

## Mobile weighing on the move

DIGI SENS has managed to make sensitive measurement technology also available in a tough environment. We have ensured that today's refuse disposal is easier, more reliable and fairer.

### More Fairness in Waste Disposal

Today the majority of refuse-collection vehicles are equipped with weighing devices, to record and invoice the quantity of refuse at the source. DIGI SENS delivers both on-board and catch-weighing systems in different variants.

With the catch-weighing systems for the individual weight measurement of single containers DIGI SENS rapidly became market-leader in Europe und North America.

Our catch-weighing software-POLYPHAG guarantees easy operation of the weighing system, thanks to continuous development based on years of application experience.

### Safety on wheels

Our axle weighing system DYWA is built into the road. It permits fully automatic, calibratable weighing while the vehicle drives slowly across it.

DIGI SENS sensors are also very well suited for precise weighing of railway wagons.

Owing to their physical characteristics DIGI SENS measuring systems can be easily retrofitted.

Even with the railway weighing system this is possible without cutting out a section of rail.

Wherever DIGI SENS technology is used it ensures better transparency, saves resources and gives more security.



Determine automatically the exact tipping weight in any position.

More transparency in rail transport with railway weighing systems.



More than 100.000 shelf weighing locations are in service all over the world.

e-nventory.NET delivers data from stores distributed all over the world.



Calibration: here every sensor receives the finishing touch.

Be clear on the loading with a DYWA axle weighing system.



Make vehicles safer with intelligent sensors.



e-nventory monitors anything you can weigh.



With e-nventory there is no blockage in supplies.



A worker retrofitting a silo with weighing technology from DIGI SENS.



Accelerometer for correct weighing of objects in motion.

## e-nventory® – Trust the stocks

The "e-nventory® principle": Measure changes in stock physically, instead of estimating them from scans or booking entries. Management of all types of store becomes simpler and absolutely reliable.



### Intelligence in the Storeroom!

Every stores location is equipped with special DIGI SENS sensors. The measuring values are requested from a local server via a bus cable or by wireless. Then the data (number of pieces or actual weight) is sent to a central server.

There the data is processed and made available for evaluation to the users, who are managing stores all over the world. Standard interfaces allow easy incorporation of e-nventory into the existing material administration or ERP-systems.

### Material administration – automatic, reliable, simple

DIGI SENS has developed around the basic "shelf with weighing system" an extensive, comfortable system for parts management. With e-nventory, C-parts, bulk materials, liquids, subassemblies and semi-finished products can be automatically managed.

Three parameters are required per stores location: minimum inventory, re-ordering batch size and lead time.

e-nventory is then in a position to manage the stores autonomously and independently of the actual order situation.

With this system companies can manage their inventories at customers' premises (Vendor managed inventory), trim their consignment store and optimise their own production logistics.

In shelving systems and on silos DIGI SENS sensors prove their superiority.

They measure accurately for years on end and are intrinsically safe.

e-nventory ensures transparency, also for bulk materials.



## Safely up and down

As a result of the development effort for our customers we offer ever simpler and better priced components, which perform remarkably well in many different fields.

### An ingenious principle

Thanks to its accuracy and solidity DIGI SENS technology is an attractive alternative to conventional load cells. It suffices to measure the mechanical strain in a structure in order to deduce the forces acting and thus to obtain the weight.

The construction, the installation and the maintenance of such systems are very easy.

The "indirect load measurement via structural deformation" is convincing on account of its much better cost effectiveness than conventional systems.

### Elegant Solutions

DIGI SENS measuring systems have been used with success for many years in lifts. Neither a load cell nor a double floor is required.

A simple sensor guarantees optimum performance and safety by precise determination of the weight.

The precise measuring data also ensure that there is no tripping hazard at the doors when the lift stops.

DIGI SENS is in a position to simulate customer problems "in house", to test under real conditions and offer the customer a fully-proven solution

DIGI SENS inside: you can rely on our OEM components.



Monitor the strain in any structure with the sensor KL66. This includes bridges, cranes, machines, tanks, lifts and vehicles.



Intelligence to the mounting foot: the precision wedge with a built-in high-resolution load cell.



Integrated measurement electronics takes care that machines are levelled perfectly.



Swiss Precision – reliable signals for a lifetime.

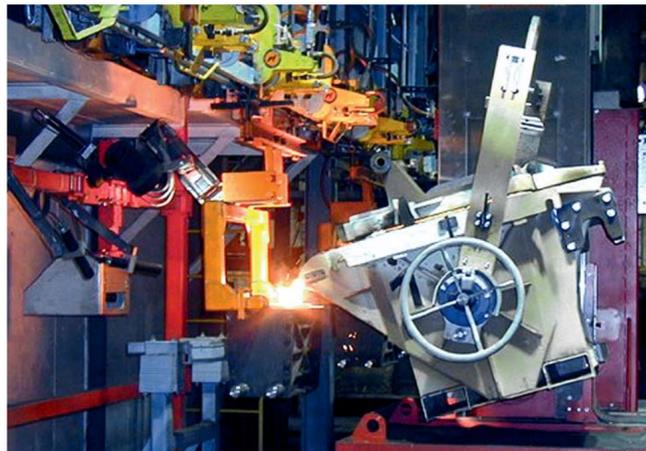
## Everything flows – perfectly weighed

Our measuring and evaluation systems supply machines and installations with reliable data. This raises efficiency and reduces costs.



DIGI SENS sensors indicate to the driver when the refuse container reaches the weight limit.

DIGI SENS sensors supply the data, so that brake discs, axles, turbochargers and turbine housings are produced with consistent quality, while saving raw materials and energy.



### Tuning-Kit for technical processes

In numerous industrial applications DIGI SENS technology allows processes to be optimised. When casting for example, it is important above all that the mould is dependably filled. Multiple load cells and a highly accurate inclinometer send data every few milliseconds to the casting robot in order to dose the melt precisely.

The DIGI SENS measuring principle is always superior to all others when it comes to short measuring times linked to high precision. The DIGI SENS conveyor belt weighing system is the key to more throughput in packaging machines, thus ensuring a decisive competitive advantage.

### A complete package

Not only in sensor technology does DIGI SENS tread new paths. Also in our signal processing computers newly developed algorithms are applied, e.g. for the exact counting of parts with differing unit weights.

The evaluation electronics is designed to work reliably under extreme service conditions. Our systems make the operator's work easier and allow him to achieve higher performance.



Measurement on the moving conveyor belt – DIGI SENS sensors monitor the weight of every portion.



What we have already achieved motivates us to find even better solutions.



The pallet weighing system can also cope with heavy loads without jack-knifing.



Every cell is calibrated and freely interchangeable at any time without re-calibration of the whole installation.



Everything speaks for DIGI SENS

## New Application Fields in View

Our industrial customers set us new challenges every day, which we gladly accept. From DIGI SENS you receive tailor-made solutions with a measurable benefit.

A fervent engineer:  
Martin Lustenberger,  
founder and CEO  
of DIGI SENS AG.

### Partner for Industry

In the beginning there was the sensor. In the course of time system solutions were developed for a variety of applications. During every project our development team, consisting of engineers, physicists, technicians and mechanics always keep their eyes fixed on the end-customer.

Our motivation is to find for every task an elegant solution, which is sustainable, economic and respectful of the environment.

### Marketable Products

With its simple to use and robust systems DIGI SENS rapidly became market-leader for dynamic catch-weighing systems in Europe and North America.

Since their introduction on to the market in the year 2000 our systems for automating stores logistics ensure higher reliability and a remarkable trimming of stocks.

### Committed to Traditional Values

The home of the firm DIGI SENS is in Murten.

Here, in the Swiss "watch belt", precision and quality are well-established. Even if we take advantage of help from selected partners from all over the world for the production of certain components, final assembly and calibration of our systems remain exclusively in our hands.

Partnership without and within, this is what motivates our employees and what our customers have appreciated all along.



Partner for Industry

## We put our weight behind you

We see our mission in logging weight so as to measure stocks and material flows of all kinds. By optimising processes we help to cut costs and protect the environment.



Development, final sensor assembly and stores are in Murten.

Head of development Daniel Kneubühl in discussion with head of production Kurt Binggeli (left to right).



They stand for quality: members of the production staff.



Our sales and marketing manager Jürg Härtli in discussion.



Mounting a sensor on to a lorry chassis for tests.

### Ever better

Our oscillating-wire sensor always plays a leading role in all the projects.

In a continuing evolutionary process we have developed the measuring principle to its present maturity. Today our applications technicians can draw on a multitude of proven components.

Even so, almost every project presents us with a new challenge. In this way we get better every day.

### Solid Partners

With increasing complexity of the products, demands on development, production and service increase. DIGI SENS identified very early on the areas that form the core business of the company. For everything else we have competent partners all over the world.

In that way we stay in control of what sets us apart and are still able to react rapidly to changes in the market.

### Networked

We are the weighing specialists. If we need algorithms, electronic data processing technology or ergonomics, then we ask for support from researchers of the Technical Colleges of Bern, Freiburg, Biel, North-West-Switzerland, Konstanz and others.



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# DIGI SENS

Perfect accord  
in the world of  
digital measurement



Excellence  
in integrated  
weighing  
application



The oscillating wire – a technology with potential

## Measurement with the oscillating wire

We from DIGI SENS AG promote the development of the oscillating-wire technology. Day for day we prove the superiority of this measurement principle, with our solutions in numerous applications all over the world.

### The Oscillating-wire transducer, music in its heart

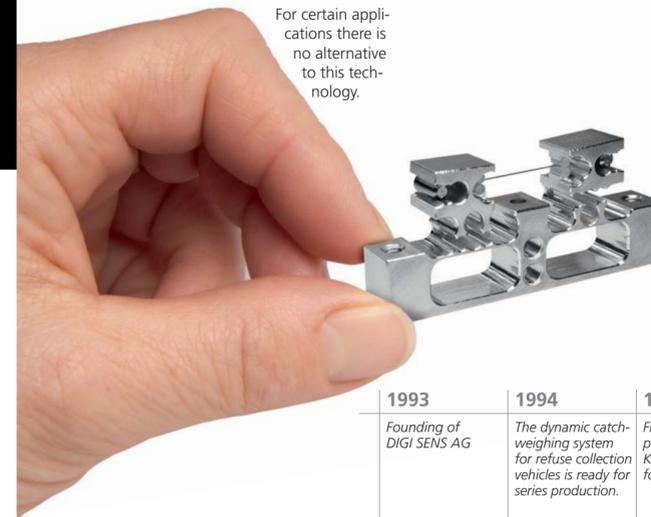
The patented DIGI SENS sensors measure the force (weight) using an oscillating wire. As in a guitar string, the resonant frequency of the wire is raised or lowered in function of any alteration in the mechanical tension.

A big advantage compared to other technologies is the digital frequency output signal from our sensors. The signal level is high and our systems are largely immune to all types of interference.

Their particular features, such as long-term stability, low energy consumption, intrinsic safety, simple interfaces and their stiffness, make the sensors highly suitable for a wealth of applications.

In the course of a continually evolving process DIGI SENS has perfected the oscillating-wire sensor into a robust component, eminently suitable for use in any industrial environment.

For certain applications there is no alternative to this technology.



DIGI SENS

1993	1994	1998	2000	2004
Founding of DIGI SENS AG	The dynamic catch-weighing system for refuse collection vehicles is ready for series production.	First large-scale production of KL-Load-sensor for lifts.	Introduction of e-Inventory® for C-parts storage shelves.	Introduction of the rapid conveyor-belt weighing system for the packaging industry.