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| Traveler Title | Manual US thickness measurements |
| Traveler Abstract | Manual measurements of cavity wall thickness using ultrasonic method |
| Traveler ID | SRFRD-CHEM-CAV-THKN |
| Traveler Revision  | R1 |
| Traveler Author | T. HARRIS |
| Traveler Date | 7-Jul-25 |
| NCR Informative Emails | PAIGEW,FIEDLER |
| NCR Dispositioners | TMHARRIS,FOREHAND,KDAVIS |
| D3 Emails | PAIGEW,FIEDLER,TMHARRIS,FOREHAND,KDAVIS |
| Approval Names | T. HARRIS | G. CIOVATI | K. DAVIS | R. GENG |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Production Rep | Project Rep |

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| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. |
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| Revision Note |  |
| R1 | Initial release of this Traveler. Adapted from STP-CAV-CHEM-THKN-R3 and ER5C-CHEM-CAV-THK-R4 |

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| Step No. | Instructions | Data Input |
| **SAFETY:** Individual must keep safety as the first priority in the process; before beginning any job, the user must assure they have the correct PPE for the individual job. Maintaining the level of safety and secure nature of the work area is paramount. Assure personal safety by using caution in movement and taking necessary steps to avoid unnecessary personnel in the immediate area. |
| 1 | Record Project ID and any project specific instructions | [[PROJSN]] <<PROJSN>>[[PROJNAME]] <<TEXT>> [[ProjInstructions]] <<COMMENT>>[[ProjFiles]] <<FILEUPLOAD>> |
| 2 | Record cavity ID or serial number | [[CAVSN]] <<CAVSN>> |
| 3 | Record operator(s), process date and time. | [[THKNOperator]] <<SRFCVP>>[[DateAndTime]] <<TIMESTAMP>> |
| 2 | Note any special handling, processing, or off-normal conditions associated with this cavity before this test. | [[SpecialHandlingComments]] <<COMMENT>> |
| 3 | If this is the first measurement on the cavity, mark the measuring locations along the profile, as requested by the PICheck the accuracy of the ultrasonic measuring probe by measuring a calibrated Nb piece and calibrate if necessary.  | [[MeasLocations]] <<FILEUPLOAD>>[[ProbeCheckedOK]] <<YESNO>> |
| 4 | Take 4 data points for each location and record in Excel spreadsheet. If a data point is a clear outlier when measuring a location, please delete it and re-measure that data point.Calculate the average thickness and standard deviation for each location.Calculate the average thickness and standard deviation for each **cell** in mm and enter values.Upload the Excel spreadsheet with all the dataCleanup the glycerin from the cavity surface once measurements are complete. | [[ThicknessData]] <<FILEUPLOAD>> |
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| 4 | Comments on thickness measurements.  | [[COMMENTS]] <<COMMENT>> |