

WHY USE FMS?

TO SAVE TIME AND MONEY

How much does buying and using Thread Gauges cost you?
Points to consider when using FMS as an alternative to Thread Gauges (Go/NoGo):

- Thread Gauges are required for each specific thread and tolerance.
As you are measuring, then a single pair of FMS thread inserts for the relevant pitch, can be used for all thread diameters and tolerances that have the relevant pitch.
- Non-standard and unusual thread gauges are expensive and often have lengthy delivery times.
- If it is a requirement that thread gauges are to be calibrated how often is this done and how much does it cost? If calibration is a company requirement FMS calibration plates do not need recertification as there is no virtual wear.
- If Thread Gauges are used for machine set-up how long does it take the machine operator to set up the machine?
- If the machine operator knows where the thread is within the pitch diameter tolerance he'll know how often to inspect/measure and what to look out for.
- When using a thread gauge for machine set-up the machine operator only knows that he is within the tolerance but not where within the tolerance.
- With FMS thread measurement inserts you can measure both external and internal thread pitch diameter (d2 & D2). FMS thread inserts can be made to measure external minor diameter (d1) and also internal major diameter (D) External major diameter (d) and internal minor diameter (D1) are easy to measure and should always be done. A thread plug gauge does not show if the major thread diameter is below tolerance and a thread ring gauge does not show if the minor diameter is above tolerance.
- The only limitation for FMS for max thread diameter is digital caliper length.
- Measuring threads with other than FMS is usually very expensive as a reference is also required. Internal diameter range is limited with alternatives.
- When measuring external pitch diameter with FMS no calculation is necessary as what you see is the pitch diameter.
- When measuring internal pitch diameter with FMS the only calculation necessary is to subtract the D2 calibration plate dimension from the measurement result. This is usually 50.00mm unless otherwise specified or ordered.
- When setting up the machine the operator can quickly measure and, if set to run near the middle of the pitch diameter tolerance, save inspection time.
- If making threaded items for a customer surprise them with measurement results rather than a "Inspected and OK".
- As all who measure external threads with thread know, wires aren't always easy to use and require a calculation. The thread wires that attach to micrometers (and are expensive) seem to have a tendency to fall off the micrometer the more chips there are below the machined item. Can take a while to find.
- Do those that make their own thread gauges (and usually only a Go) think about how much time is used and how much these "gauges" cost to make?