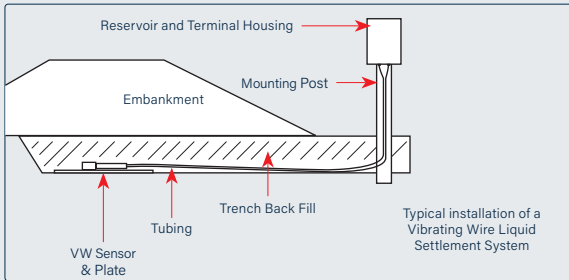


Vented Reservoir inside Reservoir Enclosure with room for DT2055B or RSTAR Affinity Logger

Typical Vibrating Wire Liquid Settlement System shown with the vibrating wire sensor fixed to the settlement plate (cover not shown). An enclosure box at left houses the reservoir.



The optional portable D Aerator SS6000 Liquid Settlement System De-Airing Unit is designed for quick and simple field deployment and is housed in its own rugged carrying case. It quickly and efficiently returns a Liquid Settlement System to its original de-aired condition.

Once the instrument is installed on the job site, the reservoir is opened to the atmosphere and will begin to absorb gases which will eventually form gas bubbles in the hydraulic lines. These entrained gas bubbles will influence the transmission of line pressures and result in instrument reading inaccuracies.

To address this issue, the RST D Aerator SS6000 Liquid Settlement System De-Airing Unit has been designed to complete a full exchange and de-airing of the water/glycol mixture in an entire Liquid Settlement System in just a few hours, essentially returning the system to its original de-aired state.

D AERATOR SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Power	12 VDC rechargeable battery. 100-240 VAC to 12 VDC charging system with extension cord.
Dimensions	50 D x 40 W x 19 H cm (19.68 W x 15.74 D x 7.48 H in.)
Weight	12 kg

	PRODUCT CATEGORY:
	SETTLEMENT SYSTEMS

Vibrating Wire Liquid Settlement System

The RST Vibrating Wire Liquid Settlement System SSVW105 monitors settlement or heave in soils and different types of man-made structures such as embankments, and earth and rockfill dams. The system consists of a fluid body, reservoir, flexible tubing, and sensor and readout unit.

A vibrating wire pressure sensor is attached to a settlement plate located at the point to be monitored, and connected via two liquid-filled tubes extending laterally to a reservoir located on stable ground. The sensor measures the hydraulic head of liquid between the sensor and reservoir locations. The liquid filled tubes can also be flushed.

> APPLICATIONS	ORDERING	
Preload consolidation monitoring.	ITEM	PART #
Embankment construction control.	Vibrating Wire Liquid Settlement System 70 kpa including Settlement Plate with Cover	SSVW105
Subsidence monitoring.	Vibrating Wire Liquid Settlement System 170 kpa including Settlement Plate with Cover	SSVW105-170
Monitor settlement or heave.	Vibrating Wire Liquid Settlement System 350 kpa including Settlement Plate with Cover	SSVW105-350
> FEATURES	Liquid settlement system vented reservoir	
Tubes ship pre-filled with water/glycol.	SSSP105RV-1. The last number will indicate how many cells required (cell range 1 to 12).	
Pre-tested and calibrated.	SSSP105RV-ENC-### (For best configuration options contact RST)	
> BENEFITS	Enclosure to house Liquid Settlement vented reservoir (Reservoir not included)	
✓ Increase Safety	Cable	
✓ High Accuracy	2x1/4" PE Tubing PVC Jacket Water/Glycol	
✓ High Reliability	Custom enclosure for reservoir and optional data logger	
ORDERING CONSIDERATIONS	De-Aired 60/40 Glycol/ Water Mixture - 1L bottle	
Range of pressure transducer on cells (Based on the expected settlements and vertical distance between cells and reservoirs)	SSSP106M	
Cable and tubing lengths for each individual cells	OPTIONAL	
Number of cells for each reservoir (RST recommends using an additional cell per reservoir to act as a reference cell)	D Aerator SS6000 - Liquid Settlement System De-airing Unit	SS6000
Enclosure type to house reservoirs and loggers as an option	Tubing Splice Kit NOTE: Must de-air system after splicing.	PP0175
SPECIFICATIONS	Cable splice kit for vibrating wire sensors	ELSPLICE4
ITEM	SPECIFICATION	
Standard Ranges	7, 17, 35 m	
Resolution/ Repeatability	0.025% FS	
Sensor Accuracy	0.1% FS	
Temperature Range	-20°C to +80°C	

Saturated extension pipes with quick connect ends are available upon request