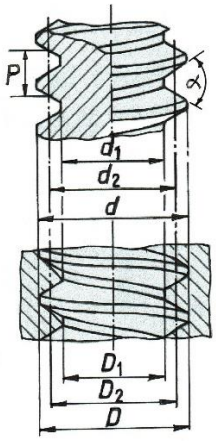
FMS CALIBRATION PLATES



A FMS calibration plate is primarily used for calibration (measurement) of D_2. All internal measuring instruments normally require a reference before using.

FMS calibration plates have however several advantages.

1. To measure internal thread pitch diameter D_2
2. When used to measure external pitch diameter (d2) they also show digital caliper accuracy.
3. For companies that require documented measuring equipment calibration FMS calibration plates can be supplied with a Calibration Certificate issued by a certified lab.
4. Standard calibration plates can be used for all thread diameter sizes if the pitch is within the stated thread type or the specific pitch.
5. Calibration plates can be made to specific customer specifications for d_2, D_2 and diameter length.

Calibration plates starting with 30 are for thread inserts starting with 21, 22, 23, 24 and 25.

These thread inserts are for thread types with flank angles from 50º - 80º.

Threads within this scope are metric, Inch (UNC etc.), parallel and tapered pipe threads (Whitworth profile, NP), PG etc.

Calibration plate 30A covers a pitch range of 1 – 4mm / 24 – 13 TPI. The standard dimension for d_2 (unless otherwise specified) is 20mm and for D_2 50mm.

Calibration plate 30AB covers a pitch range of 0.5 – 8mm / 48 – 3 TPI. The standard dimension for d_2 (unless otherwise specified) is 20mm and for D_2 50mm.

Calibration plates starting with 34 are for thread inserts for threads with flank angles not between 50º - 80º.

These thread inserts are typically for thread types with flank angles of 29º (ACME) and 30º (Tr), Knuckle (Rd) and Buttress threads.

Threads within this scope are as mentioned, ACME, Tr (Metric Trapezoidal), Knuckle, Buttress and of course Stub ACME and Stub Tr etc.

Calibration plates type 34 are for specific pitches due to the steep flank angle. The standard dimension for d_2 (unless otherwise specified) is 20mm and for D_2 50mm.

Unlike solid thread gauges wear is not an important factor with FMS calibration plates and thread inserts as there is only light contact when measuring so calibration intervals (if required) can be lengthy. Of course when measuring thread pitch diameter at machine set-up and/or manufacturing inspection can be less frequent as you know where you are within the pitch diameter tolerance.