 - *Location* : 0.010 mm
 - *Runout* : 0.17 mm
 - *Profile* : 0.13 mm
 - *Datum shall be applied wherever it required*
 - c) Feature control Frame shall be imposed on every GD&T (CLO 2).
 - d) Dimensional tolerance of holes : ± 0.003 mm
 - e) Special conditions/information/instructions on the 4 No. x Dia. 16 mm holes.
 - Location tolerance of 0.010 mm shall be applied.
 - Table of Bonus Tolerance and Tolerance Zone shall be made and all data shall be filled for the range of MMC ~ LMC (See the Bonus Tolerance Example in CLO 4)
 - f) Special conditions/information/instructions for the flanges & bolts ④ assembly (see the page ⑤ of CLO 6);
 - Projected tolerance shall be applied with the fixed fastener formula ($H = F + 2T$)
 - The students need to calculate required clearance hole size and labelled in the drawing
 - *H: Min. diameter of clearance hole*
 - *F: Max. diameter of fastener*
 - *T: Positional tolerance diameter*
 - *Remember! All calculations apply at MMC*

PROTECTED FLANGE COUPLING



Parts list

Sl. No.	Name	Matl.	Qty.
1	Shaft	MS	2
2	Flange	CI	1
3	Flange	CI	1
4	Bolt with nut	MS	4
5	Key	MS	2