Measurement: measure cone and cylinder

Try to measure cone and cylinder forms of industrial parts

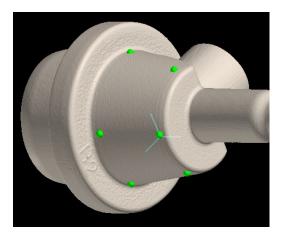


Main Control			
Show All Units Hide All	Units		
Unit Name	Туре	Rendering Type	Color Delete
SurfaceR	Voxel Surfac	e A	Copy Voxel
			New Unit
selected unit path D:¥data¥fitting¥1 name SurfaceR rendering type A ~	/Z¥ opacity (%) 55 ÷	color Bac	all unit colors Save Load k
Voxel Process	Voxel Filter	Voxel Division	Unevenness Extraction
Part Dilation	Voxel Trim	Polygon Reduction	Polygon Clipping
Voxel Operation	Make Label Unit	Section Analysis]
2D Measurement	3D Measurement	Solid Measurement	Select Measurement
Nonius	Thickness	Orifice]
Particle / Cavity	Fiber Analysis	Direction Analysis]
Voxel Export	Polygon Export	Voxel Rotational Export	t Voxel Range Export

Select "fitting" TAB, and "cone" button.

Change to "Surface Rendering" and press "3D Measurement" button.

3D Measurement	×	
basic fitting landmark		
Opoint	O line (2 points or more)	
O plane (3 points or more)	O sphere (4 points or more)	
O cylinder (6 points or more)	O cone (7 points or more)	



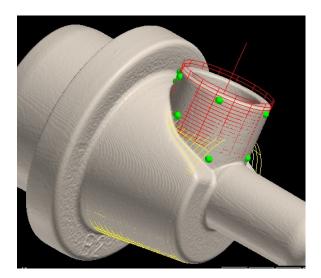
Click around cone.

Press "Set" after checking cone drawn. Select list item to show the cone information (coordinates of apex, apex angle, direction of axis, center of mass).

apex of cone 1			
cone1			
			_
Make	Make	Make	
Clear Selected	Delete	Set as Section	
result (measuring un	it) mm 🗸 🗸	(angle is degree)	
center of cone 1 = 0.0215364, 13.0387, 0.237248			
direction vector of axi	s of cone 1 = -0.0	185118, -8.53499	

apex of cone1			
cone1			
Make	Make	Make	
Clear Selected	Delete	Set as Section	
result (measuring unit) mm 🗸 (angle is degree)			
coordinates of apex of cone1 = 0.0215364, 13.0387, 0.2 \land			
apex angle of apex of	cone1 = 0.2999	98	

Select "Cylinder" button, and click around cylinder. Press "Set" as well to show the information of the cylinder (diameter, direction of axis, center of mass).



	and a state of the second s
	CAMERICANES .
1.401/28	
	Contraction of the Contraction o
an and plant selfe he	
NAME OF A DESCRIPTION OF A	
and Part	
	144444444
1	

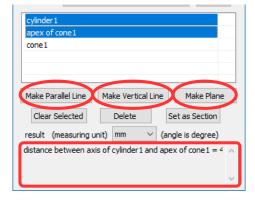
coordinates (x, y, z) (measuring unit: mm)		
4.48185, 9.04697, -3.90835 5.00447, 9.51796, 3.89981	^	
7.29481, 17.0609, -0.606831 2.53126, 17.2552, 7.10224		
1.41307, 16.9262, -7.00211		
< >		
number of points: 9		
Set Clear All Clear Last Point]	

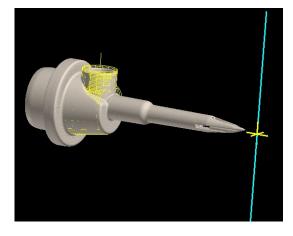
apex of cone1 cone1		
conei		
Make	Make	Make
Clear Selected	Delete	Set as Section
result (measuring un	it) mm 🗸 🗸	(angle is degree)
center of cylinder 1 = -		
direction vector of axis		-12.7314, 0.022220
diameter of cylinder 1 :	= 8.49015	

Select two list items to show geometric information between the forms (distance, angle, direction of orthogonal vector).

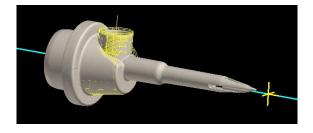
If "Make..." button is enabled, you can make new figure guided by them.

cylinder 1			
apex of cone1			
cone1			
Make	Make	Make	
Clear Selected	Delete	Set as Section	
result (measuring unit	:) mm ~	(angle is degree)	
angle of axis of cylinder 1 and axis of cone 1 = 89.96 orthogonal vector of direction vector of axis of cylinder 1 a direction vector of axis of cone 1 = 0.0244518, 0.012256			
		× .	

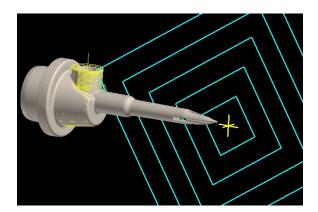




[Make Parallel Line] Make line including apex of the cone and parallel to the cylindrical axis.



[Make Vertical Line] Make vertical line from apex of the cone to the cylindrical axis.



[Make Plane] Make plane including both apex of the cone and the cylindrical axis.