Case Study: **Siemens SITRANS Probe LU**
Ultrasonic Level Transmitter

Application: **Programming Echo Profiles for Accurate Tank Level**
Monitoring, Wastewater Treatment Plant

Problem	The ultrasonic measurement device originally purchased for a new sewage treatment facility would not accurately measure level. False echo signals from fixed and moving obstructions in a sludge concentrator made the device unable to provide reliable level measurement.
Current Business Result	The contractor responsible for making the equipment operate made a number of visits to the job site to relocate and reconfigure the units, in an attempt to make them work. The contractor could not satisfy the performance requirements demanded by the consulting engineer.
	Site visit costs kept adding up, and the measurements still weren't accurate.
Solution	The original units were replaced with Siemens SITRANS Probe LU ultrasonic level units. The self-learning feature, which is standard on the LU, and HydroRanger 200 as well as LR and LR200 Radar units, was used to ignore the obstructions that produced false echoes. Each unit was up and running 15 minutes after installation.
	The illustration here shows a tank profile created before and after Siemens self-learning echo suppression algorithm. You'll notice how the first profile allows an early echo, which could be caused by an agitator or tank brace, and the second profile has learned all obstructions and only allows the true echo on the material surface.
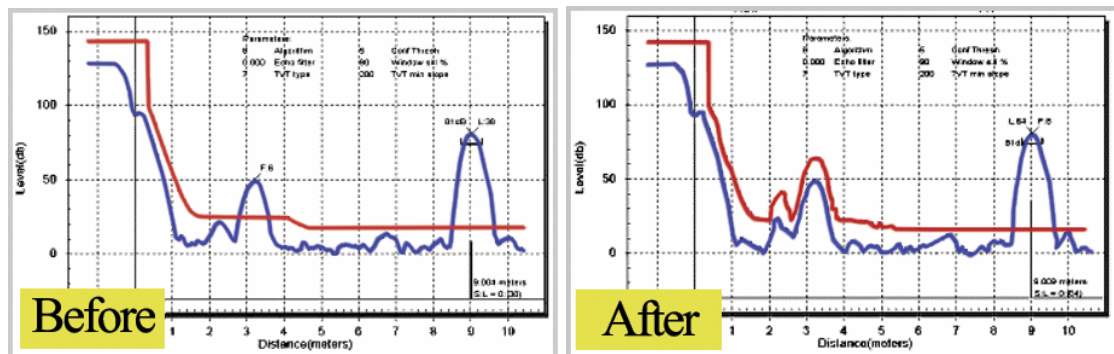
Customer Comment	**Those Probe LU units must be magic! They couldn't have been easier to tune.**