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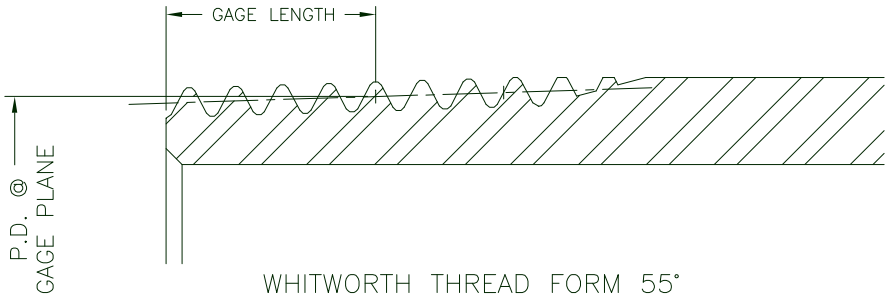
# BSPT PIPE THREADS BS 21: 1985
# BRITISH STANDARD PIPE TAPER
# (Obsolete replaced by BS 10226-3:2005)




08/08/06

# BSPT PIPE THREADS BS 21: 1985
# BRITISH STANDARD PIPE TAPER
## (Obsolete replaced by EN 10226-3:2005 (E))

**The basic form of the thread is a Whitworth form with an included angle of 55 degrees. The crest and roots are rounded off symmetrically giving the same basic differences between the major, pitch, and minor diameters. The taper is 1 in 16.**

**It is common practice for the thread plug and ring gage to have the crest truncated .14784P, and the root ground to a sharp V clearing the radius of the product threads.**

**BSPT System A – Is intended for use where additional production control methods are employed to ensure the general accuracy of the threads. Acceptability is determined by the use of a threaded plug or ring gage.**

**BSPT System B – Is intended for use where the adequacy of production control is not otherwise established. Acceptability is determined by the use of a threaded plug and ring gage, and a plain tapered plug and ring gage.**

**Gaging BSPT - System A**

| | | | |
|---|---|---|---|
| Internal Product | System A Thread Plug | | |
| | 1/16” - 2” | Tolerance | +1 ¼ Turn Large / - 1 ¼ Turn Small |
| | 2 1/2” - 6” | Tolerance | +1 ½ Turn Large / - 1 ½ Turn Small |
| External Product | System A Thread Ring | | |
| | 1/16” - 2” | Tolerance | +1 Turn Small / - 1 Turn Large |
| | 2 1/2" - 6” | Tolerance | +1 ½ Turn Small / - 1 ½ Turn Large |

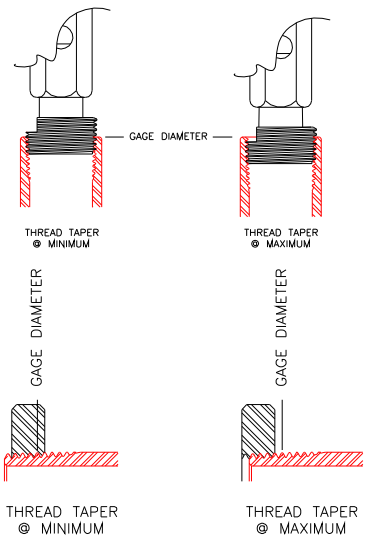
**Gaging BSPT - System B**

| | | | |
|---|---|---|---|
| Internal Product | System B Thread Plug | Tolerance | Step Limit |
| | System B Crest Plug | Tolerance | Step Limit |
| External Product | System B Thread Plug | Tolerance | Step Limit |
| | System B Crest Plug | Tolerance | Step Limit |

### THE PROPER METHOD OF GAGING BSPT THREADS

**-BSPT System A Internal Threads**
**-Clean both the gage and product prior to gaging.**
**-Screw the plug gage HAND-TIGHT into the product.**
**-It may be necessary to tap or rap the product to assure proper seating.**
**-The thread is considered within its functional limits when the gaging notch is within a plus or minus designated tolerance. (See Tolerance above)**

**-BSPT System A External Threads**
**-Clean both the gage and product prior to gaging.**
**-Screw the ring gage HAND-TIGHT into the product.**
**-It may be necessary to tap or rap the product to assure proper seating.**
**-The thread is considered within its functional limits when the gaging face is within a plus or minus designated tolerance. (See Tolerance above)**



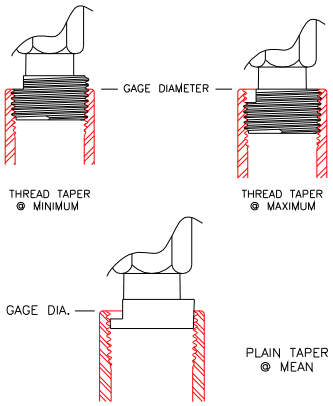
**-BSPT System B Internal Threads**

**-Clean both the gage and product prior to gaging.**

**1st -Screw the thread plug gage HAND-TIGHT into the product.**

**-It maybe necessary to tap or rap the product to assure proper seating. The thread is considered within its functional limits when the product falls between the gaging face and gaging notch.**

**2nd -Insert the tapered crest plug gage into the product assuring proper seating. The crest is considered within its functional limits when the product falls between the gaging face and gaging notch.**



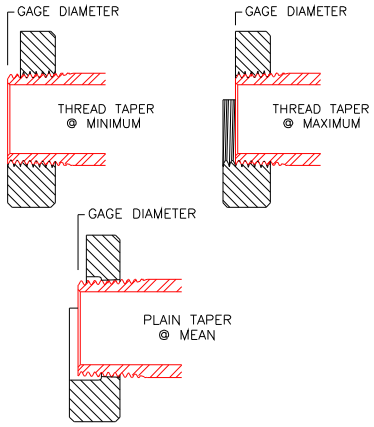

**-BSPT System B External Threads**

**-Clean both the gage and product prior to gaging.**

**1st -Screw the thread ring gage HAND-TIGHT onto the product.**

**-It maybe necessary to tap or rap the product to assure proper seating. The thread is considered within its functional limits when the product falls between the gaging face and gaging notch.**

**2nd -Place the tapered crest ring gage onto the product assuring proper seating. The crest is considered within its functional limits when the product falls between the gaging face and gaging notch.**




**-MASTER GAGE**

**Master gages are not specified in this standard however are important in the proper maintenance of working gages. In general the practices outlined in the following section of this article should be followed.**

**-GAGE CALIBRATION**

**New gages should be calibrated to a master gage and have its initial stand-off recorded prior to being put into service.**

**Inservice gages should be calibrated to the same master gage as its original calibration, and shall not wear more than the equivalent of ½ turn from its original recorded position.**

**This article contains select information referencing the following standard, and is to be used only as a reference. The following standard should always be consulted for final manufacturing and gaging decisions.**

**BSPT PIPE THREADS BS 21: 1985**