

ADDITIONAL INFORMATION REQUIRED for LEVEL MEASUREMENT

Level Measurement:

- Standing/hanging container: (hanging container up to 60 ton total weight)
The measuring unit is applicable for evenly distributed amounts (liquids)
The dimensions in the distance have to be equal to each other and equal to the center

3 point seating, shape of container; symmetric

1 force measuring unit, 2 fixed bearings

1/3 is measured

The indicated value is 3 times the measured value

3 point seating, shape of container; symmetric

3 force measuring units

Values are measured under each container foot

4 point seating, shape of container; symmetric

4 measuring units

Values are measured under each container foot

Weight of Container: _____

Nominal capacity, nominal load: _____

Filling material: _____

Weight density: _____

Lying containers:

The measuring unit is applicable for evenly distributed amounts (liquids)

Important: the containers must have a symmetric shape

3 point seating, shape of container; symmetric

1 force measuring unit, 2 fixed bearing

1/2 is measured

The load is distributed 50/50

4 point seating, shape of container; symmetric

4 force measuring units

Values are measured under each container foot

Weight of Container: _____

Nominal capacity, nominal load: _____

Filling material: _____

Weight density: _____

Standing/lying containers for bulk material:

The value indicated is calculated using 3 or 4 measuring values without a fixed bearing. The measuring values are transferred to a processing unit with tara/zero suppression. All load cells are linked to an indicator with the output corresponding to the sum of all measuring values and being displayed

3 point seating

Container with 3 force measuring units

Values are measured under each container foot

4 point seating

Container with 4 force measuring units

Values are measured under each container foot

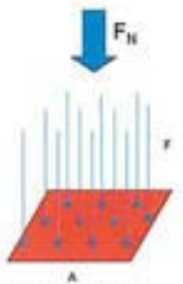
Weight of Container: _____

Nominal capacity, nominal load: _____

Filling material: _____

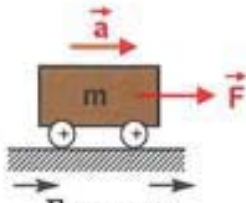
Weight density: _____

Additional features required: _____



$$P = F_N / A$$

Pressure = force/area



$$F = m \cdot a$$

Force = mass * acceleration

DEFINITIONS

Pressure – the force acting on a surface divided by the area over which it acts. *Symbol p*

Force – a physical influence that tends to change the position of an object with mass, equal to the rate of change in momentum of the object. *Symbol F; Defined $F = m \cdot a$*

Area - the extent of a planar region or of the surface of a solid measured in square units.

Gravity – A force attracting massive bodies towards each other that is proportional to the product of their masses and inversely proportional to the square of their separation.

Newton - an SI unit of force equivalent to the force that produces an acceleration of one meter per second per second on a mass of one kilogram *Symbol N*

Ton - an imperial unit of weight, equal to (2,000 lb) in the United States (a.k.a. **short ton**)

Metric ton – a unit of weight equal to 1000 kg

Long ton – an imperial unit of weight, equal to 1016 kg (2,240 lb) in the United Kingdom

Nominal Load – The load/force that the load cell is constructed for

Nominal Temperature Range – The temperature range where the measuring instrument complies with its specifications

FORCE UNITS CROSS REFERENCE CHART							
lbs-force	newton	kg-force	kN (kilonewtons)	ounce-force	tons-force (short)	tons-force (long)	tons-force (metric)
1	4.4482	0.4535	0.0044	16.0000	0.0005	0.0004	0.0004
0.2248	1	0.1019	0.001	3.5969	0.0001	0.0001	0.0001
2.2046	9.8066	1	0.0098	35.2739	0.0011	0.0009	0.001
224.8089	1000	101.9716	1	3596.9431	0.1124	0.1003	0.1019
0.0625	0.2780	0.0283	0.0002	1	0.00003	0.00002	0.00002
2000	8896.4432	907.1847	8.8964	32000	1	0.8928	0.9071
2204.6226	9806.65	1000	9.8066	35273.962	1.1023	1	1.0160
2204.6226	9806.65	1000	9.806	35273.962	1.1023	0.9842	1

