

E-PUB-03-0021 Version 01, 2017-03-20

To achieve good performance of a flotation plant a pre-requisite is that the level control valves:

- 1. Are sized correctly,
- 2. Have a good linear flow characteristic, and
- 3. Respond accurately to the control signal.

Below is a trend line from a major flotation plant showing a Dual valve level control valve on the last cell.

	Control Trend for Dart Valves
Yellow	Output to primary valve
Dark Blue	Output to secondary (this has been detuned, stands still), valve controlling on primary to maintain the setpoint with small/no adjustments
Light Blue	Measured variable, level
Green	Valve set point – advanced plant control system (normally a straight line)
Pink	Air flow
10-21-15	10-21-15 100.0 x
95.0	95.0
85.0	97.0 15.0
E0.0 75.0	40.0 75.0
70.0	70.0 The second se
60.0 55.0	
50.0	50.0



Do you have any of the following issues?

- Level not controlling accurately to within ±2.5% of set point
- Valves operating too close to the seat? <10%
- Valves saturating at 100% open at times
- Shaft guides causing seizing or sticky operation
- Plug heads wearing out quickly
- Seats not sealing
- Actuators misaligned
- Backlash in shaft linkage
- Positioner feedback linkages broken or worn or misaligned
- Actuators not holding steady
- Plant vibration

If you do, then please contact eDART at info@edart.co.za