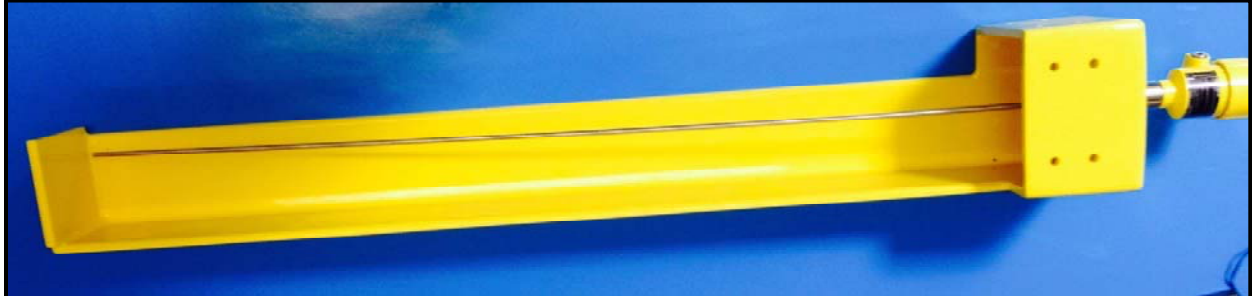


Rapidlogger Systems

Level Sensor Calibration For Square And Stepped Tanks For Rapidlogger Systems



This tech note describes the following processes:

- Set up software
- Adjusting sensor to eliminate lag time and readings becoming frozen
- Set up for linearization for a Stepped tank style

Equipment and Software needed:

- VegaFlex 81 series sensor
- Power source of 6vDC (MAX)
- Vega Connect 4 with connection box
- VEGA-DTM 1.73.1 - <http://www.vega.com/downloads/Software/DTM-Collection.exe>
- License - guided microwave -**3C73-E3F1-1480-1232-F665**

Set up software

1. Download Vega DTM 1.73.1 from link
 - a. This will install the PACTWare 4.1 software as well
2. Take off Vega LCD interface and replace with Vega connect interface seen in figure 1. If Vega connect interface is not available you can use any Hart Modem as well.

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Figure 1

3. Install USB from sensor to PC and connect power source to sensor
4. Run PACTWare 4.1
5. Click Start. This will connect the sensor
6. It will give 3 options. Click "extended adjustment"
7. Click drop box for help and click "info about" seen in figure 2. At the bottom where it says license is where you will put in the license given above

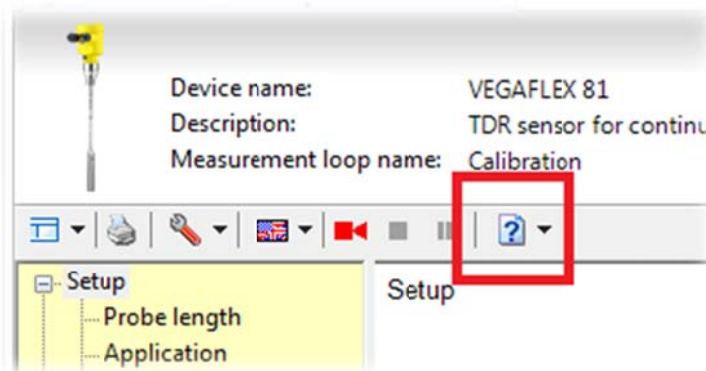


Figure 2

8. Click accept and software set up is complete

Adjust sensor

9. Reconnect LCD Vega interface.
10. Press OK
11. Press Extended Adjustment
12. Press setup
13. Press Application
14. Press Application
15. OK and switch to demonstration mode
16. ESC to front screen.
17. To change *damping* we will follow same steps from 10-12

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18. Press Damping. Here you can adjust the time
19. To change *averaging* we will start from step 11
20. Press additional adjustments
21. Press special parameter
22. Input SW
23. Press SP 05. Here you can change the averaging time
24. The sensor is now ready for a square tank style

Stepped Tank style

For a Stepped Tank style we will have to change the geometry of the tank in the PACTware 4.1 Software.

25. Follow steps 2-6
26. Under setup click on *Type of linearization* seen in figure 3

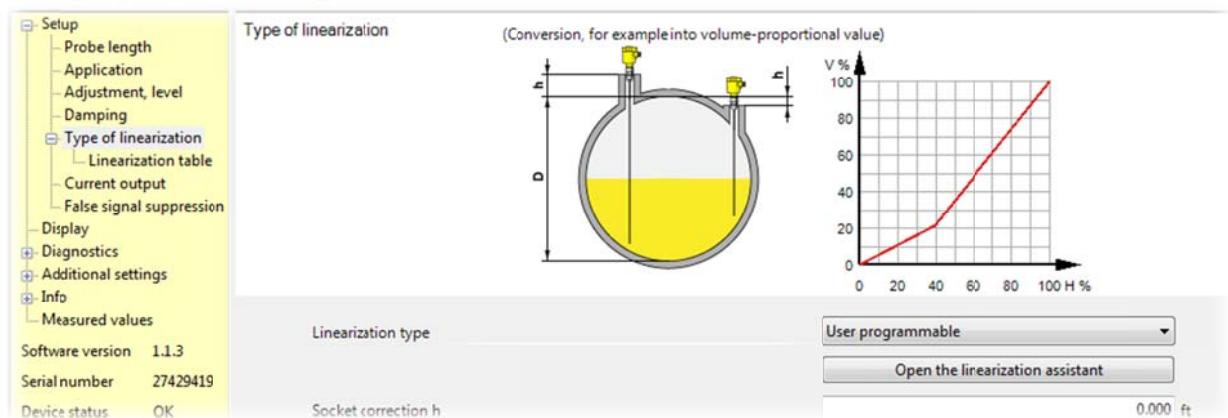


Figure 3

27. Across from linearization type is a drop box. Change this to *User Programmable* if not in this already.
28. Under that click on *Open the linearization assistant*
29. Change your selection of the linearization to *Calculation assistant*. Click Next
30. Change Vessel type to Defragmented tank. Click Next
31. Under segments click on the symbol or name of pyramid.
32. Click the delete segment button (X). See figure 4

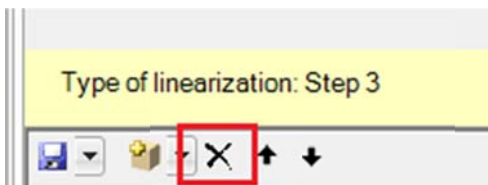


Figure 4

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33. Now for the 2 Cuboids you can type in your dimensions per schematic.
34. Change Scaling unit to bbl. Click Next till you get to finish
35. Click finish
36. It will update and save to sensor now.
37. Click the save button located at the top left of screen. This will save the setup in case you would like to place same setup on another sensor.