SYSTEL
Geotech India Pvt. Ltd.

Water Measuring Weir	SI-WMW-000

The fluid flow measurement in open channels is a widely used geotechnical instrumentation to study losses of water in earthen or concrete dams. The amount of water-loss is a function of the water level in reservoir and depends on the characteristics and behavior of the dam. Measuring the amount of loss of water is a good indicator of Structural conditions and dam operations. Usually water leakages are collected downstream of the dam or reservoir and is diverted into the tank equipped with a weir which is in the extent of reach.

Model	SI-45LS1000	SI-60LS2000	SI-90LS5000
Measuring range	10 l/sec	20 l/sec	50 l/sec
Angle	45°	60°	Rectangular
Opening Size (L x H)	195x235 mm	288x250 mm	350x200 mm
Plate Size (L x H)	490x600 mm	721x700 mm	540x450 mm
Thickness	5 mm	5 mm	5 mm
Material	stainless steel AISI 304		

The main purpose of the weir is to measure the amount of leakage of water from the instantaneous channel selected. To obtain a measure the channel entrusted must have a slope of 1-3% and a well –defined section over a length equal to or at least 10 times the width of the channel, thus downstream of the weir creates a difference and avoids creating the turbulent motions that may affect the water level upstream. The channel must be subjected to periodic maintenance in order to remove any solid materials carried by the current, which can settle and interfere with the flow measurement. The water level at the weir can be measured with a pressure transducer, a level transducer or a staging graph.

PRESSURE TRANSDUCER

The pressure transducer is placed in its protective plastic wrap and placed in the tank of calm at an altitude lower than the threshold of the weir.

Model	Pressure Transducer
Measuring range	1 m of water
Overload	100% FS
Overall accuracy	< 0.5% FS with linear sensitivity factor 0.4% FS
Thermal Compensation Range	-10 ° C +65 ° C
Ouput signal	4-20 mA
power supply	10-32 V DC

LEVEL TRANSDUCER

The level transducer consists of a tubular structure containing a float and, in the upper part, a load cell that detects the weight due to the hydraulic back pressure on the float. It is placed in the pool of calm water and in the vicinity of the weir.

Model	**Level Transducer**
Range	1 m of water
Permissible overload	20% FS
Resolution	1 mm
Overall accuracy	<0.3% FS with linear sensitivity factor <0.2% FS with sensitivity factor polynomial
output signal	4-20 mA
Power supply	12-24 V DC
Sensor material	in aluminum with a stainless steel housing Floating plastic with stainless steel frame

PARSHALL FLUME	
	We manufacture Parshall flumes as per the original design developed in 1922 by Ralph L. Parshall in USA. Our Parshall Flumes are popularly used for permanent flow monitoring installations. Our Parshall Flumes have wide flow ranges, resistance to submersion, simple flow meter calibration and self-cleaning design; thus, making our products the first choice of many engineers. The flume is sized by throat width and conforms to standard dimensions defined by the BIS. Our flumes are ideal for use in sewage treatment plant influent and effluent, industrial process discharge and in irrigation & agricultural runoff. These meet international standard in design, construction and in performance accuracy