TUBEWORKS

How do we increase productivity by over 2500%?

When TubeWorks advanced tube bending software is compared to traditional extraction methods the time saved turns minutes into seconds. TubeWorks increases productivity by Instantly extracting manufacturing and bend data, whether you are working with native SOLIDWORKS models, common IGES or Parasolid files. TubeWorks simplifies the process of sending the right information into your tube bending machine.

First part / right part production

In-depth precorrection of 3D part programs using bent tube characteristics to assist in first part / right part production.

Full part measurement and analysis

Full part tolerance analysis and laser scanner measurement of bent tubes to create an all-in-one-suite correction feedback loop during production runs.

Simplified processing of 3D part files

Analysis, processing, and conversion of structural format 3D part files.

Unbend 3D part tube in seconds

Simplified unbending of bent tube 3D part programs to allow for file preparation on 2D and 3D tube lasers and plasma machines.

Quickly process 3D assembly parts

Ability to process complete 3D part assembly files, as well as individual 3D part files.

See your parts run in virtual simulation

Universal advanced machine and part simulation platform that can be used across multiple machine manufacturers.

Reverse engineering of 3D tube parts

Processing, manipulation, and creation of complex freeform 3D part geometries to ease the manufacturing process and the reverse engineering of parts.

Schedule a demo today!

tubeworkssoftware.com

TUBEWORKS

		VIEWER	LITE	PRO	SOLIDWORKS
STEP / IGES IMPORT	TubeWorks can import files in step or igs formats. (TubeWorks Add-In will process many additional file formats).	✓	✓	✓	✓
OPEN DWG / DXF	A convenient feature to enable viewing of dwg or dxf files and export as pdf.	✓	✓	✓	✓
MEASUREMENT TOOLS	With a simple click, determine key metrics like bend radii, wall thickness, and total lengths. Click on an individual tube face and the corresponding vital information is displayed.	✓	✓	✓	✓
EXPORT PDFS	Export bend data in a professional .pdf report to share part numbers, tube profiles, tube OD, units of measure, CLR, solid model image, and other essential information with your team.	✓	✓	✓	✓
BEND ON BEND SUPPORT	Two curves of different radii with no straight separation are well tolerated inside the software. TubeWorks is capable handling bends where compound tooling would be used.	✓	✓	✓	✓
MANUAL BEND REPORT	Produce an easy to read report containing stop positions, rotations, angles, direction of rotation. This makes bending on a manual machine as easy as following step by step instructions. Apply stretch compensation and display the corrected data.		✓	✓	✓
EXTRACT BEND DATA	Automatic extraction of all bend data including tube specs like CLR, bend radii plus full LRA and XYZ data. Lite edition pulls data with just one click, while the full edition can automatically pull data upon import.		✓	✓	✓
CALIBRATE TOOLING	The new TubeWorks tooling calibration feature applies corrected data in the design phase – when optimization matters most. Bend the tube according to instructions, record the result, and TubeWorks will automatically calculate spring-back and stretch. All the data is stored within the tooling log alongside the associated tools.		✓	✓	✓
STRETCH COMPENSATION	Selecting the material specification will automatically apply stretch compensation to the bend regions, calculate corrective bend data and developed tube length.		✓	✓	✓
TOOLING LOG	Record your Machines, Bend tooling, Material specifications and Test data into a centralized location. Allowing fast feedback of available tooling, corrective bend data and developed tube length.		✓	✓	✓
OVER-BEND CALCULATIONS	Selecting the material specification will automatically apply over-bend compensation to the bend regions and calculate corrective bend data.		✓	✓	✓
FEASIBILITY STUDY	Compare your imported model with what you've stored in your tooling log to assess if your bend is feasible with the tools you have on hand—an easy way to save time and money on tool resources.		✓	✓	✓
DESIGN TUBE	Design a new tube from scratch with no CAD experience necessary. Simply point and click to get precision lengths, angles, and rotations.		✓	✓	✓
EXTEND CENTERLINE	Extend the endpoints of your centerline for tubes with end manipulation.			✓	✓
SEND TO BENDER	The highly versatile design exporter at the core of TubeWorks can send your creation directly to the bender as a .$$$, .SV or .S2B file. Alternatively a pdf report including LRA and XYZ can be created and values entered into the machine manually.			✓	✓
CHANGE BEND RADII	Embrace complete design customization by changing any of your bend radii to match the dies you have in stock. Bend data adjustments are automatically recalculated.			✓	✓
UNBEND TUBE FOR LASER	TubeWorks intelligently unbends tubes for laser cutting and automatically applies stretch compensation to the bend regions so the flattened tube is ready to cut. TubeWorks Add-In also unbends single bends and marks bend locations for alignment in post bending operations.			✓	✓
VERTICAL CUT PREPARATION FOR LASER	With a single click, TubeWorks normalizes your cuts, notches, and holes for laser cutting applications without a 6th axis (head tilt). TubeWorks can also regenerate the centerline to the new, corrected placement.			✓	✓
CREATE FLAT PATTERN FOR 3-AXIS LASER	TubeWorks Add-In creates flat patterns for a 3-axis laser which can be exported as a dwg or dxf file.			✓	✓
CREATE TUBE	Create tube geometry by entering LRA or XYZ into an input table. Or import a $$$ file and TubeWorks does the rest!			✓	✓