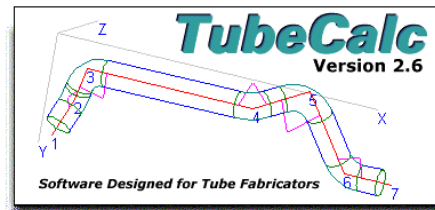


## The Tube Fabricator's Software Power Tool



**TubeCalc for Windows is an XYZ to Bender calculator that displays and prints a centerline image of the tube and report data.**

### Major Features

- Calculates bender data from centerline XYZ coordinates and bend radii.
- Calculates the price for each tube based upon the cost of the material.
- Calculates total length (without elongation) and cut length (without elongation) of the tube.
- Calculates the bending time per tube based upon entered bending speeds.
- Displays an image (with OD) of the tube that can spin into any orientation.
- Builds reports automatically, and copy data from TubeCalc to other Windows programs.
- Saves and loads data files to disk, Imports TubeCAD data files.
- Exports bender data to EATON LEONARD FIF files.
- Exports image of tube to AUTOCAD DXF files.
- Imports and Exports Supravision files.

### General Specification Data

Enter a part name (not just the file name), the customer name, revision notes, bender type and other notes in this menu.

### Centerline and Bender Data

Bender data (Length, Rotation, Angle) is calculated the moment data is entered in the Centerline Data grid (XYZ coordinates). The Bender Data window always reflects the state of the coordinates in the Centerline Data window.

### Lengths Specification Data

Display the length-related calculations for the tube: total length, cut length, cut length cost, X, Y, and Z span, and End to End Span, in this menu. The menu allows you to adjust the elongation variable that controls the amount of elongation per degree of bend in your tube process.

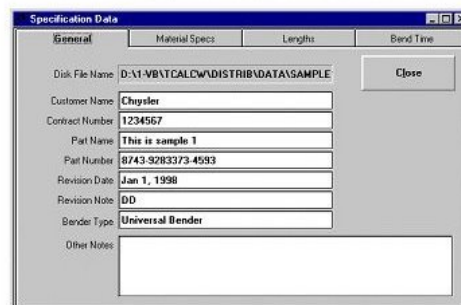
### Bend Time Specification Data

This menu calculates the bend time for a single part. The derived values are based upon average bending speeds entered.

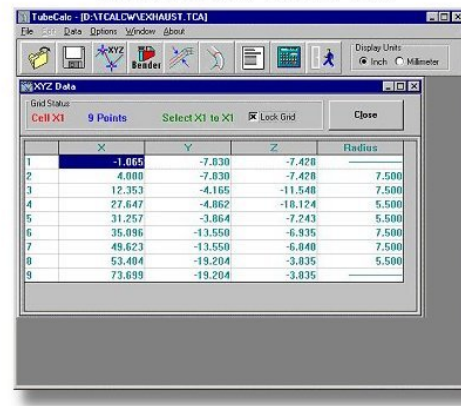
### Major Features

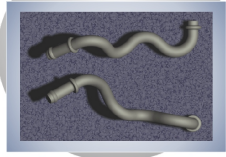


### General Specification Data Menu

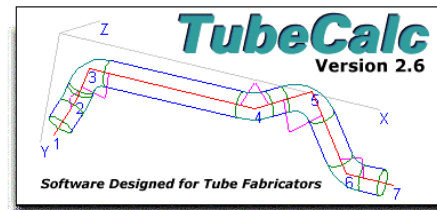


### Centerline and Bender Data





## The Tube Fabricator's Software Power Tool



### Material Specification Data

Enter a material name, the OD, wall thickness, offsets for either end, and the material price in this menu.

### View Window

The View window displays the centerline of the tube as defined by the Centerline Data window. The image in the window can spin to any orientation using the Yaw, Pitch and Roll spin buttons. The image can be oriented to any of three main views by pressing one of the primary view buttons.

The image can be printed to your windows printer, or to a DXF file for export to general CAD packages like AutoCAD, CADKEY, and others.

### Report Windows

Alphanumeric data can be printed or copied to another program within Windows using the clipboard. Reports include:

- Units Displayed
- Date/Time
- General Specs
- General Specs 2
- Material Specs
- Length Specs
- Span Distances
- Bend Time Specs
- Centerline XYZ Data
- Centerline XYZ Data 2
- XYZ Tangent Point Data
- Bend Data
- Bend Data 2
- NC Tube Bender
- Conrac Hydraulic Bender
- Accumulated Length Bender Data
- Empty Row
- New Line
- Horizontal Line

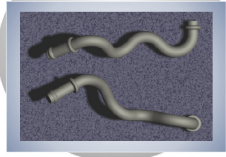
### Elongation Compensation

TubeCalc now takes into account elongation for all reports that show distances between bends and total lengths. The CUT LENGTH value is based upon *elongation distance per degree* value entered in the LENGTHS page of the Specification Data menu.

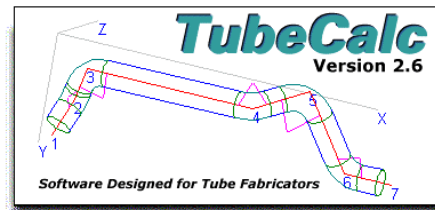
### Bend Time Specification Data Window

### Elongation Compensation Chart

### Report Window



## The Tube Fabricator's Software Power Tool



### Transpose XYZ Coordinates

TubeCalc can now transpose (shift) XYZ coordinates in space using the new "Transpose" command. Users of earlier TubeCalc versions will also notice a new "Data" command in the TubeCalc 2.6 main menu to open this new command.

### Quick Point Number Set

TubeCalc uses a new XYZ Point Total command that allows users to set the number of points with a quick drop-down list.

### Flip Coordinates End for End

TubeCalc can now "flip" the ends of a tube using this new command.

### TubeCalc is now NETWORK Enabled

TubeCalc can now operate with a single network key with multiple network licenses.

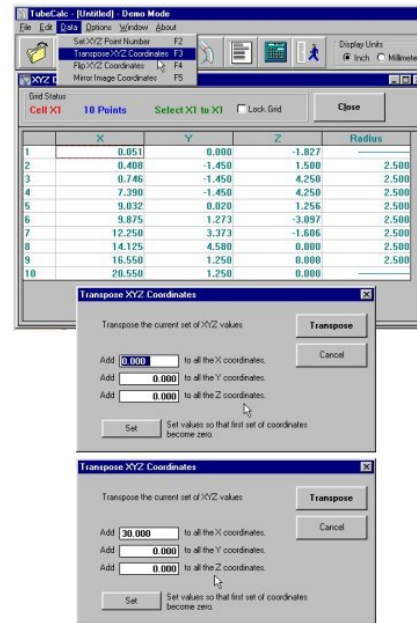
The network package frees your staff from being constrained to one hardware key per workstation. The starter network package allows 5 users to simultaneously use TubeCalc on five workstations at one time.

TubeCalc can be installed to all of your workstations, even if that number is higher than the total number of TubeCalc licenses purchased. The network hardware key allows users to login automatically if there are unused licenses available. As soon as a user closes TubeCalc, a license is freed at the server for use by another users.

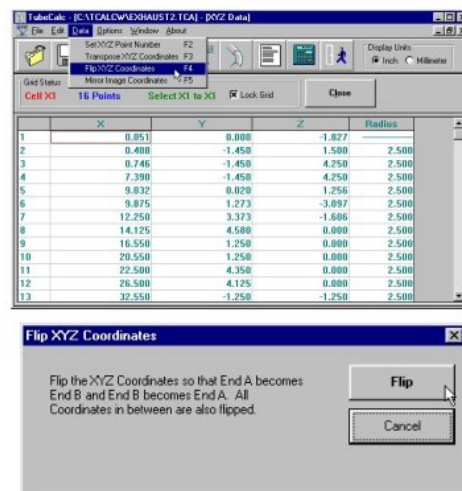
### Import/Export Supravision Files

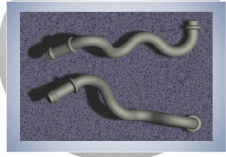
TubeCalc can now import and export Supravision files. Supravision software is used by several measuring centers, including the Multi-Measure 5000.

### Transpose XYZ Coordinates Menu

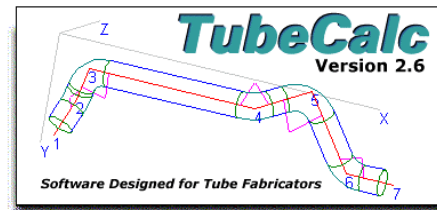


### Flip Coordinates End for End





## The Tube Fabricator's Software Power Tool



### Open File Structure of TubeCalc Files

TubeCalc's data file structure uses standard ASCII and designed to be easy to read and understand. You won't see any cryptic symbols in its file structure.

Many of our customers have written macros and scripts within Pro/E, Catia, and other CAD systems to build the TubeCalc files for distribution to those in their business that have TubeCalc for Windows. They often report adding the TubeCalc-building script is a simple task that takes less than a day.

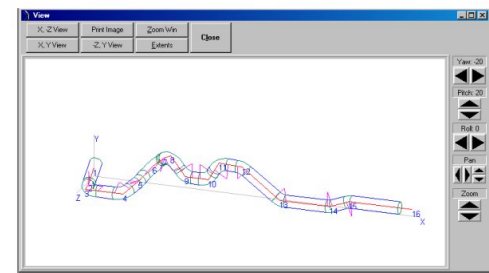
The file structure is so simple that customers have told us that they actually enter TubeCalc files in Notepad either in the plant or in the field, and then e-mail them back to the plant for loading into TubeCalc!

Because it is being used this way, the TubeCalc structure is now modified slightly to make it even more useful for those who use the TubeCalc files.

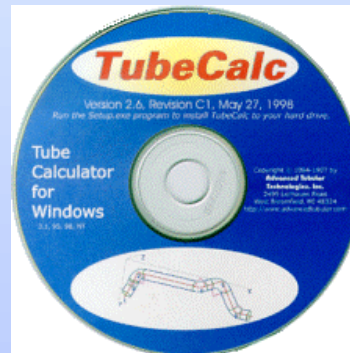
One important change about TubeCalc 2.6 is that the files use a new "[Unit]" field to allow you to enter data in either Inches or Millimeters. For example, "[Unit]=Inch" can be placed toward the top of the file to indicate that all incoming data is in inches. (Use "[Unit]=Millimeter" to indicate Millimeters.)

### Computer/Platform Requirements

- Microsoft Windows 3.1, 95, 98, 2000, NT based systems
- Minimum of 4 Megabytes of Ram in Windows 3.1
- Minimum of 8 Megabytes of Ram in Windows 95, 98, 2000 and NT
- Requires less than 2 Megabytes of disk space
- CD-Rom Drive for installation
- One parallel Printer port or a USB port



	Length	Rotation	Angle	Radius
1	22.14		55.47	45.00
2	24.13	-100.00	55.47	45.00
3	90.45	-28.96	71.97	15.00
4	0.03	-100.00	71.97	15.00
5	46.95	-137.82	54.33	20.00
6	6.05	-100.00	54.33	20.00
7	49.74			



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E-mail: [sales@advancedtubular.com](mailto:sales@advancedtubular.com)