

THREAD PITCH DIAMETER MEASUREMENT WITH FMS

Holder Assembly



Caliper & insert holder 10A



Place caliper jaws in holder slots



Fasten the 4 grub screws carefully



Remove the alignment cylinder

Find the relevant pitch diameter tolerance and the relevant FMS thread inserts

EXTERNAL THREAD MEASUREMENT (d2)

With external thread inserts, after zeroing, the measurement result is the pitch diameter.

Mounting and using FMS thread inserts type 21 & 26



Put the relevant thread inserts into the mounted insert holders. Zero the caliper with the inserts touching as shown.

N.B. The thread inserts shown are type 21B.

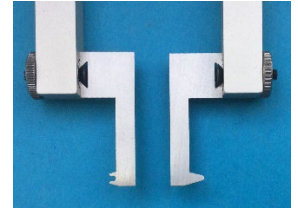
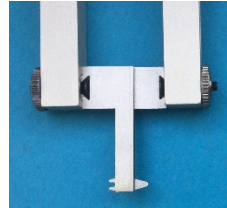


Holder assembly is not necessary with the special FMS caliper.

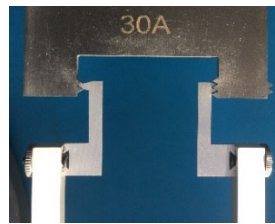


INTERNAL THREAD MEASUREMENT (D2)

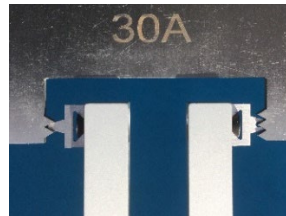
FMS internal thread inserts types 22 and 27 can measure the pitch diameter of threads from 6mm/1/4". Types 23 and 28 from approximately 36mm/1.25" and over. A calibration plate is necessary for internal measurement.



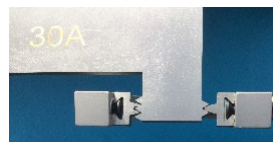
Thread insert types 22 and 27 can overlap. This allows pitch diameter measurement of small diameter threads. Inserts type 22B are shown.



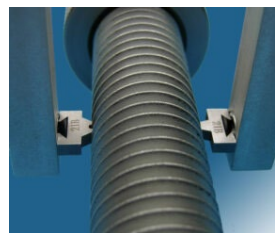
A calibration plate is necessary when measuring internal pitch diameter. Zero the caliper (0.00) and add the given D2 dimension (50.00mm is standard) to the measured pitch diameter.



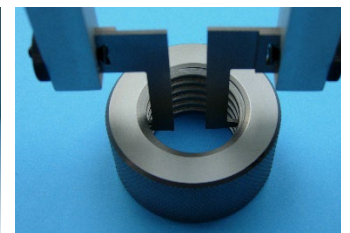
Internal inserts type 22B (top) and 23B (bottom) are shown being calibrated with calibration plate 30A.



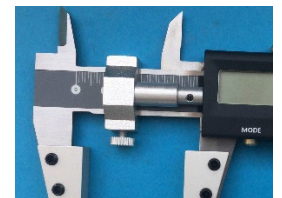
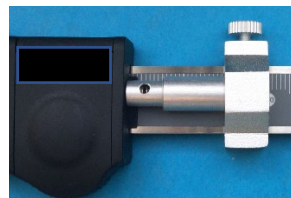
This shows external thread insert type 21B being calibrated with calibration plate 30A. Not necessary but can achieve caliper calibration.



d2 external (21B)



D2 internal (22B)



Caliper pressure device type A40 mounted for external and internal contact pressure. There is a caliper pressure device (B40) for digital calipers more than 300mm/12". This can give the "extra third hand" often wanted.

d2 is the international abbreviation for external pitch diameter and D2 for internal pitch diameter.

<https://flexiblemeasuring.com/>