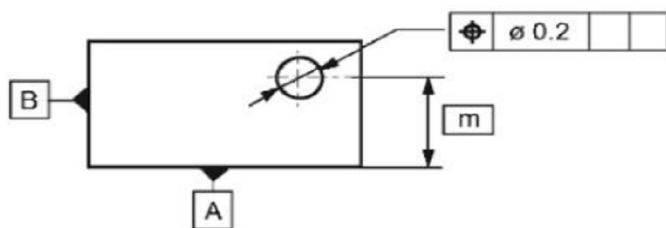


ACCURATE

CENTRE OF EXCELLENCE

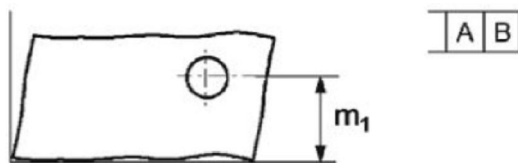
Datum Precedence (Priority Sequence) :

Refer following engineering drawing. The hole is located from datum 'A' and datum 'B'.

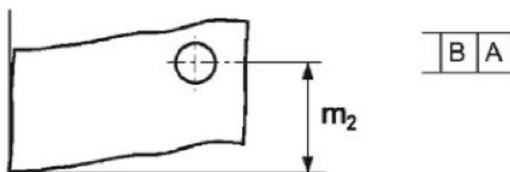


Think how a machinist will clamp the part in fixture to drill a hole. He has got two options like below.

Option_1:



Option_2:



Remember:

1. Length of part is more than breadth.
2. Datum face 'A' and Datum face 'B' at any circumstances cannot be exact perpendicular because of manufacturing tolerances.

In such conditions if Datum face 'A' is rested first on fixture then Datum face 'B' takes its own orientation and cannot be fully rested on fixture. If tried to rest the datum face 'B' first then automatically datum face 'A' get oriented. For drilling a hole basic dimension 'm' is set in program from the fixture faces. Looking at two different precedence selections A&B or B&A of datum the centre of hole located at m_1 & m_2 in actual. And m_1 is not equal to m_2 as it is very much clear from pictures.

Conclusion: If datum precedence while clamping a part is interchanged then actual dimensions are varied. Also same effect occurs in measurement by interchanging Primary and Secondary. Therefore it is must to follow the sequence of the datum given in the drawing.

A division for Training and Testing

Accurate not only in market of precisions measuring instruments (Multi-Gauging & 3D-CMM) but to support your organization as partner of all Quality challenges through providing global training programs and establishing worldwide measurement correlations of any prismatic or free formed critical part inspection

Our Valued Services

Training Programs

- International Aukom Germany CMM Certification Courses Level 1, 2 & 3
- Dimensional Metrology & 3D Coordinate Measuring Machine (CMM)
- Geometric Dimensioning & Tolerance (GD&T) Level 1&2
- Measurement Techniques of GD&T parameters.
- Surface Roughness
- Calibration & Measurement Uncertainty
- Statistical Tolerance Stack Up Analysis
- Problem Solving Technics.
- SPC and MSA

ACCURATE SALES & SERVICES PVT. LTD.

Gauge House, 67, H.I.E. Hadapsar,
Pune – 411013

Ph: 020 66039258
9970001686
9970002515

Email: sales@accuratesales.co.in
cmmapplication@accurategauging.com

Web: www.accurategauging.com
www.aukom.info