

# High Accuracy Tank Scale Consistently Rejecting Vibration

**Thailand's Minor Dairy Limited has recently put into operation a brand new METTLER TOLEDO tank scale increasing reliability and high throughput.**



Minor Dairy Limited is a subsidiary of The Minor Food Group a leader in the world of food manufacturing, where in Thailand it holds a market leader position for premium ice cream business, known as SWENSEN'S.

Due to the well-known good taste and great quality of SWENSEN'S premium ice cream, raw material control is a critical point in order to assure consistency and high throughput of production. Minor Dairy Limited proposed to install a tank scale system to accurately measure raw material used in each batch. The objectives were to achieve a higher level of accuracy than the old system, eliminating vibration caused from production process agitator, and the need to com-

ply with international food regulations such as GMP and HACCP. Minor Dairy Limited's most important concern was after sales service.

## The solution for a sensitive production process

After demonstrating the benefits of METTLER TOLEDO tank scale components and services, Minor Dairy Limited took the final decision to implement two sets of IP68 protected FlexMount® weigh modules with an IND560 process weighing terminal and a Scoreboard (large display module). Additionally, flexible hoses were installed into the existing pipe system ensuring maximum tank scale accuracy – one of SWENSEN'S main requirements.

With its IP69k stainless steel housing, the IND560 weighing terminal is the perfect match for a tank scale process weighing application in the food industry. The extremely high A/D conversion rate of 366 readings per second is combined with proven TraxDSP™ filtering to make sure that the tank scale consistently provides fast and precise weighing results even in difficult vibrating environments. Mr. Songwut Reongkosum, Factory Engineering Manager, concludes: "The METTLER TOLEDO system specialists made a big effort to understand our requirements and met them all to our complete satisfaction. With the service contract we now have the safety we require to run our production smoothly."





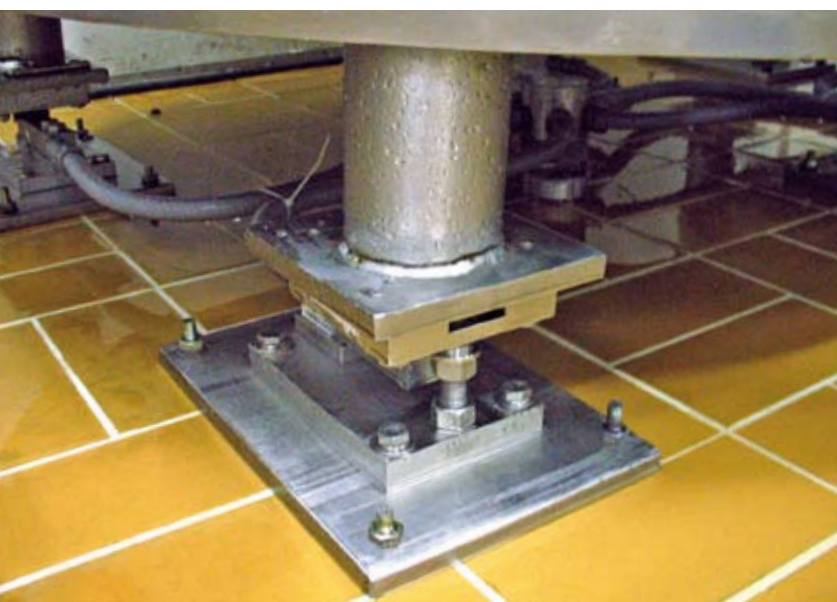
TraxDSP™ is a patented filter design that practically eliminates environmental noise and vibration to provide stable weights.

#### Fast facts: IND560 Process weighing terminal

- Display: Active VFD dot matrix, SmartTrac™ over/under display
- Alibi memory
- Extremely high A/D conversion rate of 366 readings per second
- TraxDSP™ supreme noise and vibration filtering
- Panel-mount and harsh environment versions, IP69k
- Digital I/O: 12 in/18 out
- Interfaces: RS232, RS485/422, Profibus® DP, DeviceNet™, Allen-Bradley™ RIO, Ethernet, Digital I/O, 4-20mA and 0-10V analog output



Protected against submersion



#### Fast facts: FlexMount® weigh module

Hermetically sealed stainless steel IP68 load cell – the right choice for hygienic sensitive areas

- Capacity range 110kg – 20.4t
- 3000e OIML, 5000d NTEP
- Top plate rigidly located for easy installation
- Uplift protection
- Large range of thermal expansion/contraction possible
- Stainless steel mounting hardware
- Global approvals standard on every load cell

#### Key Benefits for Minor Dairy Limited

- High accuracy tank scale
- Accurate results even in difficult environments with vibration
- Standard regulation compliance as GMP
- Safety through service contract