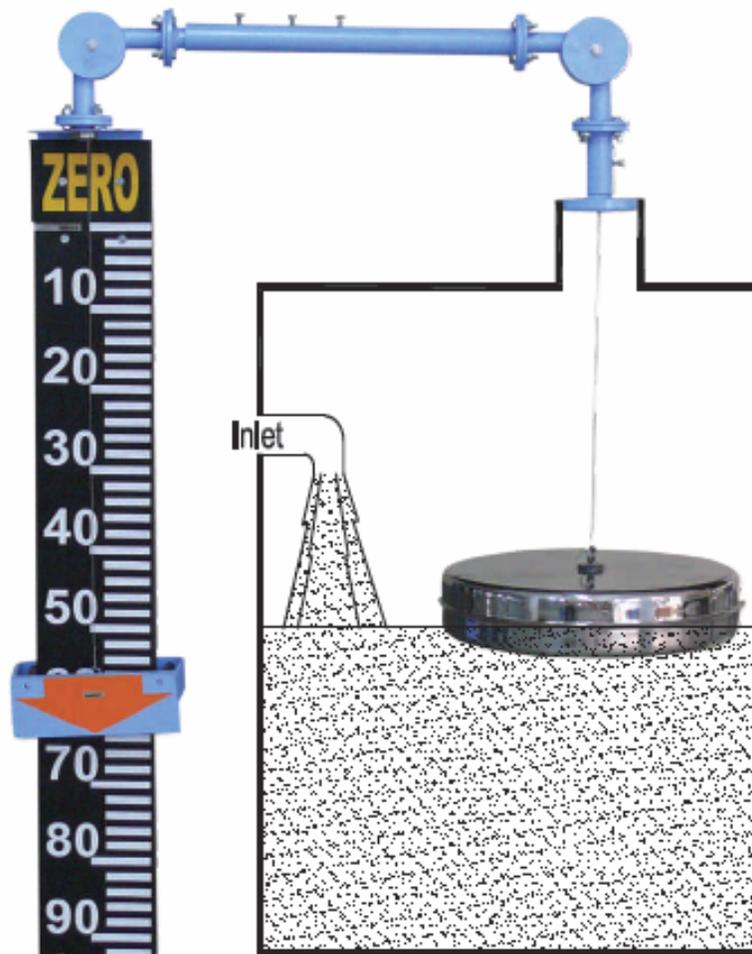


## Instruction Manual

### Float and Board Level Indicator Series 3411LI : FB



### **1. Product Description**

Strataa Float and Board Level Indicator – Mechanical level indicators are widely used for oil tanks, large Acid tanks, where in there is not much pressure i.e. non pressurized tanks based on simple rope and Float principle.

### **2. Warning**

Read all warnings and instructions before performing installation or maintenance. Safety glasses and gloves should be worn at all times when working with or examining water gauge glass and connections.

### **3. Danger**

Improper installation or maintenance of gauge glass and connection can cause immediate or delayed breakage resulting in bodily injury and/ or property damage.

### **4. Installation**

Only properly trained personnel should install and maintain water gauge and connections.

Remember to wear safety gloves and glasses during installation.

Before installing, make sure all parts are free of clips and debris.

Upon unpacking, inspect all components for damage. Check the Strataa nameplate to verify that the specifications of the Float and Board Level Gauge are correct for the operating conditions.

Contact Strataa if you have any questions or encounter any problems.

The number of different types of gauge and valve installations is too great to adequately detail in an installation manual. It is, therefore, the user's responsibility to assure that knowledgeable installation personnel plan and carry out installation in a safe manner. The following procedures are some of the installation guidelines that should be employed.

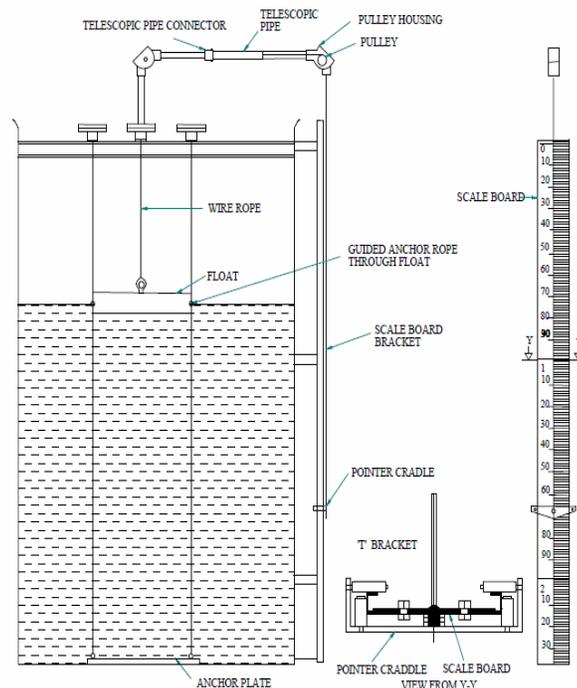
#### **A. Ensure that**

- The interior of the gauge piping is clean.
- No kinks in the wire ropes (cables).
- No noticeable binding friction in the mechanism.
- Installation cleanliness.
- Location of float away from inlet pipes and mixers.

## B. Assembling

1. A schematic diagram of the entire assembly has been provided in this manual.
2. The Stainless Steel float is to be inserted into the tank through the manhole.
3. One end of the Sheave Vessel Connector is flanged and has to be connected to the process flange while the other is screwed and has to be connected to the sheave housing.
4. The Sheave Housing have to be assembled as shown. The telescopic pipe has to be adjusted based on the distance of the process connection flange and the outer wall of the tank. After adjustment tighten the bolts provided on the adjuster union to keep the assembly secure.
5. Scale Board T Bracket will have to be welded on the tank and scale board will have to be bolted using  $\frac{1}{4}$ " BSW x  $\frac{3}{4}$ " long bolts, nuts and washers.
6. Prior to bolting the last Scale Board locate the scale between the two parallel nylon rollers of the pointer cradle assembly.
7. While one end of the wire rope assembly is knotted onto the float the other end is passed through the sheave housings and has to be knotted or crimped in the hole provided on the pointer cradle assembly.
8. Check that the brackets are welded correctly and are in plumb. If out of plumb, then pointer cradle movement will be affected.
9. Anchor plate must be assembled and installed as shown in Figure 1.

FIGURE 1



### **C. Initial Operation**

Initial filling of the tank must be at reduced rate of flow, until the float travels and the indicator operations are verified. This checks that the installation was correctly made and prevents possible damage to the gauge system.

1. Station an observer at the gauge board.
2. Begin filling the tank to raise the float around a meter to 1.5 meters from the bottom.
3. Continue filling the tank to the desired level.
4. Hand gauge the product and compare the measurement with the Pointer Cradle. If they do not coincide, adjust the cable at the pointer cradle.

### **D. Normal Operation**

When the tank is full, the indicator will be at the bottom of the gauge board. As the tank is emptied the float will fall and the indicator will rise.

### **USE AND CARE**

#### **Do not's**

- DO NOT use scale if it contains any scratches, chips, or any other visible signs of damage.
- DO NOT subject float to bending or torsional stresses.
- DO NOT over tighten any component.
- DO NOT exceed the recommended pressure of the gauge.

#### **Do's**

- DO verify proper gauge has been supplied.
- DO examine gauge and packing's carefully for damage before installation.
- DO inspect the gauge daily, keep maintenance records, and conduct routine replacements.

### **Maintenance**

Examine the gauge regularly for any signs of clouding, scratching, erosion, or corrosion. This will help establish the routine inspection and routine replacement schedules.

### **Inspection**

Examine the surface of the gauge for scratches, corrosion, chips, cracks, surface flaws or nicks.

### **Storage**

Keep the gauge in original packing until ready to install.

**How to order - 3411LI : FB - S - B21 – T - \*Range -AP**

**BASIC MODEL 3411LI**

CODE	CONSTRUCCION TYPE	CODE	CONSTRUCCION TYPE
<b>G</b>	GUIDED	<b>U</b>	UNGUIDED (Standard)

CODE	MATERIAL OF PROCESS CONNECTION
<b>CS</b>	CARBON STEEL
<b>SS3</b>	AISI 304 SS
<b>SS</b>	AISI 316 SS

CODE	PROCESS CONNECTION	CODE	PROCESS CONNECTION	CODE	PROCESS CONNECTION
<b>B09</b>	½" 150# RF	<b>B21</b>	1" 150# RF (Standard)	<b>B39</b>	2" 150# RF
<b>B10</b>	½" 300# RF	<b>B22</b>	1" 300# RF	<b>B40</b>	2" 300# RF
<b>B11</b>	½" 600# RF	<b>B23</b>	1" 600# RF	<b>B41</b>	2" 600# RF
<b>B15</b>	¾" 150# RF	<b>B33</b>	1 ½" 150# RF	<b>B51</b>	3" 150# RF
<b>B16</b>	¾" 300# RF	<b>B34</b>	1 ½" 300# RF	<b>B52</b>	3" 300# RF
<b>B17</b>	¾" 600# RF	<b>B35</b>	1 ½" 600# RF	<b>B53</b>	3" 300# RF

CODE	MATERIAL OF FLOAT
<b>SS3</b>	AISI 304 SS
<b>SS</b>	AISI 316 SS (Standard)
<b>SSL</b>	AISI 316L SS
<b>PP</b>	POLYPROPYLENE

**RANGE**

XX Please specify in mm (e.g Write 2650 for 2650 mm)  
(this indicator will be supplied from 1500 mm to 20000 mm)

CODE	INSTALLATION TYPE
<b>OG</b>	OVERGROUND (Standard)
<b>UG</b>	UNDERGROUND

CODE	OPTION
<b>AP</b>	ANCHOR PLATE OF CS

Note: Specifications and dimensions given in this product manual represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.