

Western Instruments

Established 1965

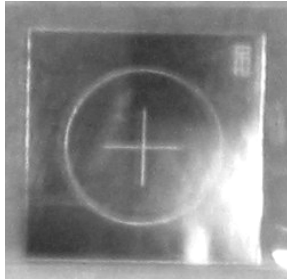
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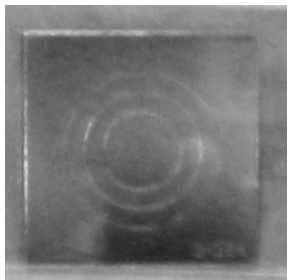
February, 2007

QQI's (Quantitative Quality Indicators);



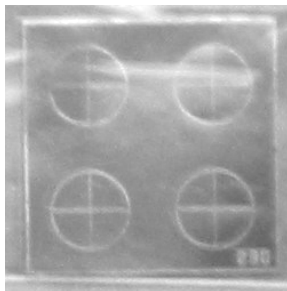
CX230 (CX230P6 is Self adhesive)
Description: Circle with Cross.
Thickness: 0.051mm (0.002")
Indication Depth: 30% of Thickness.

CX430 (CX430P6 is Self adhesive)
Description: Circle with Cross.
Thickness: 0.10 mm (0.004")
Indication Depth: 30% of Thickness.



3C2-234 (3C2-234P6 is Self adhesive)
Description: 3 Circles
Thickness: 0.051 mm (0.002")
Indication Depths: 20%, 30%, & 40% of Thickness (OD to ID).

3C4-234 (3C4-234P6 is Self adhesive)
Description: 3 Circles
Thickness: 0.10 mm (0.004")
Indication Depths: 20%, 30%, & 40% of Thickness (OD to ID)



CM230 (formally CX4-230)
Description: 4 Minature Circles with Crosses.
Thickness: 0.051 mm (0.002")
Indication Depth: 30% of Thickness.

QQI's (Quantitative Quality Indicator) are Artificial Flaw Standards, used during procedure development, to assure proper field direction and adequate field strength. QQI's are a very practical way of ensuring direction to particular geometry's of defects. They are used primarily for Wet Method media, as their indications are very small.

A QQI is a thin foil, either 0.051mm or 0.10mm (0.002" or 0.004") thick of AISI 1005 steel, which has a very high permeability. The specific patterns are Etched into one side, which faces the material they will later be attached too. Each QQI is 19mm (0.750") square, however the CM-230 can be cut into 4 very small shims.

QQI's must be in intimate contact with the part being evaluated, and in an Annex of ASTM E1444 there is a procedure for their use. Furthermore, detailed instructions for their use is available from Western Instruments. QQI's and their more robust cousins, the Castrol Strip, are far more affective than Pie Gauges for Wet Method Inspection.