

Quick Guide

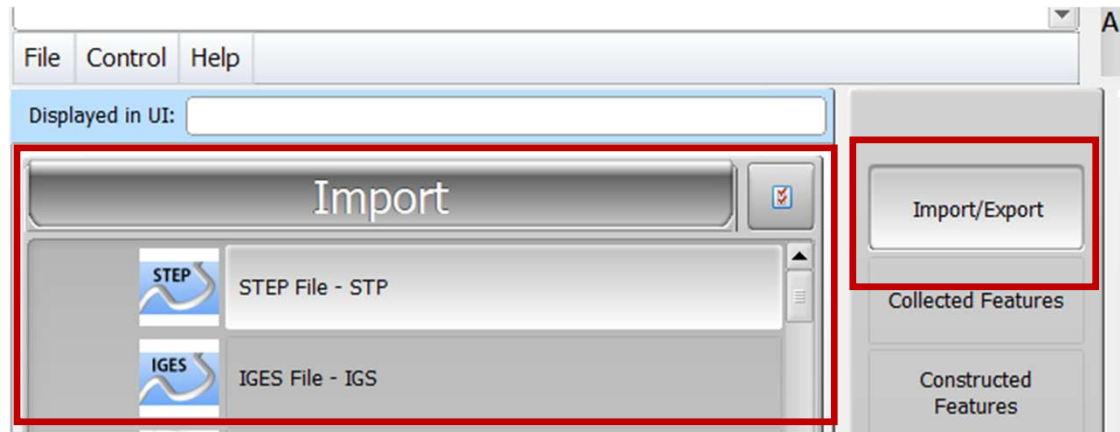
How to import segmented
centerline data



In VTube-STEP:



Import a 3D file (.stp or .igs)





Find your file and press Open

The screenshot shows a Windows file explorer window with a list of files. The file 'VTube-LASER Demo 6.STP' is selected and highlighted with a red box. The 'Open' button at the bottom right is also highlighted with a red box.

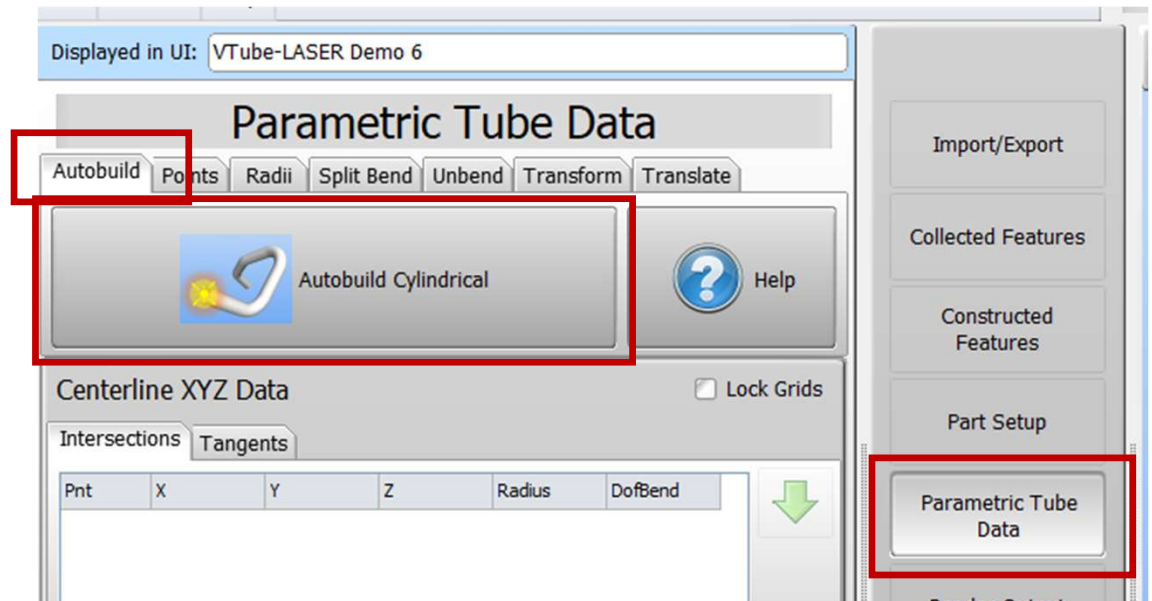
File Name	Modified	Type	Size
Hole Tutorial.STP	5/30/2024 11:53 AM	STP File	1,635 KB
VTube-LASER Demo 6.STP	6/14/2022 4:41 PM	STP File	128 KB
Adjacent Bends Import 2.STP	7/30/2020 12:27 PM	STP File	38 KB
Coil.STP	7/28/2020 10:34 PM	STP File	129 KB
Napkin Holder.STP	5/15/2020 9:47 PM	STP File	178 KB
VTube-LASER Demo 5.stp	9/23/2019 5:16 PM	STP File	77 KB
Tube with drilled hole.stp	8/19/2019 4:54 PM	STP File	69 KB
HVAC Dual Split Bend.stp	6/27/2019 7:34 PM	STP File	140 KB
68282201AD Tube A Braze Fixtures.STEP	3/4/2019 6:47 PM	STEP File	2,415 KB

File name: VTube-LASER Demo 6.STP STEP (*.stp;*.step)

Open Cancel

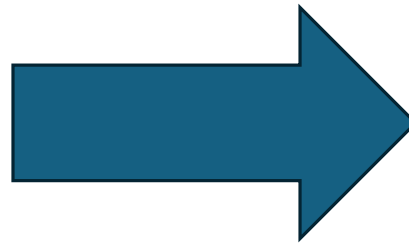


Go to Parametric Tube Data >
Autobuild > Autobuild Cylindrical










Switch to VTube-LASER





Go to Space Objects > Show Point Cloud Control

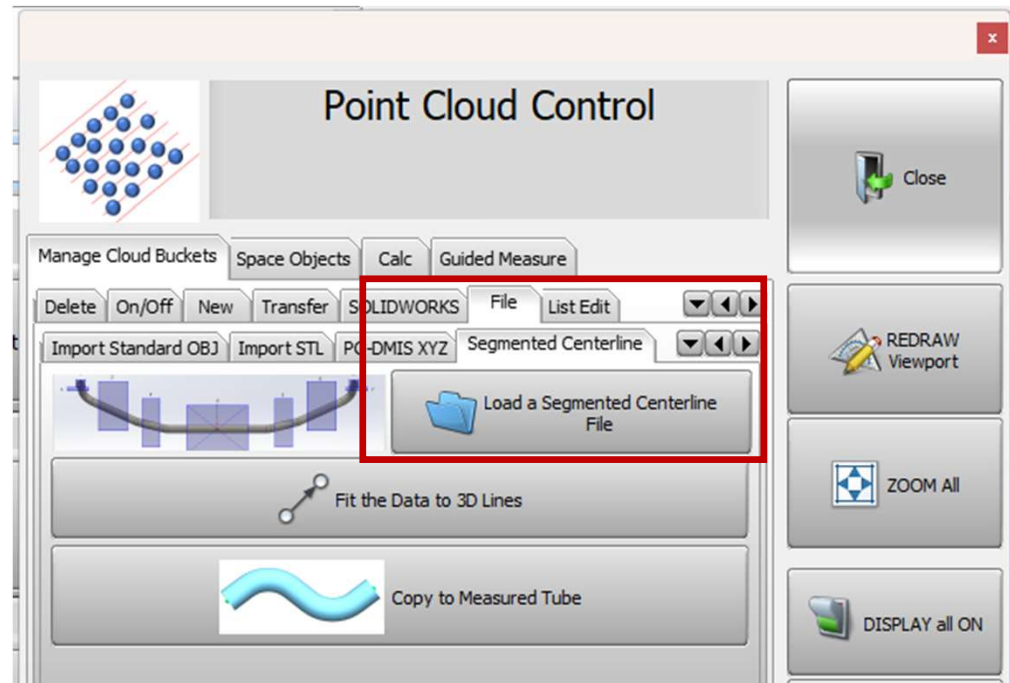
A screenshot of the "Space Objects" software interface. The main panel is titled "Space Objects" and contains several buttons. The button "Show Point Cloud Control" is highlighted with a red border. To the right, a vertical sidebar contains a list of menu items, with "Space Objects" also highlighted with a red border. The sidebar items include: Rev, Master, Part Setup, Master Tube, Measure Setup, Measure Process, Measured Tube, Inspection Data, Bender Setup, Reports, Space Objects, Data Handling, and User Interface.

Space Objects	
	Show Space Object Control List
Create/Edit Scanned Point Cloud	
	Show Point Cloud Control
Create Space Objects	
	Create POINT from Point Cloud
	Create PLANES from Point Cloud
	Create CIRCLES from Point Cloud

Rev	Master
Part Setup	
Master Tube	
Measure Setup	
Measure Process	
Measured Tube	
Inspection Data	
Bender Setup	
Reports	
Space Objects	
Data Handling	
User Interface	



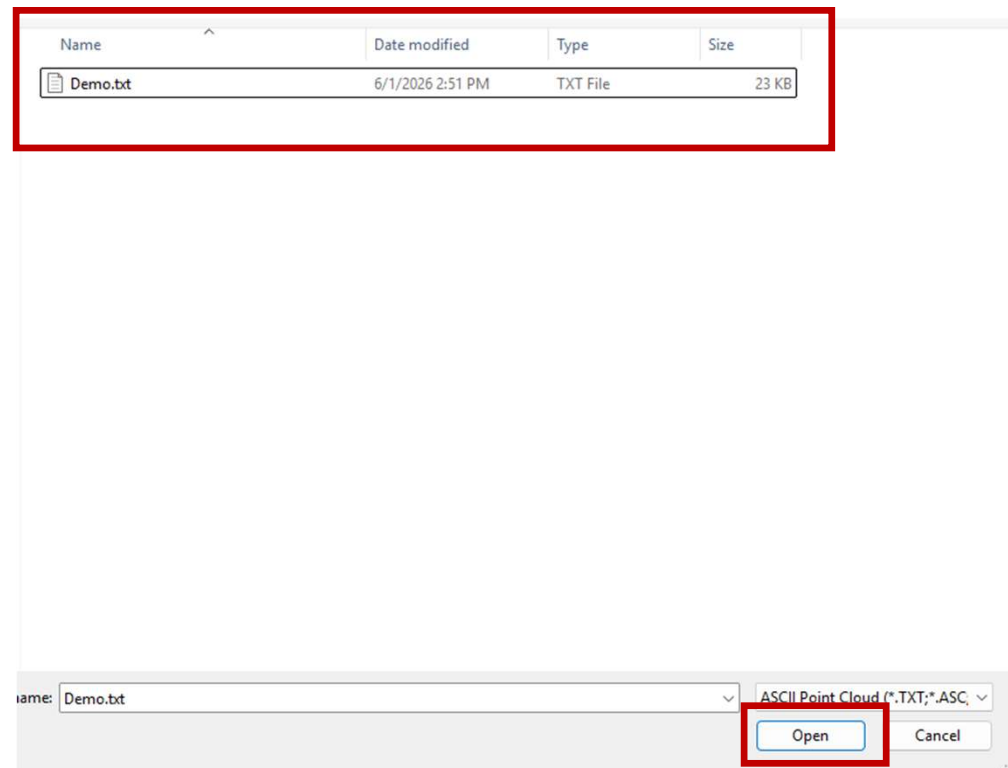
1. Go to File > Segmented Centerline.
2. Load a Segmented Centerline File





Find the .TXT file that corresponds with the .stp or .igs first loaded in.

Press Open





1. Press ACTIVE all ON
2. REDRAW Viewport to see the segmented centerline data



Manage Cloud Buckets | Space Objects | Calc | Guided Measure

Delete | On/Off | New | Transfer | SOLIDWORKS | File | List Edit

Import Standard OBJ | Import STL | PC-DMIS XYZ | Segmented Centerline

Load a Segmented Centerline File

Fit the Data to 3D Lines

Copy to Measured Tube

Total Points in Memory 91
Display Only Total 0
Display + Active Total 0
Row Currently Selected: ..

No.	Name	Color	Display	Active	Type	Scale	PDiam	Count
1	SCL A END	Green	<input type="checkbox"/>	0	5.0	0.0	8	
2	SCL 1 SRT	Brown	<input type="checkbox"/>	0	5.0	0.0	16	
3	SCL 2 SRT	Red	<input type="checkbox"/>	0	5.0	0.0	8	
4	SCL 3 SRT	Teal	<input type="checkbox"/>	0	5.0	0.0	20	
5	SCL 4 SRT	Orange	<input type="checkbox"/>	0	5.0	0.0	10	
6	SCL 5 SRT	Grey	<input type="checkbox"/>	0	5.0	0.0	20	
7	SCL B END	Olive	<input type="checkbox"/>	0	5.0	0.0	9	

REDRAW Viewport

ZOOM All

DISPLAY all ON

DISPLAY all OFF

ACTIVE all ON

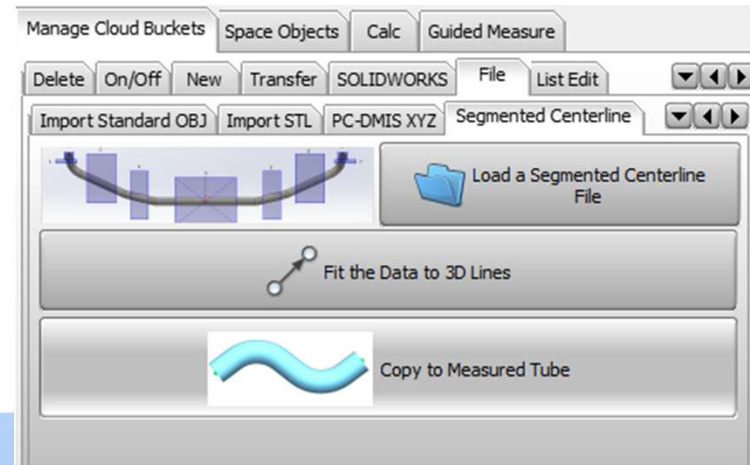
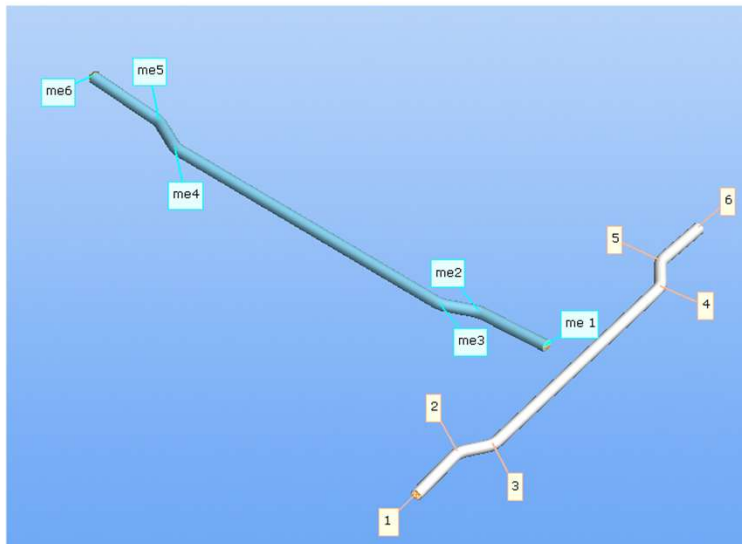
ACTIVE all OFF

Delete All Buckets

Delete Selected Buckets



1. Press Copy to Measured Tube. This will draw the blue tube in the Viewport
Blue = Measured
White = Master





1. Go to Inspection Data
2. Recalculate the Alignment

The screenshot displays the V-TUBE LASER software interface. At the top, there are two green vertical bars. Below them, the text "Best Fit Alignment 5" is visible. A red box highlights a button labeled "Recalculate Best Fit Alignment 5 - (Ctrl-R)" with a gear icon. Below this, there are several tabs: "Data", "Pass/Fail Attributes", "Alt Tolerances", "General Setup", and "Alignment". Under the "Data" tab, there are sub-tabs: "Straights", "Overall Lengths", "Bend Profiles", "Bender Data", and "Aligned Model". A table shows alignment data for five segments:

Trim A	+Tol A	-Tol A	Trim B	+Tol B	-Tol B	Angle	Tol A	An
146.4	3.2	3.2	177.6	3.2	3.2	0.4539	3.0000	0.8

Below the table, there are more tabs: "Tan Envelope", "GD&T OD", "SAE J2551-1", "Intersection", "Cylinders", and "Scores". A section titled "Straight length tangent envelopes with 3D radial deviation" contains another table:

	T1 dev	T1 tol	MP dev	MP tol	T2 dev	T2 tol
1	8.4	3.2	7.2	3.2	6.1	3.2
2	54.0	3.2	51.1	3.2	48.2	3.2
3	0.7	3.2	1.6	3.2	3.9	3.2
4	47.5	3.2	50.7	3.2	53.8	3.2
5	4.3	3.2	6.5	3.2	8.7	3.2

On the right side of the interface, there is a vertical menu with several options: "Part Setup", "Master Tube", "Measure Setup", "Measure Process", "Measured Tube", "Inspection Data" (highlighted with a red box), "Bender Setup", "Reports", "Space Objects", "Data Handling", and "User Interface". At the bottom right, there is a circular gauge showing the number "10".