

Our customer has a semi-automated mixing tank and uses a level sensor to detect the tank level. The tank is filled with a primary solution to a reconfigurable percentage of the full tank, controlled by a setpoint. A secondary solution is then added by hand.

Texmate installed a Tiger 320 Series DI-60A controller. The controller is calibrated to display the percentage in hundredths of a percent (000.00%). When the pump fills the primary solution to the selected percentage, the setpoint relay stops the pump and the controller scrolls the message 'PUMP IS NOW OFF'.

The operator then adds the secondary solution to the tank. When the level sensor senses the tank is 90.00% full the controller display scrolls the message 'TANK IS ABOUT TO OVERFLOW-----TIME TO PANIC'.

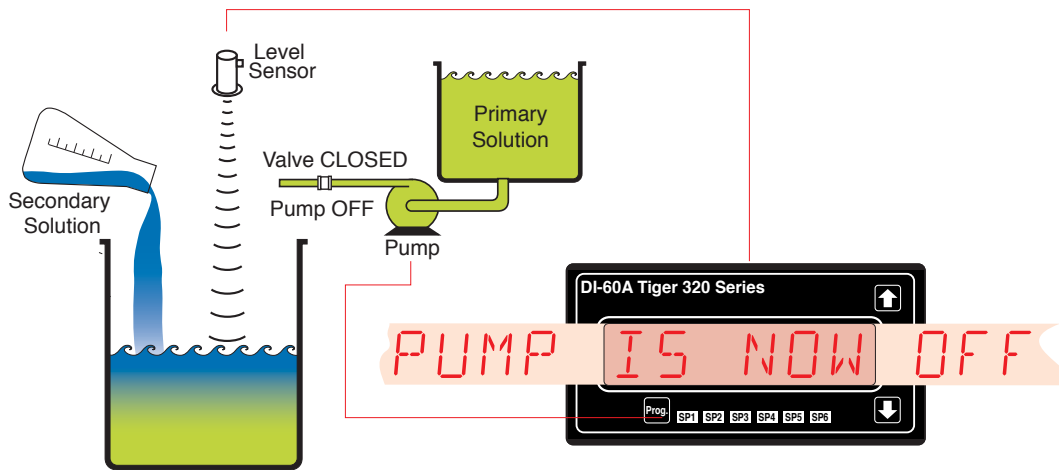
The Custom App shown below was written and compiled in Texmate's Tiger Development System (TDS) program to control the operation of the primary solution pump and the display messages by setpoint.



TEXT MESSAGING FOR TANK LEVEL APPLICATION

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1
2
3
4 MAIN_MACRO:
5 IF &DISPLAY > = 9000 THEN
6 WRITE" TANK IS ABOUT TO OVERFLOW-----TIME TO PANIC "
7 // This instruction uses the display value to initiate the
8 //instruction.
9
10
11 ELSIF [ SP1 = OFF THEN
12 write" PUMP IS NOW OFF "
13 // This instruction uses the setpoint state to initiate an
14 //instruction.
15
16 Endif
17 END
18
19
20
21
    
```



APPLICATION FUNCTIONS	
MACRO	
RELAY OUTPUTS	

LINEARIZATION	
TEXT MESSAGING	
INPUTS	

PROCESS	4 / 20 mA 1 / 5 V
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APPLICATION VARIATIONS

- For irregular shaped tanks, the level sensor signal can be linearized using one of the controller's four built-in programmable linearization tables.

Suggested Ordering Code Options for This Application

Basic Order Codes	Comments
DI-60AT-DR-PS1-IP07-OR31	Messaging center of Process Lin Table for irregular shaped tank
Note: Custom Smart App required. Charges vary depending on application. Contact Texmate.	