

How to create a jacketed vessel

A quick guide to help you started with a jacketed vessel.

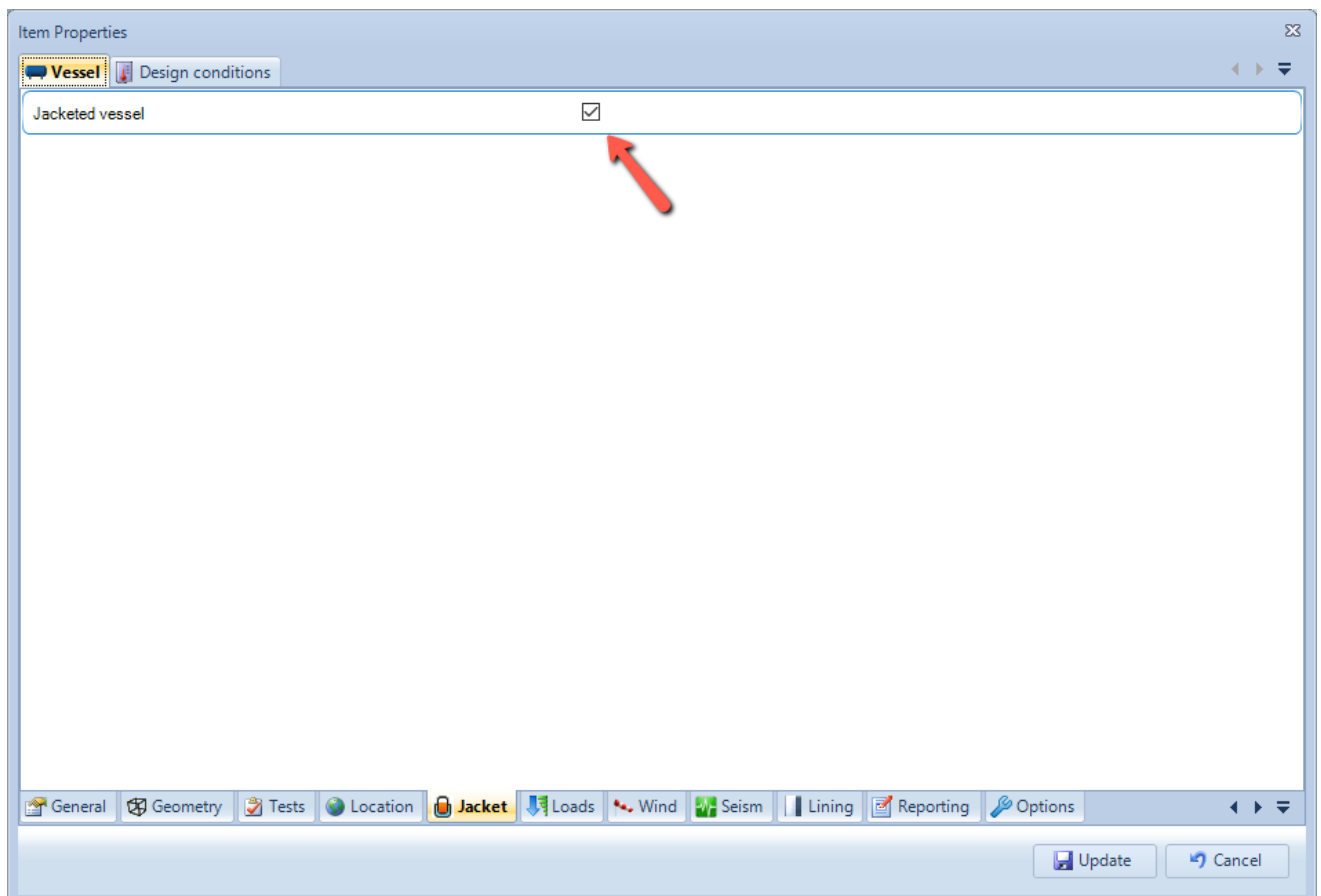
Online version: <https://nextgen.sant-ambrogio.it/KB310234>

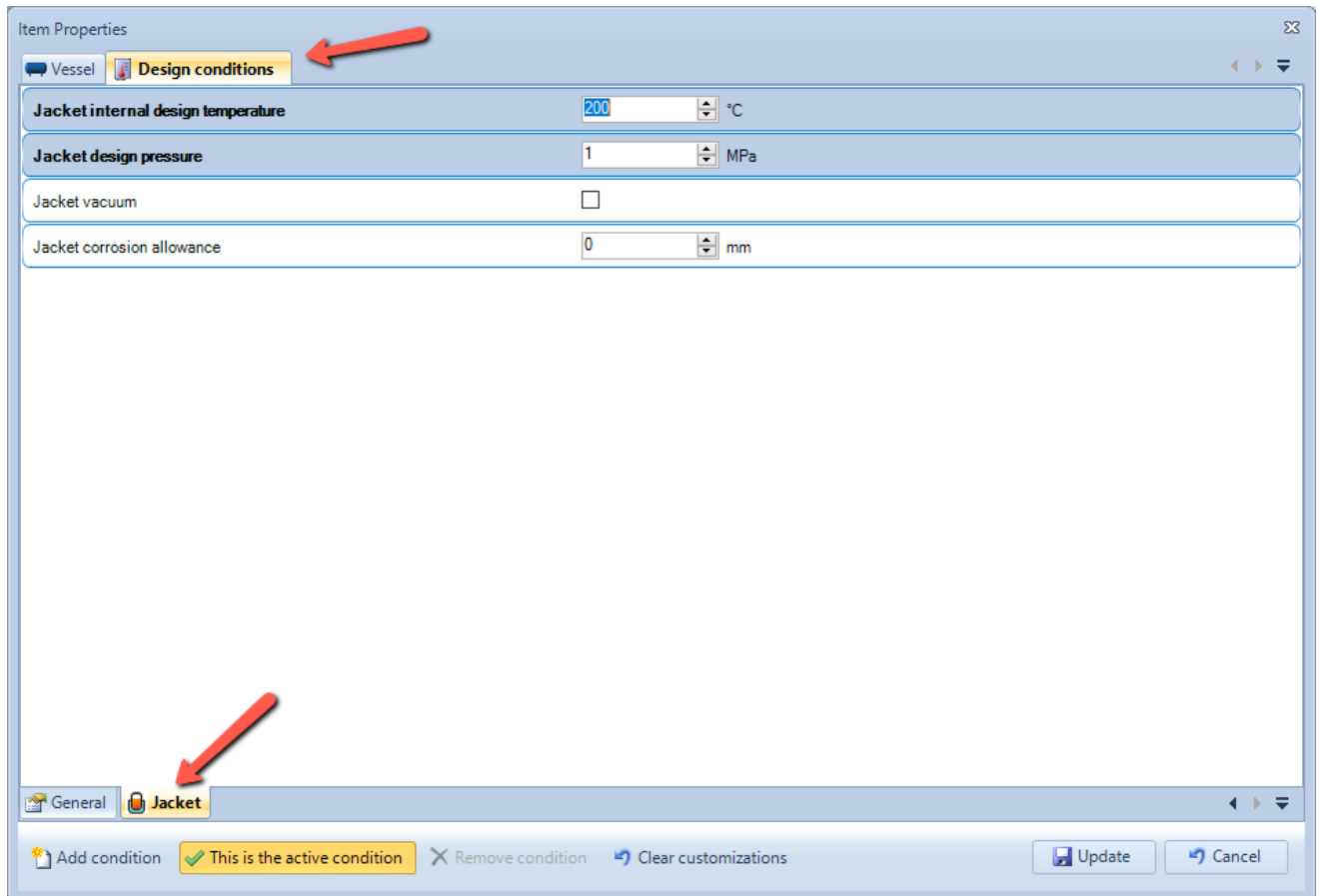
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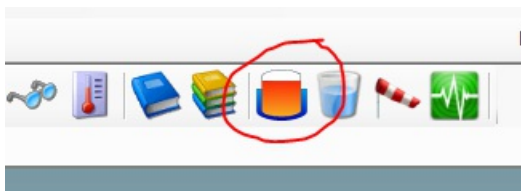
These are the steps required to to enable a jacketed vessels calculation:

1. Enable "Jacketed vessel option" under File > Item properties > Jacket tab. Define jacket conditions in the same window by switching to Operating conditions tab, then Jacket. The software will automatically take into account the effects of the pressure of the jacket in relation to the vessel underneath and vice versa:

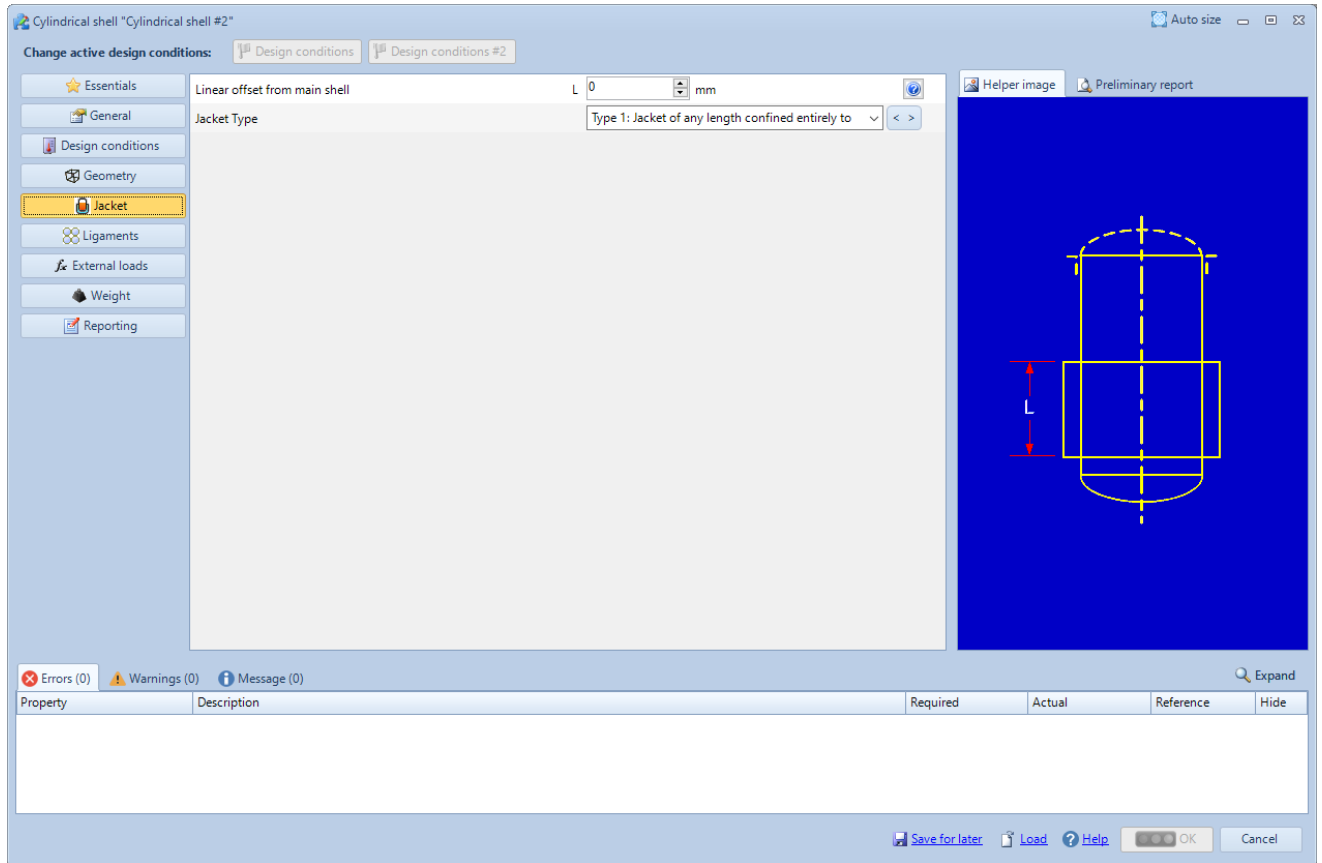




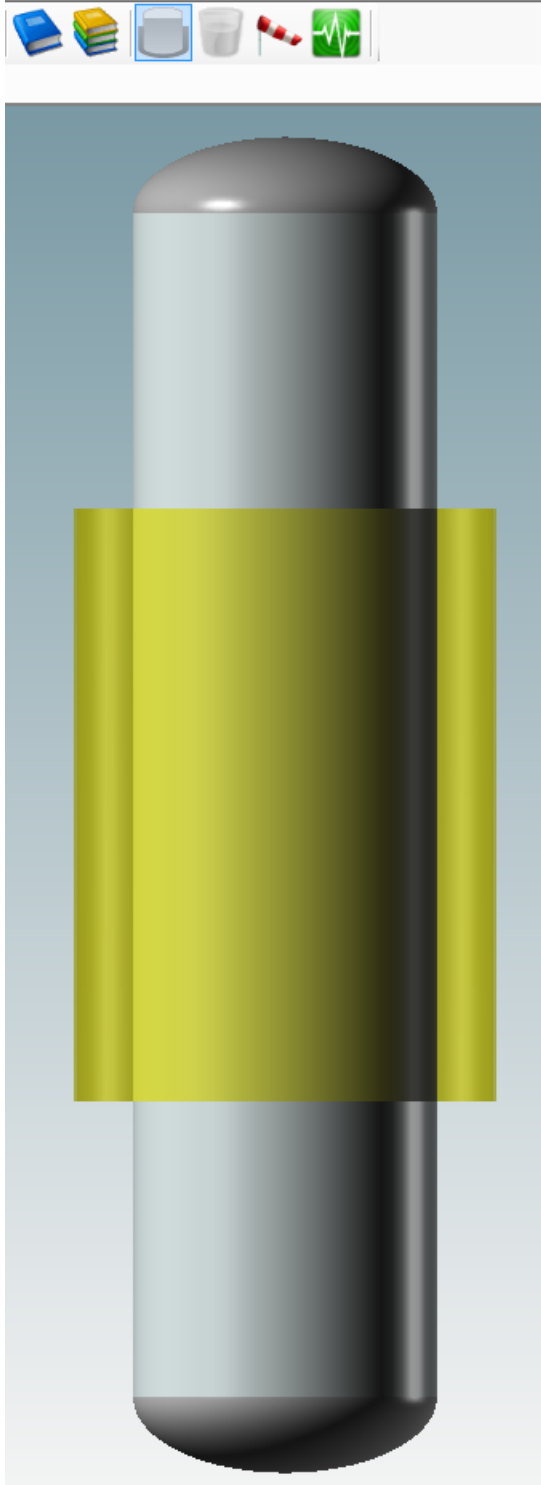
2. Design the vessel as you would normally do
3. When main shell - the one where jacket shall be applied to - is selected, "Add jacket" icon in the main toolbar is enabled:



4. By clicking on "Add jacket" icon the external cylinder of jacket is added. Fill in dimensions, material and set its L offset from the base of previously selected (point 3) main shell:



- 5. The jacket will be placed around main shell:



6. From now on it is possible to connect other elements constituting the whole jacket, e.g. heads, cones and closures.
7. The software will automatically perform the external pressure calculation on the underlying members. It is recommended to manually check and set the unsupported length actually subjected to stress on these components, since the software automatically conservatively considers the entire length of the component.