MetLogix

Tech Bulletin #: TB_100317_1

Software/Version: M3 2.10.10

Date: 10/03/2017

Topic: Thread Inspection Tips and Requirements

M3 Thread Inspection Tips and Requirements

IMPORTANT: The thread edge finding routine is seeking flanks, crests, and roots that are clean and free of debris and also representative of “good” geometric form. When data is missing in the candidate data cloud it is typically because of debris, burs, fiber, or other contaminants that interfere with the edge finder. Please prepare inspection pieces accordingly.

Thread Alignment:

The initial thread data check is for alignment of the threads center axis with either the 0 degree(horizontal), or 90 degree(vertical) cardinal axis of the video image. The default limit is +/- 6 degrees. This limit can be “loosened” using the following metlogix.ini parameter. NOTE: No testing for accuracy has been performed by Metlogix beyond the default limit.

[Thread]
MaxAngErr=6

Once the thread alignment check above is successful the data sufficiency checks begin;

Thread Data Sufficiency:

1. Candidate thread points must consist of at least 4 contiguous valleys on each side.

2. Candidate thread flanks must be separated by a valid crest or root “end point”(visible in the data cloud).

3. Candidate thread flanks must have at least 4 points per flank.

4. Candidate thread flanks must intersect.

Failure in any of the above conditions will result in a Measurement Failure upon pressing “Done”. If a failure occurs please check thread alignment, thread cleanliness and verify that the region specified for the thread tool is collecting sufficient data(per above).