

### Operating Principles

The Solinst Tag Line uses a weight clipped to a polyethylene coated, permanently marked, stainless steel wireline or laser-marked PVDF flat tape. The weight provides a simple method to measure the depth to the bottom of a well, or the depth to the top of a backfill sand or bentonite layer.

The Tag Line weight is lowered until the cable/tape goes slack, indicating it has reached bottom. The cable/tape is gently pulled up to remove the slack and the measurement is taken from the top of casing or the Tape Guide measurement point.

The weight clips off the cable or tape, which allows it to be used for other applications, such as bailer, pump, datalogger, or packer deployment.

**Note:** The Tag Line Reel is not recommended for heavy lift applications, but rather it is just meant to be used as a cable/tape deployment and storage device. When the Tag Line is used as a retrieval device, there may be enough strain and tension on the line to damage the reel if not properly operated. It is recommended that the line is wound onto the reel after relieving tension by raising the line manually.

### Using the Tape Guide

1. The Tape Guide has been designed to:
  - Improve accuracy when reading depths and easily obtain repeatable measurements,
  - Prevent cable or tape from being cut by well casing,
  - Allow the cable/tape and weight (bailer, pump, etc.) to hang straight from the side of the well.
2. Feed the cable/tape into and out of the well using the groove in the top of the Tape Guide.
3. For ease of operation the Tape Guide can be used to support the Tag Line reel (small size only). Simply fit the small end of the Tape Guide onto the edge of the well casing (2" or 50 mm dia. or larger).
4. Insert the leg of the Tag Line reel into the hole on the Tape Guide and rest the Tag Line on the side of the well casing.

**Note:** Medium and large reels should be placed on the ground, while using the Tape Guide for protection on sharp well casing edges.

### Routine Care

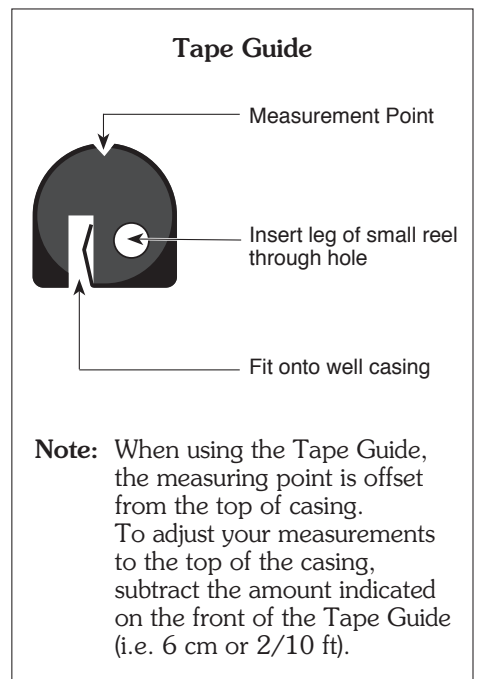
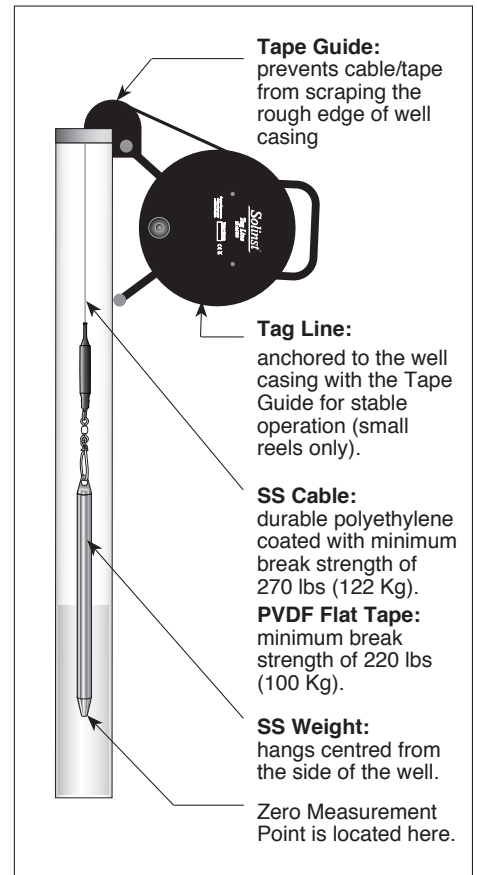
1. After use, the cable/tape should be carefully rewound onto the reel, the weight wiped dry and placed into the weight holder.
2. The weight, cable/tape, and reel can be cleaned with a phosphate free (non-abrasive) detergent and warm water.
3. Use of a carrying case adds to the service life of the Tag Line.
4. Use of the Tape Guide adds to the life of the cable or tape.

### Replacement Parts

The following parts (with instructions) can be provided should the parts become lost or damaged.

1. Weights
2. Reels
3. Replacement cables or tapes
4. Splice kits

**Note:** To store the Tape Guide, simply clip it onto the support bracket located on the back of the Tag Line reel.





## Tag Line Applications

The Tag Line was originally designed to be used during monitoring well construction, but with a weight that is removable, the Tag Line is also useful for many other applications.

### Ideal for measuring:

- The depth to the bottom of a borehole or well
- Depths during well installation
- Sand and bentonite layers when installing a Solinst CMT or Waterloo Multilevel System

### With the tag weight removed, it can be used for:

- Safety support for portable pumps
- Supporting Model 800 Packers during lowering and removal
- Bailer deployment – Model 428 and 429
- Discrete Interval Sampler support line (Model 425)
- Deploying Levelloggers during pumping and slug tests, well profiling with an LTC

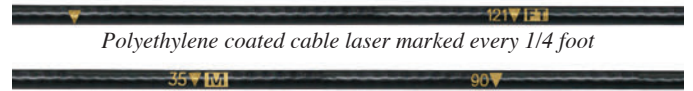
You always know the exact depth of the pumps, bailers, packers, or dataloggers, using the conveniently laser marked cable or tape.



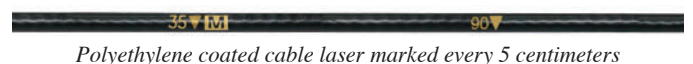
PVDF Tape laser marked every 1/100 foot



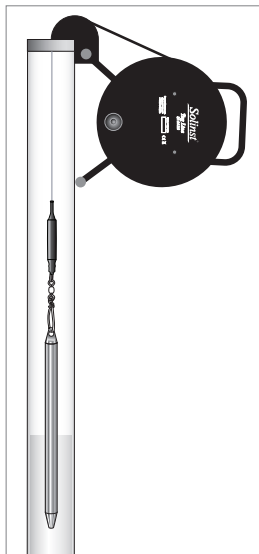
PVDF Tape laser marked every millimeter



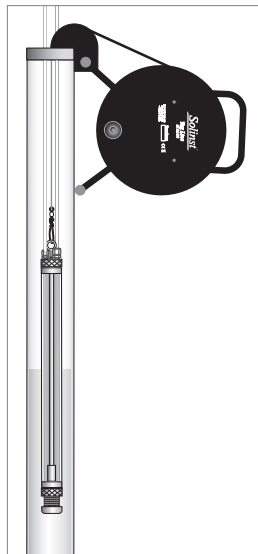
Polyethylene coated cable laser marked every 1/4 foot



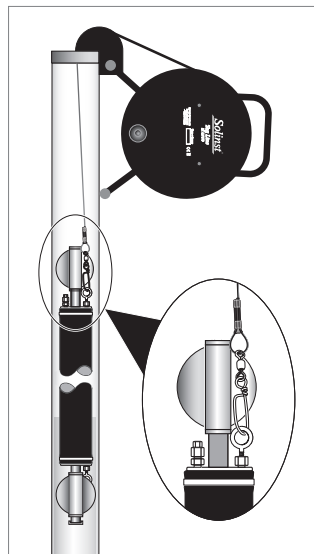
Polyethylene coated cable laser marked every 5 centimeters



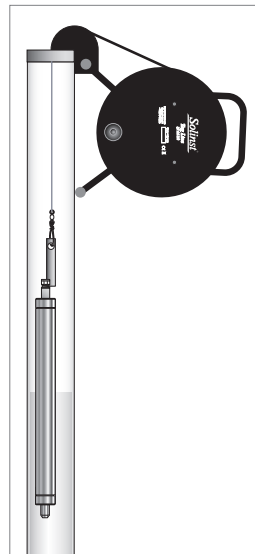
The Tag Line can be used to measure well depths during monitoring well construction



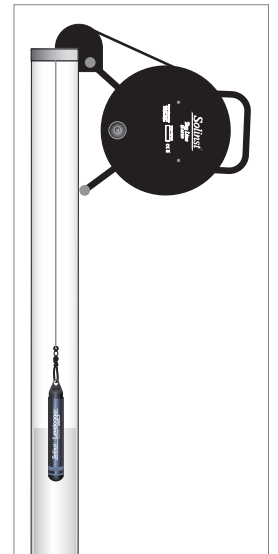
Model 407  
Bladder Pump or  
Model 408  
Double Valve Pump



Model 800  
Low Pressure Packer



Model 425  
Discrete Interval Sampler



Model 3001  
Levellogger

**Note:** The Tape Guide can only be used as reel support for small Tag Line reels. Medium and Large reels should be placed on the ground.

®Solinst is a registered trademark of Solinst Canada Ltd.