



World-class Metrology for Tube Fab

# VERSION 3 Datasheet

## Version 3 - New Features List

**NEW SCAN SCORE** - New Scan Score gives confidence to users by grading the current scan.

**NEW AUTOMATED MULTI-VIEW SOLIDWORKS DRAWINGS** - New automated multi-view tube drawings in SOLIDWORKS

**5X FASTER SCAN SPEEDS** - Incoming point and scan speed is 5x faster. (You can see the improved speed in the DRO window.)

**NEW BEND PROFILE MODEL ENVELOPES** - New color-based bend profile envelopes are displayed in the model if the bends are measured.

**NEW BEND PROFILE ENVELOPE QUALIFICATION GRID** - New bend profile envelope qualification grid

**NEW BEND PROFILE MODEL RINGS** - The new bend profile model rings display if any part of reduced four points of a bend profile are outside the envelope.

**NEW BEND PROFILE MEASURING METHODS** - Three new methods for measuring bend profiles: inside, inside/outside, or all sides.

**NEW BEND PROFILE START SOUNDS** - New unique start sounds for all three Bend Profile scan types make it clear which type of bend profile scanning is active.

**NEW INSIDE RADIUS MEASURING** - New radius calculations are based on the inside radius alone.

**NEW INLINE BEND PROFILE CONTROL** - The new Inline Bend Profile Setup allows you to choose which radii to measure automatically during UNISCAN or MULTISCAN. Include all of them, some of them, or none of them.

**NEW USER COORDINATE SYSTEM** - New measured-tube-aligned user coordinate system changes the coordinate system to align with the master tube. The UCS control is added to the top of the DRO.

**BETTER/MORE EFFICIENT SCAN SOUND SYSTEM** - We improved laser scanning sounds and better scan-sound handling internally. The new sound system requires less CPU power.

**REDESIGNED INSPECTION MENU** - The Inspection menu was completely redesigned with more items.

**NEW CIRCULAR GAUGES** - New circular gauges are much easier to read than the old progress bars for "percentage in tolerance" and Scan Scores.

**NEW COMMUNICATION PROTOCOLS** - UNISON SVNet, Schwarze-Robitec SVNet, YLM SVNet

**NEW PERMANENT CYLINDER FIT DATA TRACKING** - New tracking and storing of all cylinder fit attributes in order to calculate scan scores

**NEW IMPORT ADJACENT BENDS** - Now you can import models with adjacent bends with no straight between the bends.

## SCAN SCORES and CIRCULAR GAUGES

Overall Scan Score



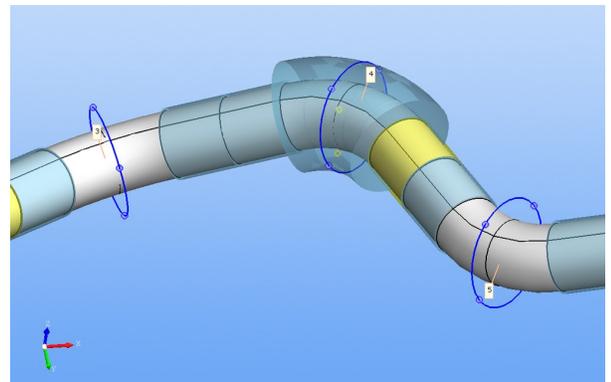
This score is a consistency indicator based on historical cylinder fit data for this part.

Tangents In Tolerance %

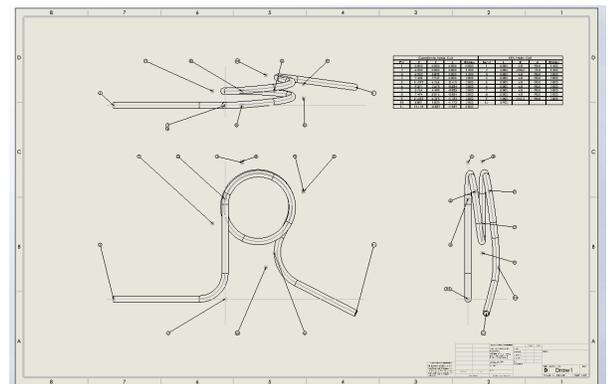


This represents a percentage of tangent points inside the tolerance envelope.

## BEND PROFILE ENVELOPES and RINGS



## SOLIDWORKS BUILDER



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## Version 3 - New Features List (Continued)

**NEW IMPORT SETUP IMAGE** - Now you can import a setup image of the tube. This allows setup technicians to specify how the part is set in front of the measuring center for measuring.

**NEW REAL-TIME EDITING of LASER LINE SEPARATION DISTANCE** - New real-time editing of laser line separation value allows users to adjust the UniScan laser line separation even when measuring.

**NEW G-Tube GTT IMPORT** - Now you can import legacy G-Tube GTT files to create new VTUBE-LASER projects.

**IMPROVED COMCO BENDER CORRECTIONS LOGIC** - We fixed and improved the COMCO CSV bender corrections logic.

**IMPROVED TRANSFORM (ROTATE) FOR ENTIRE ASSEMBLY** - Now you can rotate the entire assembly when one of the parts is transformed in space. Simply make the "Aligned" switch active for every part to transform.

**NEW TRANSLATE (MOVE) CONTROL WINDOW** - We added a new translate window that lets you move one part or the entire assembly along any of the X, Y, or Z axes. You can make any point 0,0,0. You can move an entire coordinate column of data by any linear distance.

**IMPROVED PRECISION WEIGHT ALIGNMENTS FOR ASSEMBLIES** - Now use Precision Weights across multiple tubes in the assembly. This gives you total control over which points control the alignment across all tubes in the assembly.

**NEW LRA SPINNER CONTROL** - The new LRA Spinner control lets you change bender data incrementally and quickly. You jog values and see the changes on the screen immediately.

**IMPROVED ASSEMBLY ALIGNMENTS** - Now align all assembly parts when a single measured part aligns to the master.

**LRA BENDER DATA QUALIFICATION GRID** - Customers requested LRA data qualification—so we added the feature.

**WINDOWS 10 DIALOGS** - Customers requested the new Windows 10 style open/save dialogs (rather than the older Windows 7 dialogs).

**MATH FORMULA ENTRY** - New floating-point edit boxes allow for entry of full math formulas.

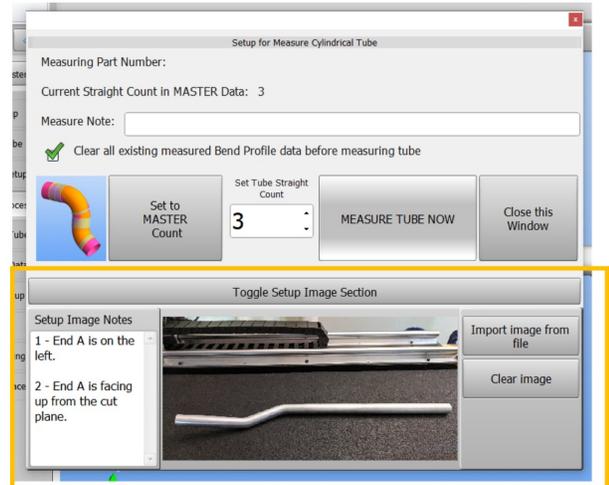
**NEW LASER STRIPE ZONES** - This new post-processing feature allows you to restrict the laser lines used to certain parts of the straights. The goal is to increase consistency between measures on highly-deformed parts.

**AUTO REVERSE ALIGNMENT** - New automatic reverse alignment for parts that you accidentally measure in reverse

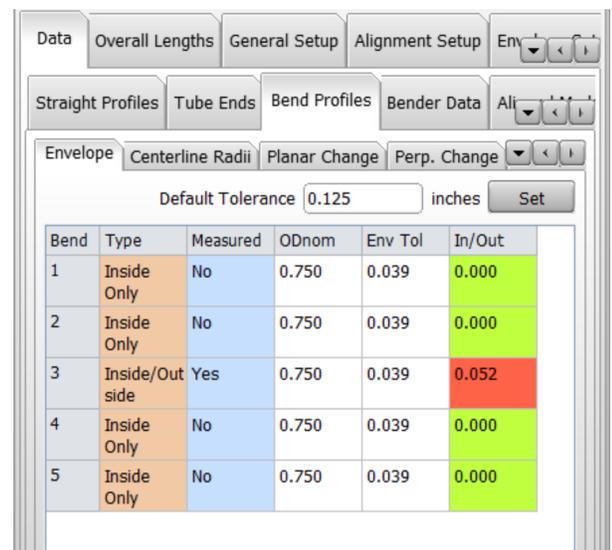
**NEW IMPORT HEXAGON ISOGEN FILES** - New HEXAGON Isogen piping assembly file import

**IMPROVED IMPORT DOCS FILE ASSEMBLIES** - Rewritten logic for importing DOCS files now recognizes DOCS assemblies.

MEASURE SETUP IMAGE



BEND PROFILE ENVELOPE TOLERANCES



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