

Load Cell and Weighing Assembly Solutions
for Silo, Vessel and Process Weighing

A large, stylized graphic composed of overlapping red and blue geometric shapes, resembling a large 'Z' or a series of steps, positioned on the right side of the page. The background is a blue-tinted industrial scene with various pipes, tanks, and machinery.

Industrial Weighing



Thames Side

Company Overview



Quality, reliability, innovation and outstanding customer service have made Thames Side Sensors Ltd a worldwide leader in Industrial and Process Weighing load cell technology.

Now part of the family owned Tecnicas group, among the top five companies in global load cell manufacture, Thames Side Sensors Ltd has its origins in the 1970's. With headquarters in the UK and offices, sales partners and customers in over 60 countries in every kind of process industry we have a truly global presence. Over 30 years of supplying the world's process industries in sectors as varied as offshore, cement, food, pharmaceuticals, minerals, metals, plastics and others has given us an un-rivalled, extensive, applications knowledge which allow us to properly advise customers on the correct selection and application of our products.

Our state of the art manufacturing facilities are located in Barcelona, Spain with an additional factory located in Morocco. All of our load cells are manufactured under strict quality control with full traceability and each and every one is individually tested to ensure their performance. Components and raw materials are sourced from world class manufacturers with an emphasis on quality. Thames Side Sensors Ltd is fully committed to quality and has SO9001:2008 certification.

Customer satisfaction with both the products and service we provide has always been the key to the success of our business and our company goals and objectives are geared around this.

We carry a significant stock at our facilities in the UK ensuring rapid delivery times when required.

Our confidence in our manufacturing methods allows us to offer a 5 years warranty against manufacturing defects on the majority of our products.

Thames Side Sensors provides the ultimate in load cells and loading assemblies for tank, vessel, silo, process and truck/axle weighing applications as well as for incorporation into many types of process machinery. Our mounting assemblies, which are designed in accordance with Eurocode 3 practices, form a crucial part of the weighing system. Use of the latest Finite Element Analysis (FEA) software pinpoints the optimum design of assembly for correct operation and rigorous manufacturing and test procedures ensure total reliability under the harshest of conditions. These innovative mounting assemblies provide a simple but complete mechanical link between the weighing structure and support base, removing the need in many applications for additional tie bars or other restraints. Our patented designs of mounting assembly, LeverMount® and MasterMount®, allow rapid installation and removal of the load cell without jacks or special tools even when vessel is full, providing major savings on installation costs. Options of special anti-corrosive load cell coatings to provide additional protection in extreme environments where stress corrosion could occur and high temperature load cells for operation up to 150C are just a few of examples that set us apart from the rest.



Thames Side Sensors typically sends around 200 shipments to customers on all five continents every month and operates to the latest Incoterms rules. Our Logistics staff has vast experience in export shipping requirements including the special documentation and certification sometimes required for certain destinations. They also ensure that we use robust packaging that conforms to both international regulations and individual customer requirements.

We work with quality experienced global shipping companies who have a focus on 'on time' delivery and we can arrange shipment by road, sea or for urgent requirements, by air. For those customers who have their own preferred logistics partners, we provide an efficient collection service. Special third party inspections and witness tests such as SGS, ABS and others can be accommodated as required.

Same day shipments and next day timed delivery can be made for urgent orders in the UK, with European shipments often available on a next day delivery, depending on location.

In 2011 we established a 100% owned subsidiary in India to ensure that we could fully meet the demands of our existing and potential customers in one of the major world growth markets. Thames Side Sensors India Pvt Ltd has its offices in Mumbai and has locally available stock and commercial/technical customer support functions. Make Thames Side Sensors Ltd your preferred partner for Industrial and Process weighing load cells and we promise to provide technically superior, quality products at a competitive price, delivered on time.

SKT CAP SCREW
M8 x 55 LONG
WASHER PLAIN M8
TORQUE TO 35Nm.





Whilst not strictly necessary for the majority of vessel weighing applications, many of our load cells have OIML certification for use in legal for trade weighing applications.



Most of our load cells have ATEX certification for operation in all dust and gas zones. Several products have special ATEX certification for all dust zones and gas zone 2 which allows their use without safety barriers, saving substantial cost. We would be pleased to advise customers on the correct choice of load cell and certification to suit their intrinsically safe applications.



Environmental Protection

In addition to the IP68 rating, many of Thames Side Sensors' load cells also meet IP69K protection which makes them ideal for use wash down areas or on silos exposed to heavy rainfall.

High Temperature Applications

Utilising high temperature electrical components and PTFE cable the majority of Thames Side Sensors' load cell designs can be specially manufactured for operation in environments up to 150C.

Lightning Protection

Load cell models used for weighbridges/truck scales have in-built lightning surge arrestors as standard. A version of our load cell junction box is also available with surge arrestors for applications where lightning strikes are a risk, such as silo installations in remote or tropical areas.

Parylene Coating

To provide additional protection in extreme environments where stress corrosion could occur, our load cells can be provided with a special transparent 'Parylene' coating to give excellent resistance to aggressive chemicals. Parylenes are almost completely unaffected by solvents, have low bulk permeability and easily pass a 100 hour salt spray test. They also have good thermal endurance and can perform in air without significant loss of physical properties for 10 years at 80 degrees Celsius.



Offshore and Marine

Over 3000 high capacity load cells and special mounting assemblies have been delivered for mud weighing systems on oil rigs and drill ships in the last 5 years making Thames Side Sensors by far and away the leading world-wide manufacturer of load cells for offshore applications in the oil industry. Other applications in this field include load pins for winches and cranes and weighing systems for gas cylinders used for flare ignition.



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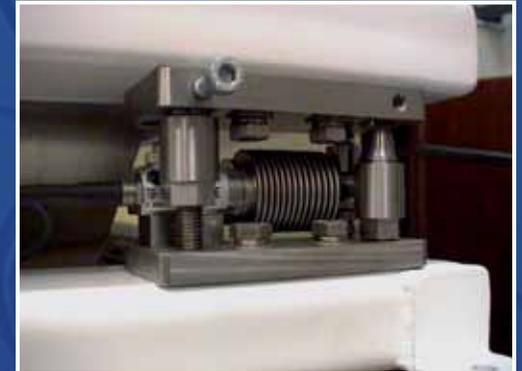
Process Industries

Around one third of the world's cement production is weighed using Thames Side load cells, with thousands of high capacity load cells installed world-wide on cement silos as well as those used in mixing and batching plants and feeding equipment. Food, pharmaceutical and chemical industries are key sectors due to our expertise in load cells for harsh environments together with standard all stainless steel construction of both load cell and mounting assembly. Other industries served include biomass, paint, plastics, minerals and metals processing where our high temperature load cells are indispensable.



Machine Building

Thames Side Sensors load cells find many applications in the manufacture of specialised machinery which incorporates static or dynamic weighing as part of the process. This includes materials handling equipment such as weigh feeders, belt weighers and bag filling/emptying equipment as well as form-fill-seal machinery, check-weighers and rotopackers.



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Weigh Bridges, Axle Weighers and Weigh in Motion Systems

Customers world-wide appreciate the technical performance, reliability and quality of our weigh bridge load cells which incorporate lightning protection as standard. Both analogue and digital load cells, the latter offering an open protocol so customers are not tied to one supplier, are available. A special version of our T95 load cell is widely used in high accuracy weigh-in motion (WIM) and axle weighing systems.



Load Cells and Weighing Assemblies



LA66

Anti-vibration assembly with bending beam load cell

10 to 300kg capacity

Stainless steel construction

OIML C3 approved stainless steel load cell

IP68, IP69K

ATEX certification for dust and gas

Designed for platform, hopper and tank weighing, bag fillers, conveyors and belt weighers



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LA350

Anti-vibration assembly with shear beam load cell

300 to 5000kg capacity

Stainless steel construction

OIML C3 approved stainless steel load cell

IP68, IP69K

ATEX certification for dust and gas

Designed for platform, hopper and tank weighing, bag fillers, conveyors and belt weighers



LeverMount[®]

Patented cast 316 stainless steel mounting assembly

10 to 5000kg capacity in 3 body sizes

Unique and secure load cell installation/removal without jacks

OIML C3 approved stainless steel load cell

IP68, IP69K

ATEX certification for dust and gas

Designed for process weighing applications, particularly food and pharmaceutical





T20

Low profile, compact mounting assembly

2500 to 30,000kg capacity

Stainless steel or zinc plated assembly

Stainless steel compression load cell

1000 division accuracy

IP68, IP69K

Designed for level measurement applications as a reliable alternative to radar, ultrasonic and other level sensors

T21

Low profile stainless steel mounting assembly

10000 to 30,000kg capacity

Stainless steel compression load cell

3000 division accuracy

Built in jacking facility

IP68, IP69K

Designed for higher capacity applications in food and pharmaceutical

T95

Stainless steel or painted steel assembly, operating in tension

2,000kg to 20,000kg capacity

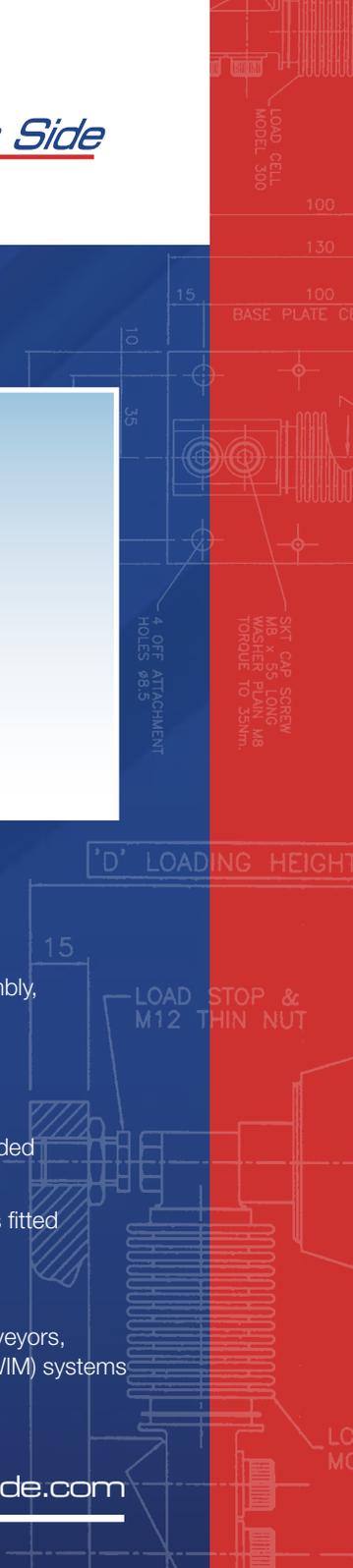
Self centering design

OIML C3 approved stainless steel folded shear beam

IP68, IP69K, lightning surge arrestors fitted to WIM models

ATEX certification for dust and gas

Designed for mixer applications, conveyors, axle weighing and weigh in motion (WIM) systems



Load Cells and Weighing Assemblies



MasterMount®

Patented cast steel mounting assembly

2,000 to 30,000kg capacity

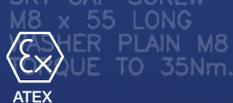
Unique and secure load cell installation/removal without jacks

Stainless steel double-ended shear beam load cell

IP68, IP69K

ATEX certification for dust and gas

Designed for vessel, tank and silo weighing



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VC3500

Low profile mounting assembly

30,000 to 200,000kg capacity

Painted steel or stainless steel construction

Stainless steel double-ended shear beam load cell

IP68, IP69K

ATEX certification for dust and gas

Designed for large silos, vessels and tanks



T30

High capacity self-aligning mounting assembly

100,000 to 600,000kg capacity

Stainless steel column load cell

Integral mount with anti-lift and allowance for vessel expansion

Compact footprint

IP67

Designed for large silos and tanks



T34 Silo mount

- High capacity mounting assembly
- 15,000 to 1,000,000kg capacity
- Stainless steel rocker column load cell
- Zinc plated mount
- IP68, IP69K
- Inbuilt lightning protection
- ATEX certification for dust and gas
- Designed for vessels, tanks and silos



T34 Weighbridge

- Self aligning assembly, with stainless steel mounting cups
- 15,000 to 60,000kg capacity
- Stainless steel rocker column analogue or digital load cell
- OIML C4 approved
- IP68, IP69K, inbuilt lightning protection
- ATEX certification for dust and gas
- Designed for weighbridges/truck scales

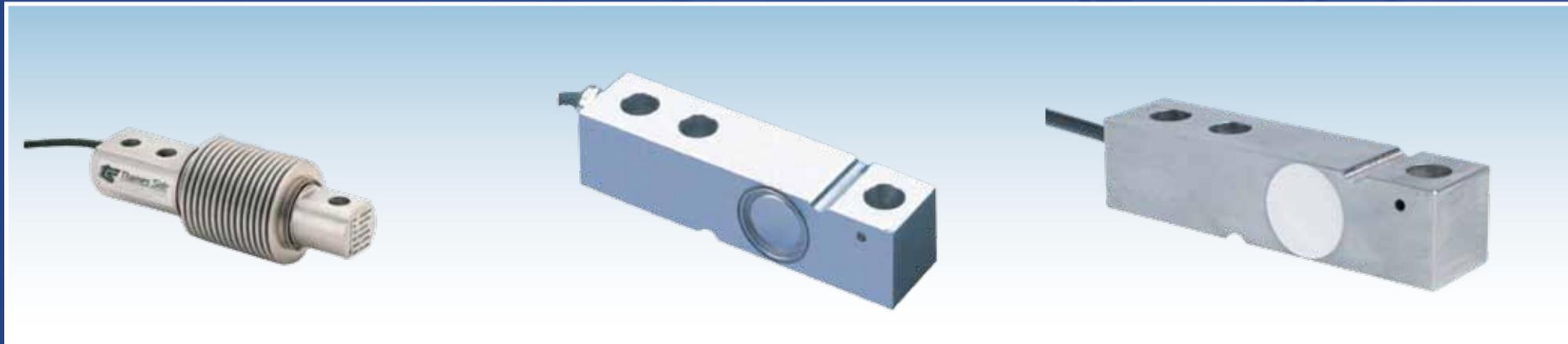


Load Pins

- Custom designs to suit the application
- 100 to 1,000,000kg capacity
- Down hole or externally gauged
- Optional built in 4-20mA output
- Stainless steel
- ATEX variants
- Designed for cranes, winches, shackles and other load monitoring applications



Load Cells



T66

Bending beam load cell

5, 10, 20, 30, 50, 75, 100, 150, 200, 250, 300, 500kg capacities

Fully welded stainless steel construction

OIML C3 approved

IP68, IP69K

ATEX certification for dust and gas



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350

Shear beam load cell

300, 500, 750, 1000, 1500, 2000, 3000, 5000kg capacities

Fully welded stainless steel construction

OIML C3 approved

IP68, IP69K

ATEX certification for dust and gas



350n

Shear beam load cell

300, 500, 750, 1000, 1500, 2000kg capacities

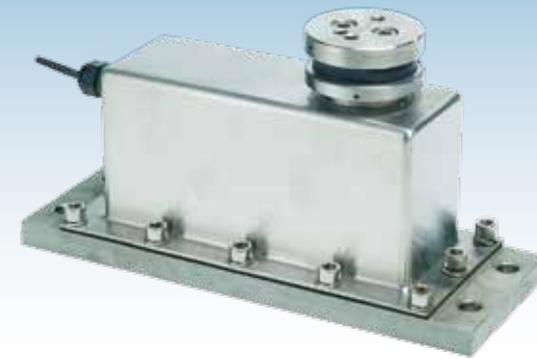
Nickel plated alloy steel construction

OIML C3 approved

IP66

Optional load feet





650

S beam tension/compression load cell

250, 500, 1000, 2000, 5000, 7500kg

Fully welded stainless steel

OIML C3 approved

IP68, IP69K

ATEX certification for dust and gas



T61

S beam load cell

50, 100, 250, 500, 1000, 2000kg

Can be used in tension or compression

Alloy steel, potted

IP67

Optional rod end bearings

T16

Viscous damped load cell assembly for dynamic weighing

5, 7.5, 10, 15, 20, 35kg

Stainless steel housing with venting option for washdown applications

Double bending beam single point load cell

OIML C4 approved

IP66



Instrumentation



Junction Boxes

- Options for 4 or 8 load cells, 4 or 6 wire connection
- Standard version in ABS plastics or stainless steel
- ATEX version in aluminium
- Version with in-built lightning protection
- IP66
- Optional high quality polyurethane 4 or 6 wire cable for connection to instrumentation



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Smart

- Stainless steel construction
- High resolution, 100,000 external divisions
- 7 digit, high brightness LED display
- 3 variants with optional analogue/digital outputs
- IP65
- Ideal for vessel, tank and silo weighing
- ATEX version available for zones 2, 21 and 22



DP100

- Cost effective general purpose indicator
- RS232 communications
- 6 digit LCD display
- Battery or 9vDC operation
- 5v excitation for 4 350 ohm load cells
- High resolution



Matrix II

- Stainless steel enclosure
- Alpha-numeric indicator with graphic monochrome display
- RS232/485 and Ethernet communications
- Supports up to 8 analogue or 16 digital load cells
- Calibration and configuration via keyboard input
- OIML R76 and EN 45501 approved, ideal for truck weighing



R400

- Tough ABS construction, optional stainless steel
- 100,000 divisions
- Modular design with versions for batching/filling, truck weighing, WIM, general purpose
- RS232/485 built in with many input/output options
- Ethernet/Profibus support
- IP65

X320

- Tough ABS construction
- RS232 communications
- Trade approved 4000 divisions
- Built in check weigh function
- AC, DC and rechargeable NiMH battery options
- IP69K

Instrumentation



XT950

- Universal load cell amplifier
- 4-20mA and 0-10v outputs
- Surface mount ABS case
- Internal 4.5 digit display
- 10v excitation for up to 6 load cells
- IP65

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XT1500

- Panel mount indicator, DIN 72 x 72mm
- 4.5 digit LED display
- 10v excitation for up to 6 load cells
- AC or DC versions
- Analogue outputs and RS232/485 communications
- IP65

SGA

- Cost effective load cell amplifier
- ABS case with cable glands
- 10v excitation for up to 4 load cells
- User selectable analogue outputs set by on-board switch
- AC or DC options
- IP65

Weighing Assembly Selection Guide

Load Cell Type	LA66	LA350	LeverMount	T20	T21	T95	MasterMount	VC3500	T30	T34
Capacity kg										
10	•		•							
20	•		•							
50	•		•							
100	•		•							
200	•		•							
300	•	•	•							
500		•	•							
1,000		•	•							
1,500		•	•							
2,000		•	•			•	•			
2,500				•						
3,000		•	•							
3,500										
5,000		•	•	•		•	•			
10,000				•	•	•	•			
15,000							•			•
20,000				•	•	•	•			•
30,000				•	•		•	•		•
40,000										•
50,000								•		
60,000										•
75,000								•		
100,000								•	•	•
150,000								•		
200,000								•	•	•
300,000									•	
400,000									•	•
600,000									•	•
800,000										•
1,000,000										•
ATEX	•	•	•			•	•	•		•
OIML	•	•	•			•				•
Painted						•	•	•	•	
Zinc Plated				•				•		•
Stainless	•	•	•	•	•	•		•		

Made to Measure



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