## Integration of external calculations into the NextGen report

How to integrate calculations performed externally, for example using Excel spreadsheets, into the NextGen calculation report.

Online version: https://nextgen.sant-ambrogio.it/KB220260 Latest update: 28 giu 2021

The final calculation report of a pressure vessel may have to contain calculations performed externally to NextGen, which go to complement and complete the checks performed by the software.

From NextGen it is possible to export the calculation report in Microsoft Word format and from there operate with maximum flexibility.

If you wish, you can also use the program's internal functions that allow the preparation of a PDF report that can be easily integrated with your external calculations: these operations can be performed from the pre-print window, which can be activated via the following button on the top bar of the program.



Once the dialog box is open, you have several options:

Item Report			23
Components	A	ctive design condition	n
Check/uncheck all components	1	Design conditions	~
<ul> <li>Torispherical head #1 (Torispherical head)</li> <li>Corpo principale (Cylindrical shell)</li> <li>Nozzle #1 (4" XS)</li> <li>Welding neck flange #1 (WN 4" 150)</li> <li>Conical shell #1 (Conical shell)</li> <li>Colical shell #1 (Conical shell)</li> <li>Vindrical shell #2 [NON STAMPARE] (Cylindrical shell)</li> <li>Welding neck flange #2 (Welding neck flange)</li> </ul>		Units of measurement Both metric and custo Page Numbers First page: Fotal page count: Print date	omary ✓ 1
		ist of applicable loads Edit anguage English	•
		Report	Cancel

The "Page Numbers" section allows you to renumber the report, for example by starting the numbering

from a page number other than 1 or by changing the number of total pages. In this way it is possible to add to the report an initial section created externally to NextGen, maintaining a congruent numbering. You can also change the date shown in the footer.

Using the highlighted button it is possible to add one or more sections called "empty pages": let's assume that we have done a finite element analysis for the N1 nozzle and want to integrate it in the calculation report.

Empty pages sectio	n	23
Section propertie	s	a
Title	Nozzle N1 FEA calculation	
Pages count	13	
	Save Cancel	

By creating this section, NextGen will know that the report will be integrated with a new section outside it and will take this into account in the page numbering and in the summary.

The newly created section can be moved like a normal component report, with the only difference that it will not produce any output in the calculation report.



The report summary will take this section into account and return the page number from which that section will be available.

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Scrolling through the report, after the torospheric head has been printed, a jump will be made in the page numbering, which will continue on page 26 with the calculation of the cylindrical shell.