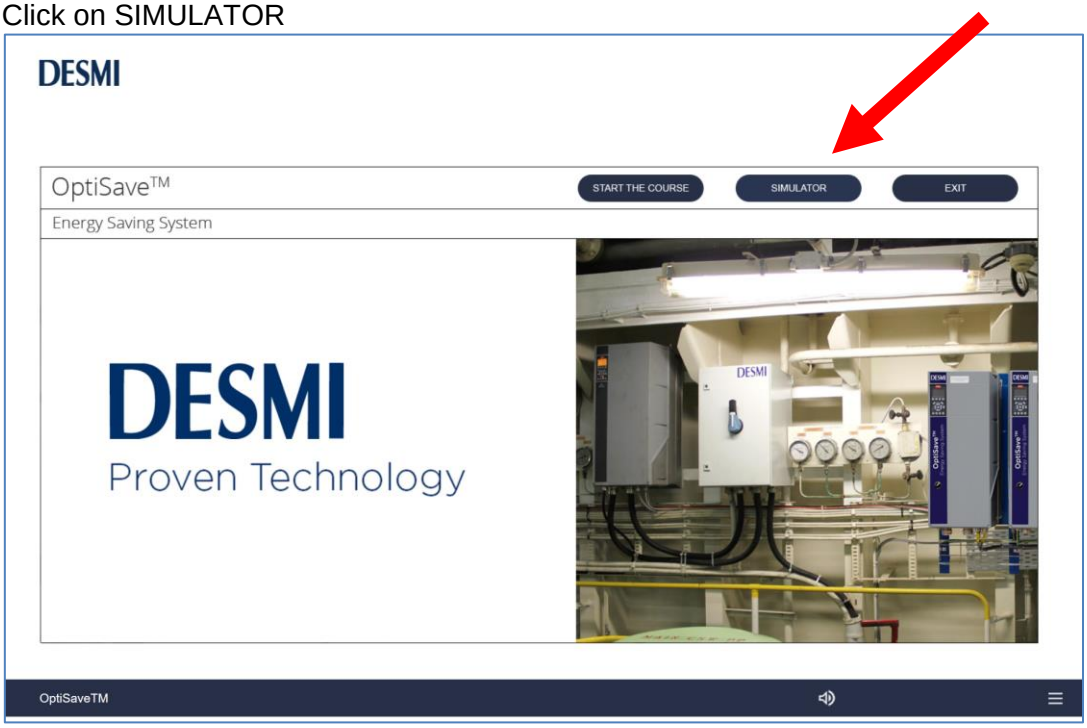
Quick user guidance for the DESMI OptiSave™ Energy Saving Simulator

After entering your name, please click on the play button in the lower right hand side corner

Click on SIMULATOR



DESMI Pumping Technology A/S
Tagholm 1
DK-9400 Nørresundby
Denmark

Phone: +45 9632 8111
Web: www.desmi.com

CVR No.: 19351211
VAT No.: DK46837150
Bank: Danske Bank SWIFT/BIC (dabadkkk)
Account No.: 4368-3694103286
DKK account 3694103286
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Click on the arrow to start

Click on start

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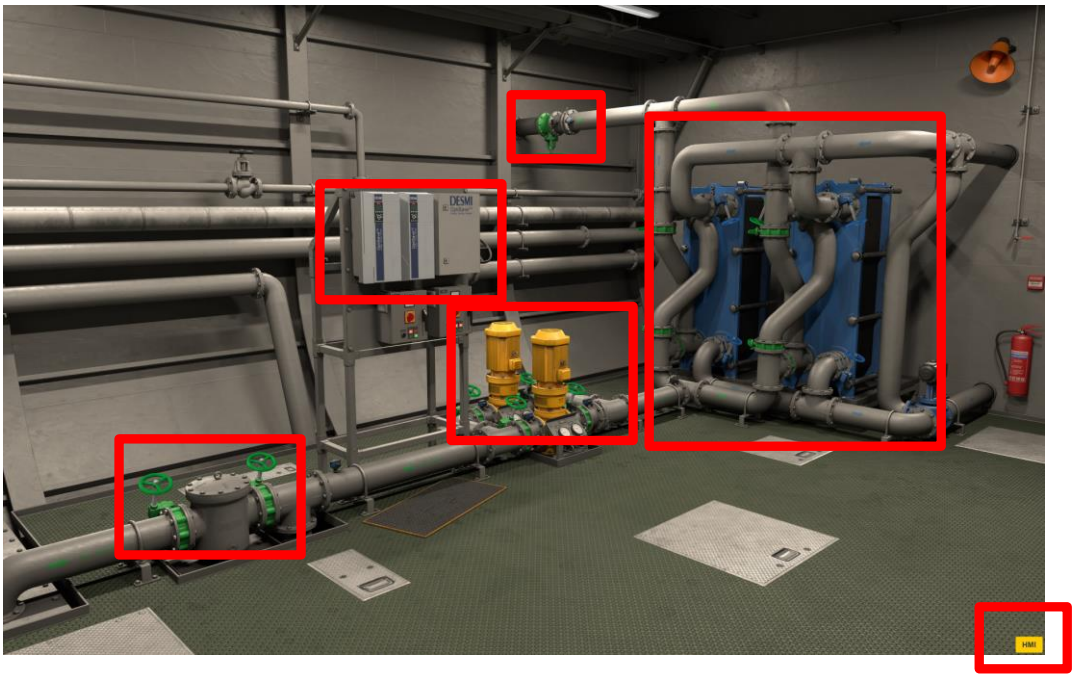
Two screens appear – one with simulation – one with PID
LCP (Local Control Panel) marked = Starters as shown.

When seeing the simulator screen you can click on all the valves, pumps, frequency converter and …
In the lower right hand side corner, you can click on HMI (display in engine room).



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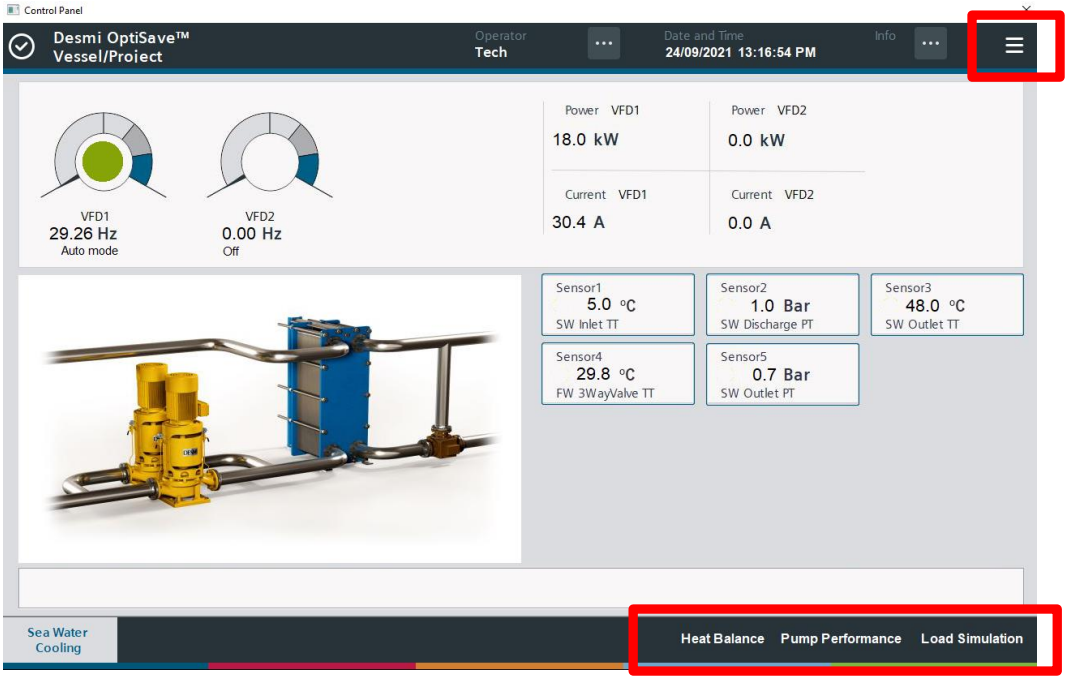
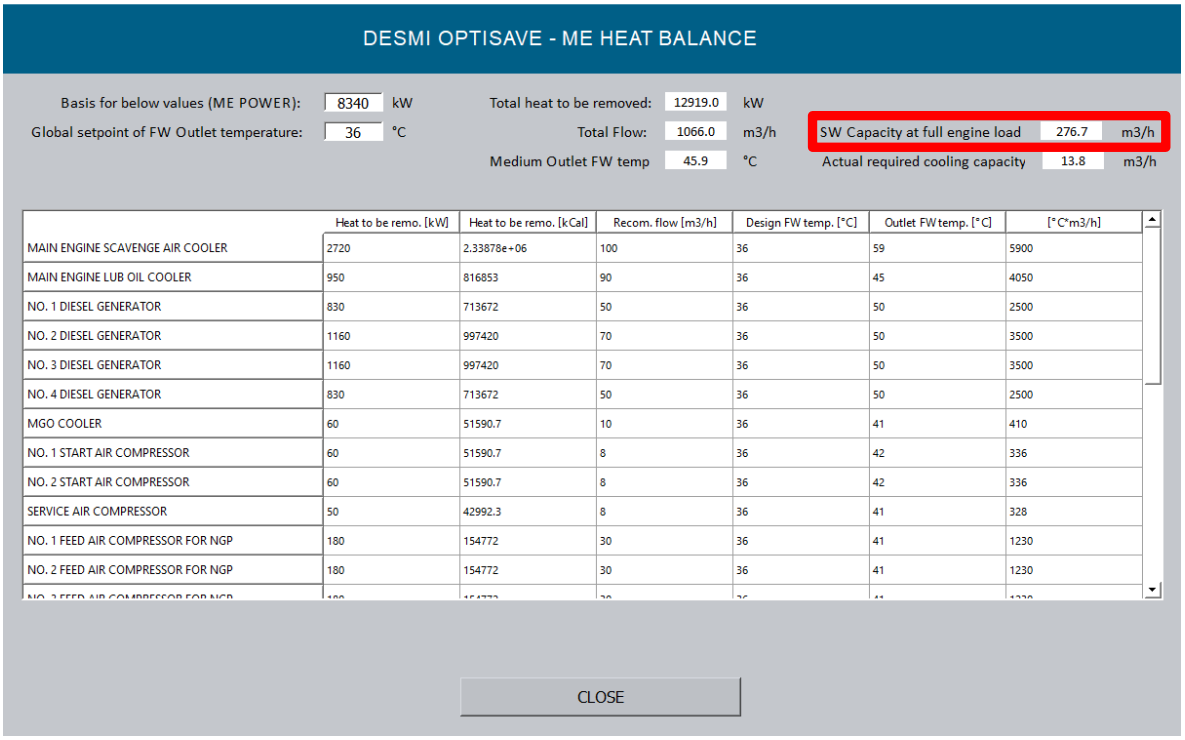
When clicking HMI the below screen appear. Note the top right hand side corner menu option and the menu in the button



To Change heat balance, change the value for ME Power and the rest of the values change automatically. Make sure to check the red area to find optimal pump.



	Heat to be remo. [kW]	Heat to be remo. [kCal]	Recom. flow [m3/h]	Design FW temp. [°C]	Outlet FW temp. [°C]	[°C*m3/h]
MAIN ENGINE SCAVENGE AIR COOLER	2720	2.33878e+06	100	36	59	5900
MAIN ENGINE LUB OIL COOLER	950	816853	90	36	45	4050
NO. 1 DIESEL GENERATOR	830	713672	50	36	50	2500
NO. 2 DIESEL GENERATOR	1160	997420	70	36	50	3500
NO. 3 DIESEL GENERATOR	1160	997420	70	36	50	3500
NO. 4 DIESEL GENERATOR	830	713672	50	36	50	2500
MGO COOLER	60	51590.7	10	36	41	410
NO. 1 START AIR COMPRESSOR	60	51590.7	8	36	42	336
NO. 2 START AIR COMPRESSOR	60	51590.7	8	36	42	336
SERVICE AIR COMPRESSOR	50	42992.3	8	36	41	328
NO. 1 FEED AIR COMPRESSOR FOR NGP	180	154772	30	36	41	1230
NO. 2 FEED AIR COMPRESSOR FOR NGP	180	154772	30	36	41	1230

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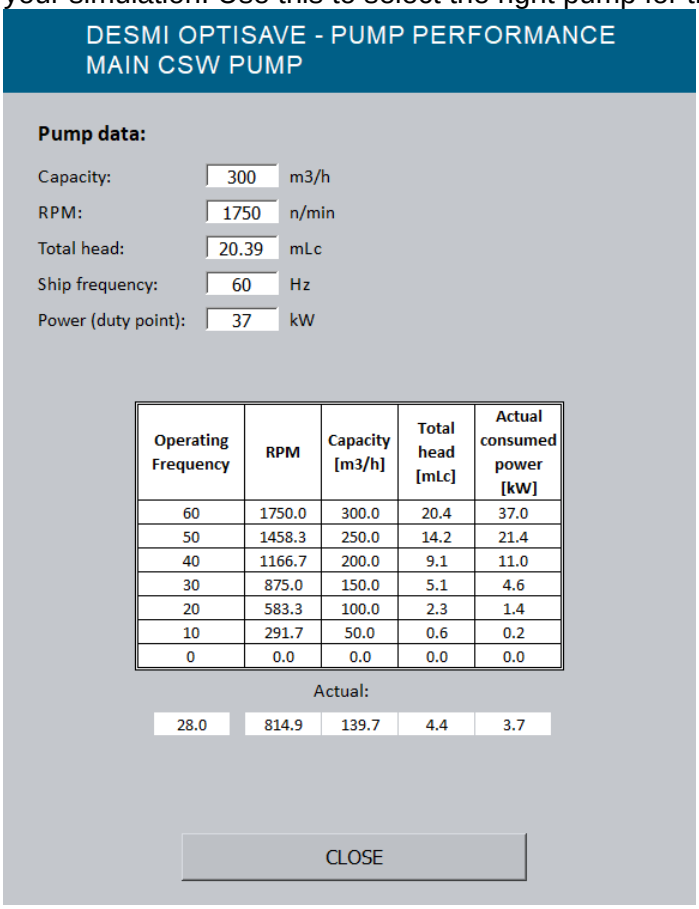
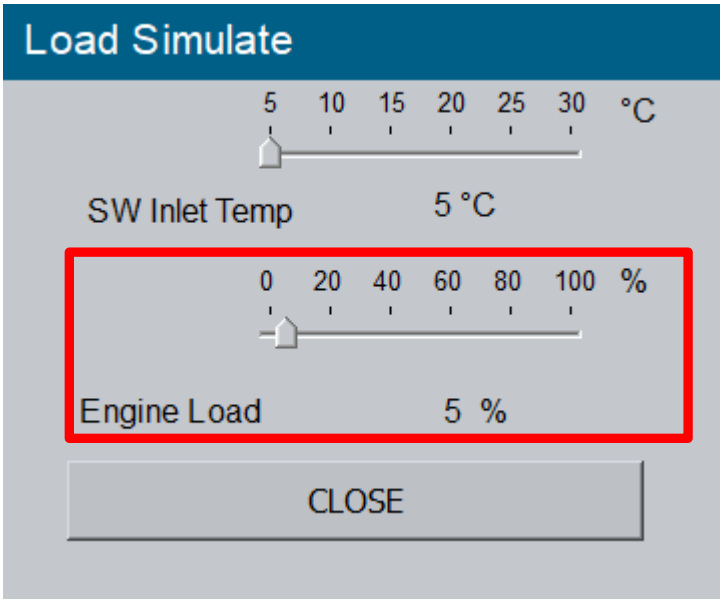
Pump size and performance can be changed in order to find the pump with the best performance for your simulation. Use this to select the right pump for the “job”.



And under load simulation you can change seawater temperature. Change overall load of the vessel – refer to heat balance.



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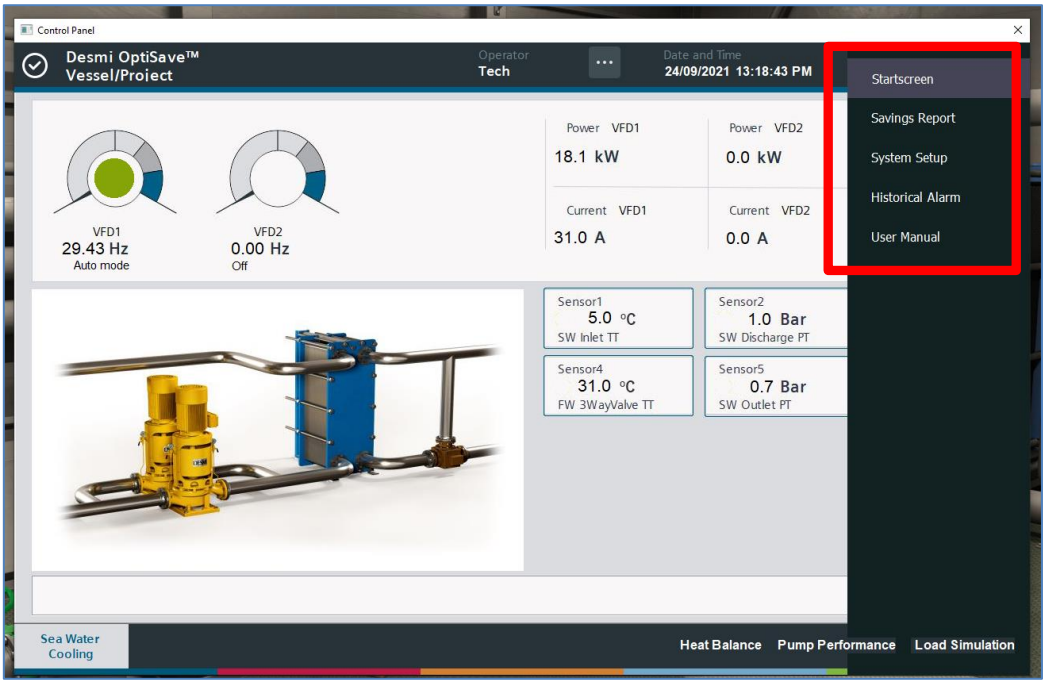
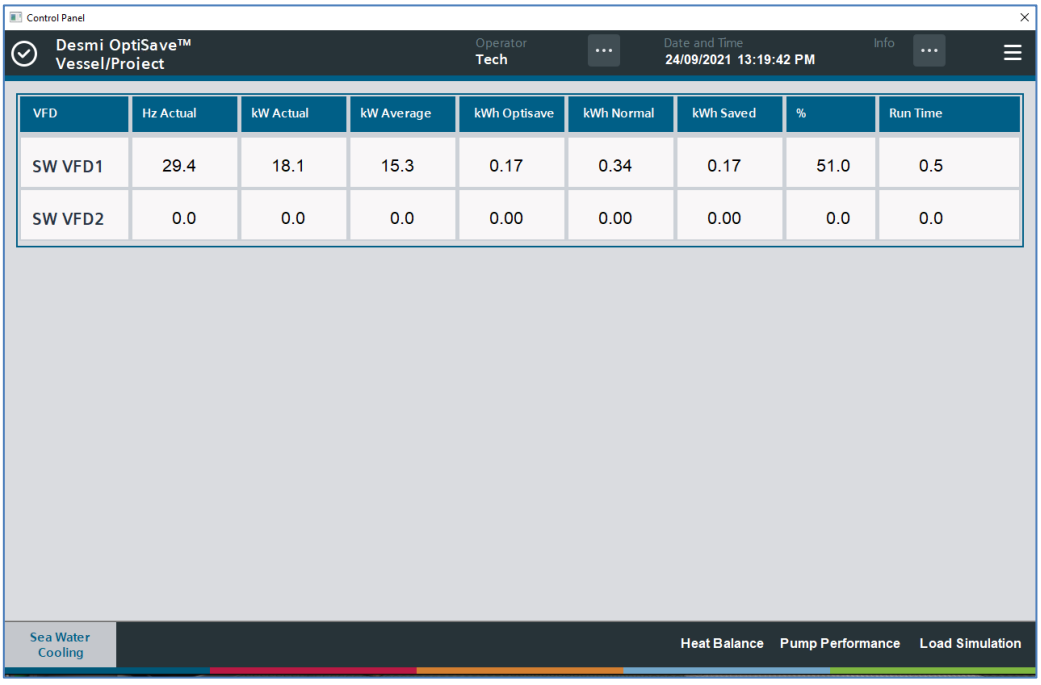
ISO 9001 BUREAU VERITAS Certification

After simulation you can see a report in the menu in the top right hand side corner



Savings report



VFD	Hz Actual	kW Actual	kW Average	kWh Optisave	kWh Normal	kWh Saved	%	Run Time
SW VFD1	29.4	18.1	15.3	0.17	0.34	0.17	51.0	0.5
SW VFD2	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0

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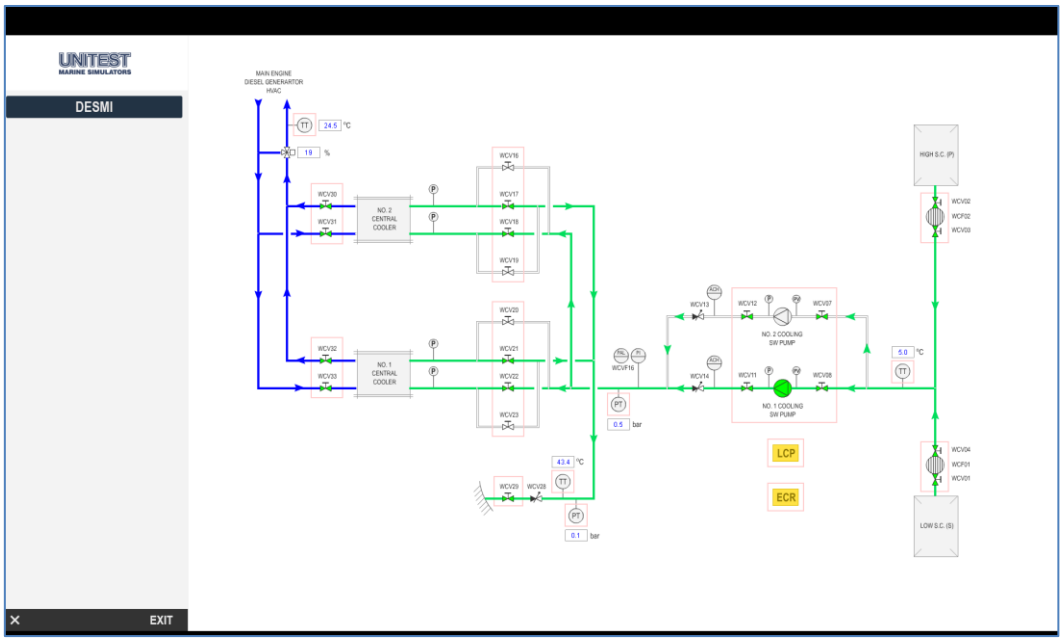
On screen number two, you will see what effect the changes have in the PID.
PID & “Engine room” are interactive.



For more information, please do not hesitate to contact desmi@desmi.com or your local DESMI sales representative.

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