

How to add a coaxial nozzle to the small end of a cone

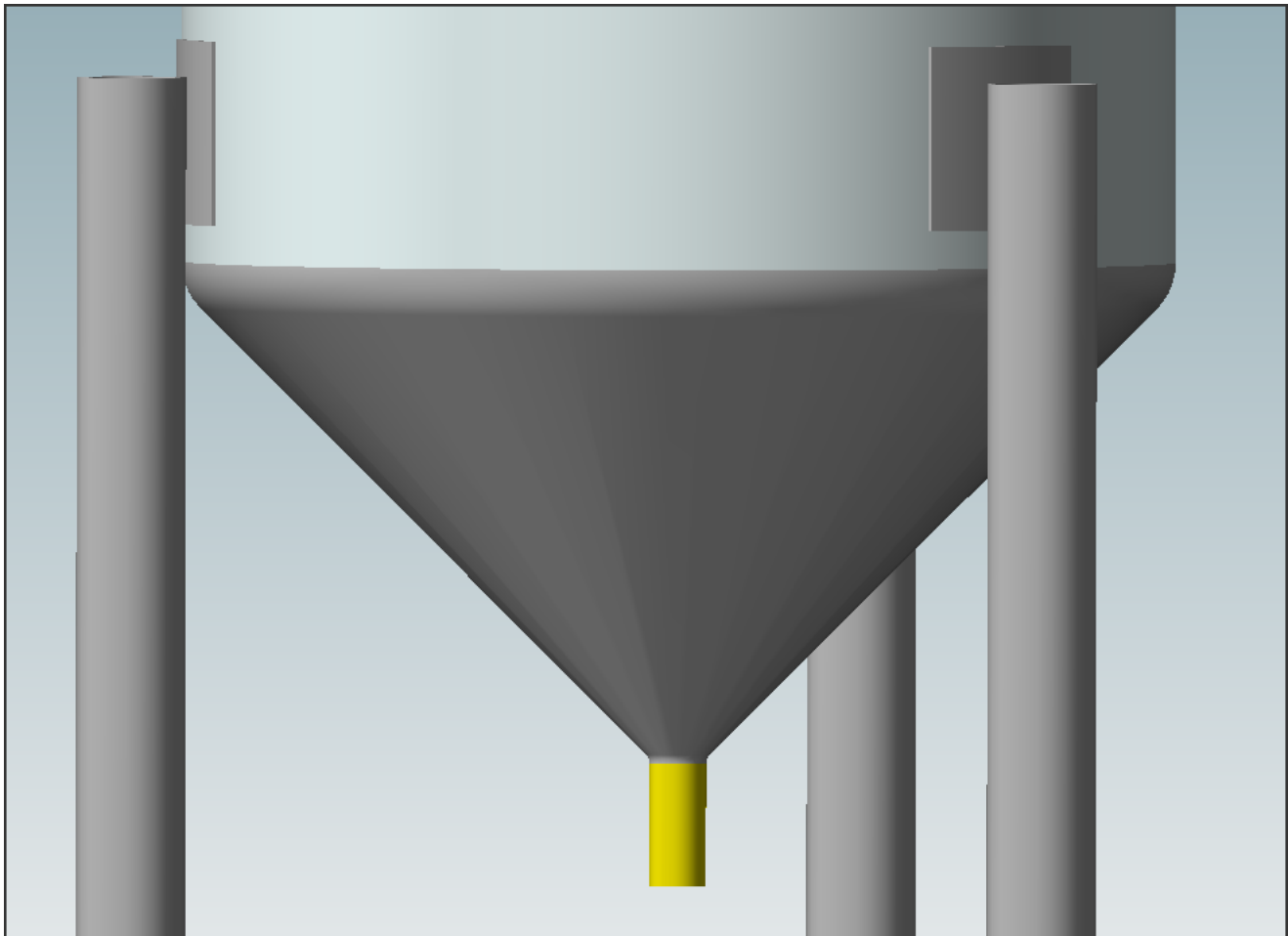
Often vertical vessels equipped with a cone on the lower part end with a drainage nozzle, in this article we illustrate how to add it.

Online version: <https://nextgen.sant-ambrogio.it/KB034359>

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A nozzle coaxial to the cone **should be treated as a simple cylinder**: this is necessary because this tube does not fit on the surface of the cone and does not create an opening to compensate.

It is therefore sufficient to select the "Cylindrical shell" component instead of "Nozzle" to proceed with the addition.



The rules that must be applied are therefore those of the cylinders adjacent to the cones. For some calculation codes, it is possible to select additional options specific to the pipes, for example in the case of ASME VIII Div. 1 it is possible to validate the pipe section according to B31.3

Essentials	Name / Position	Cylindrical shell #2
General	Material	<input type="text"/> Database Edit
Design conditions	Undertolerance method	Absolute value < >
Geometry	Undertolerance	0 mm
Liquid level	Overpressure due to static head - internal	0.02 MPa
Ligaments	Overpressure due to static head - Hydraulic test	0.02 MPa
External loads	Overpressure due to static head - external	0 MPa
Weight	Is surrounded by a jacket or external chamber, perform test at external pressure too	<input type="checkbox"/>
Reporting	Heat exchanger pipe	<input type="checkbox"/>
	Apply impact test exemption temperature reduction of UCS-68(c) for PWHT	<input type="checkbox"/>
	Circumferential joint efficiency	1
	Check pipe according to ASME B31.3	<input type="checkbox"/>
	Use Appendix 1-2 (thick cylinders) when applicable	<input checked="" type="checkbox"/>