scanvaegt systems

Scanvaegt ScanX.NET
Weighbridge Management

ScanX.NET is the complete software-system for efficient control and management of all types of data registrations from weighbridge systems and other heavy-duty scales. The system is scalable with a modular design and can therefore be adapted specifically to various industries and tasks.

ScanX.NET – fast, scaleable and versatile

ScanX.NET is a modern, intuitive and scaleable it-system for registration and management of data, generated from weighbridges and other heavy-duty industrial scales within the environment sector, contractor business, recycling industry, raw material extraction, agriculture and many others.
The system can manage data in realtime from one or more scales simultaneously and handles several jobs, e.g. weight registration, reporting, access control, payment, traffic control, identification, invoicing and numerous other tasks.

A flexible and reliable system

ScanX.NET, developed in Denmark and utilized by 50% of the market, is based on modern it-tools, which ensure robust and smooth program performance.

This makes ScanX.NET a future-oriented system with prolonged uptime and high reliability

Multiple highlights

- Management of numerous scales and terminals
- Administration of several facilities/locations
- Simple handling of basic data
- Intuitive weighing methods
- Various registration methods
- Easy integration to external systems
- Scaleable system-architecture
- Multi-client installations, also on terminal servers

SCANX.NET – A DANISH IT-SYSTEM IN WORLD CLASS

Strong features - logical and easy operations

Modular system design

The modular system design of ScanX.NET provides vast flexibility and ensures optimum adaption to the individual solution. The system can easily be extended with more standard modules as well as customized modules, when the company and the solution grows or changes.

Efficient control of hardware

ScanX.NET has optimized terminal communication and handles data exchange with up to 25 terminals per local site. In addition to this ScanX.NET also constitutes an efficient tool for management of the hardware-units, that may be part of a weighbridge solution, e.g. traffic lights, gates, barriers and video-cameras.

Logical archive structure

ScanX.NET is based on a series of master data archives, located in one or more SQL-tabels, where all data is saved. The archives are set-up in a logical manner, making it easy to find the right data via fast and accessible search options.

Easy integration and data synchronization

The system architecture makes it easy to setup integration to other external systems, e.g. ERP-systems.
The system also supports management of more locations in the same ScanX.NET-system, meaning one central system can manage and capture registrations from two or more individual installations.

Simple export/import

ScanX.NET has standard import and export of data using CSV-files, facilitating import of data, being maintained in an external system – e.g. Navision and similar ERP-systems – into the ScanX.NET archives. In the same manner it's easy exporting data like prices, taxes, VAT and fees to external economy and invoicing systems, administrative systems and ERP-systems.

*The ScanX.NET modules are now available for use on tablet and smartphone via **ScanPortal**, which is a browser-based solution.*

Userfriendly registration

The registration and communication between ScanX.NET and the weighing terminals on site proceeds securily and effectively.

The vast processor power of the VT-terminal and the clear, readable touch-screen with precise pressure transfer on the screen keys makes it easy and fast to do the registrations.

The **Wheel-loader** function has been designed specifically for gravel plants and raw material extraction and meets a number of wishes and requirements.

A universal system

ScanX.NET is a comprehensive system with numerous applications, which solve all jobs related to weighing, registrations and administration.

1. Access control
2. Gate management
3. Identification
4. Registration of weight, product, supplier etc.
5. Pendulum weighing
6. Control of barrier and traffic light
7. Camera surveillance
8. Delivery inspection
9. Re-classification
10. Transfer to ERP
11. Random sample control
12. Access control
13. Waste registration
14. Waste declaration
15. Waste declaration for landfills
16. Registration of hazardous waste
17. Cash payment
18. ScanX.NET administration
19. Payment & price management
20. Traceability
21. Facility Control
22. E-mail reports
23. Reporting to authorities
24. Weighing-in wood chip/straw
25. Calculation of water percentage and energy value
26. Weighing-out
27. Cloud based reports

Scaleable solutions to fit any requirement

The flexible system design allows ScanX.NET to be applied for minor weighbridge installations with a local weighing pc and for medium-sized installations with more weighbridges and administration on the same location as well as for the large-scale Entreprise solutions, comprising a central administration/server and data-capture from weighbridges in various geographical locations.
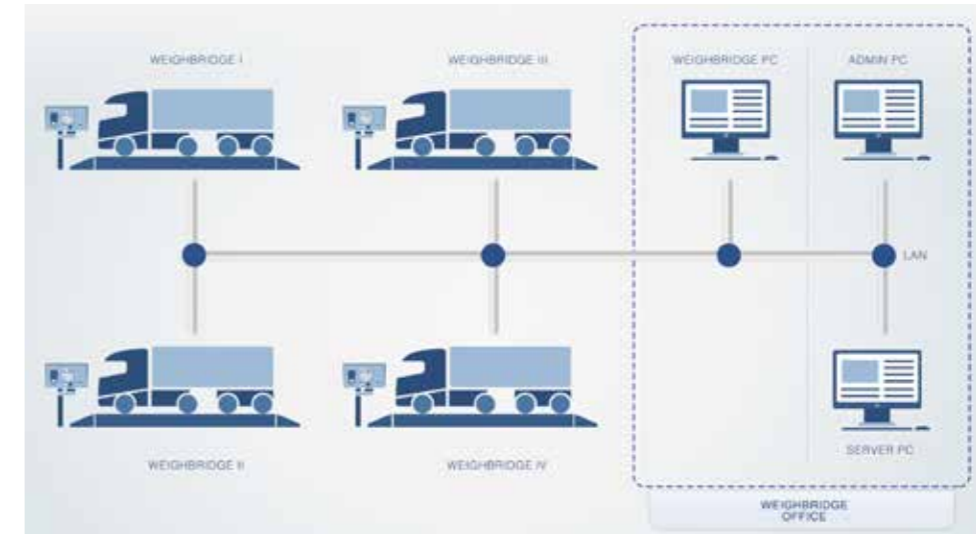

Installation without weighing terminal

This entry solution consists of a weighbridge without weighing terminal, but with a weight indicator for registration of weight data, which are transferred to ScanX.NET in the pc. From here reports and confirmations can be printed-out directly. The solution can be fitted with remote display, placed outdoor, for the driver to see the weight result.
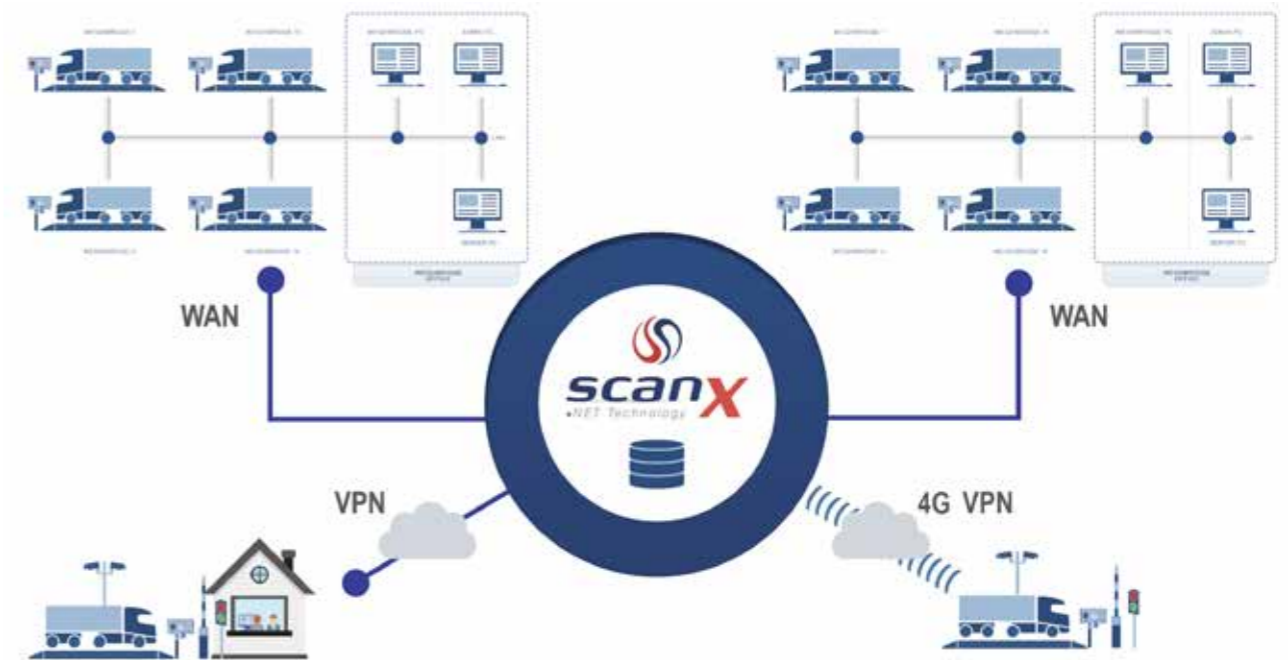

Basic installation

The ScanX.NET-system manages a local, stand-alone solution, consisting of the weighbridge with a VT200 weighing terminal and video camera, traffic light and barrier, if required. In the weighhouse ScanX.NET is installed in the pc, which via a network switch captures the registrations from the weighbridge. Reports and confirmations can be printed-out on the printer.

Medium-sized installation

The medium-sized installations comprise typically more weighbridge solutions, consisting of weighbridges, VT200 terminals, video camera, barriers and traffic lights. ScanX.NET is installed in a pc with report printer in a central weighhouse on the same location. From here the system is connected to local network with database server and ScanX.NET server.

Entreprise Installation

The large entreprise installation comprises more weighbridge solutions – entry as well as medium-sized solutions – in different geographical locations. Data is transferred and exchanged via WAN/VPN between the central database server and the geographical locations.

Smart operations

Complete control

ScanX.NET is a versatile system, which can control and manage a wide range of different hardware-units, connected to the weighbridge.
In addition to handling communication and data exchange with up to 25 terminals per local site, ScanX.NET can also manage e.g. barriers, traffic lights, gates, video cameras, remote displays and bridge-bizz.

Detailed price management

ScanX.NET can manage prices in several different ways, e.g.:

- Simple price: Each product has a list price with a price per ton
- Price index: The price is divided in weight-intervals and is differentiated, depending on quantity or date
- Combination price (price matrix): Price index per customer or agreement

All three price types can have different ingoing and outgoing prices for the same product no. Furthermore three fees can be added to a weighing.
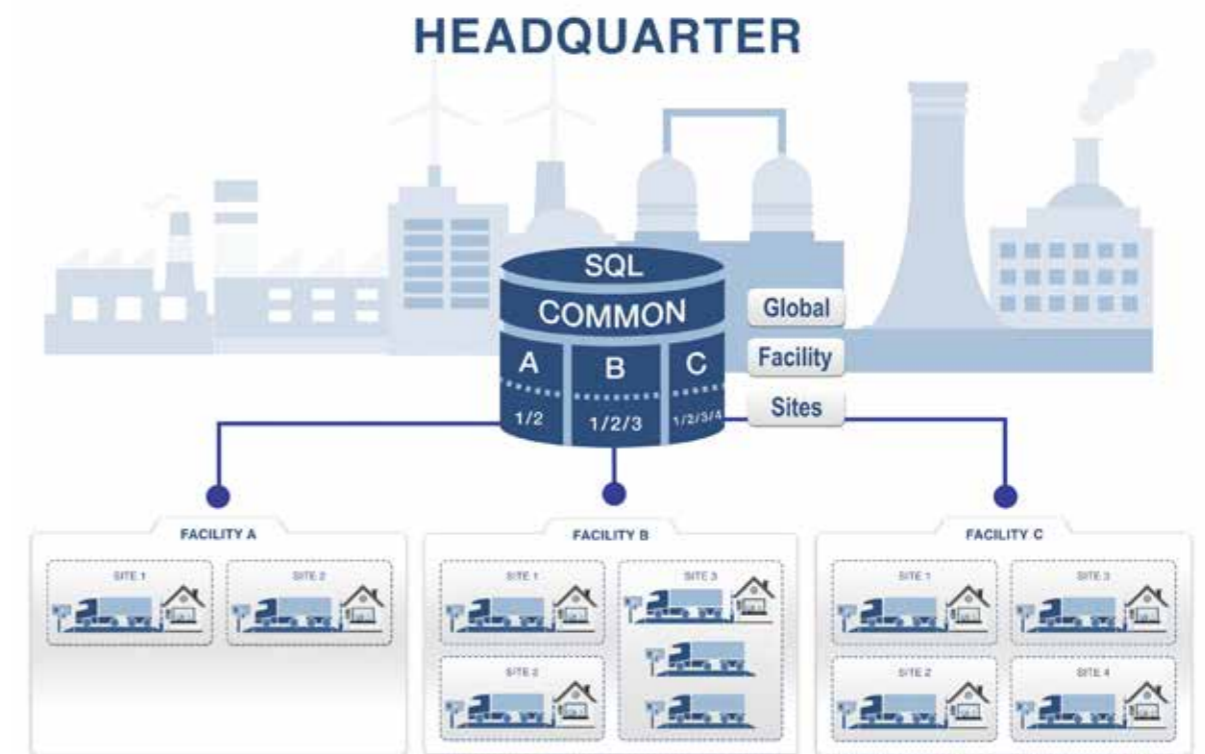
Reports

ScanX.NET has a simple and userfriendly report design using Microsoft Reporting Tools for generating standard reports. Existing reports can be adjusted or expanded according to requirement, and individual reports can be designed in Microsoft Reporting Tools, which can be employed, free of licence fees.

Flexible system

ScanX.NET can run in dedicated application-server environments, e.g. Citrix or Microsoft Remote Desktop Service as well as standard Windows Server.

Total overview and control

Facility Control: Smooth data management

The Facility Control makes it possible to manage several "facilities" in the same system. Each facility represents a unit, e.g. a company, a plant, a production location, a processing site or similar.
Facility Control collects data to a database, where the system both separates and manages data from the different facilities in several levels, i.e. a common global level, a facility level and a site level.

Remote control of driver terminal

If you operate several facilities, some of which close early, an operator at the head office can operate the terminals remotely at the other facilities in other locations. This allows you to reduce staffing.

Should a driver on an unmanned facility need help, the operator can view the driver's terminal screen displayed directly on his PC and either guide the driver or completely take over the operation and complete the registration.

Secure synchronization of data

The synchronization module ensures secure synchronization of master data and weighing data between the SyncServer in ScanX.NET's main system and one or more Sync-Clients at the local weighing stations.
The synchronization for capture of weight data between the systems takes place at a fixed time interval whereas the synchronization of master data takes place once every 24 hours. Master data can however also be synchronized instantly.

Allround functionality

Handles multiple jobs

ScanX.NET is a comprehensive system with several strong functions, e.g:

- Various weighing methods: Normal Weighing, Single weighing, Manual weighing, Take-over weighing, Unit weighing, Part weighing and Divided weighing

- Master data archives with Vehicles, Carrier, Agreement, Delivery, Customer, Product, Producer, Plant, Municipality, Container, Site 1, Site 2, Extra data 1, Extra data 2, Card

- Prices with Simple list price, Index price, Price matrix, Taxes and Fees

- Price calculation, related to the above

- Ingoing Prices and Outgoing Prices
- In the Weighing archive date and time for in-weighing and out-weighing is saved
- Search facilities with direct access to the archives from the in-weighing screen
- Print-out of receipt, weight slip and standard reports
- Management of user access
- Integration to other systems
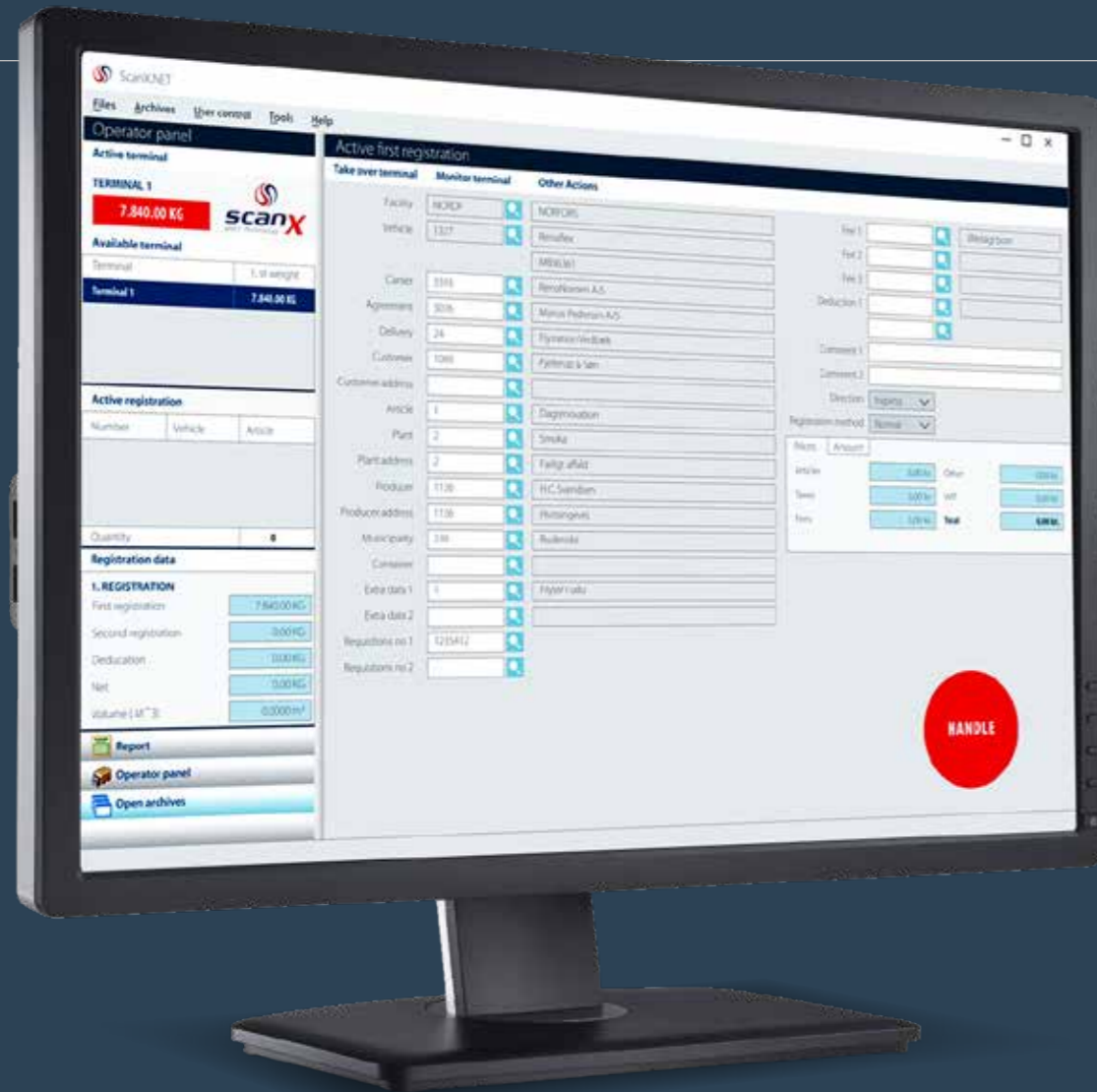- Easy handling of the GDPR using the function **Forget me**

Several different weighing methods

ScanX.NET is capable of handle a wide variety of weighing jobs, as the system supports several different weighing methods, e.g.:

- Normal weighing: first and second weighing can be carried-out on the weighbridge or by the operator
- Keyed-in weighing: the operator can key-in a fictive weight
- Single weighing: a fixed tare weight is employed for the first weighing and the actual gross weight for the second weighing. The difference is net weight. Done on the weighbridge or by the operator
- Unit registration: Registration of number of a unit

- Part weighing: weighing a vehicle, too long to fit on the weighbridge - the weighing process is split in two, then Part weighing adds the two weight results, like a first weighing and second weighing

- Divided weighing: Weighing a long vehicle, divided in 2 sections, which not are to be weighed as one. Data and weight for each section are registered separately as two first weighings. Same procedure is repeated at weighing-out if Normal weighing is utilized

Userfriendly, intuitive operations

Fast, simple registration

ScanX.NET incorporates a number of smart features, making it easy to operate the system. Registrations are done fast and efficiently – the operator needs only to key in very few informations, and then system brings out the required data.

The operator can work with several open archives and screens at the same time – and thereby run more jobs simultaneously, e.g. setup data and carry out transactions.
The operator screen is based on the Microsoft screen design standards, making it quite familiar and easy to use. The design is adapted dynamically to the screen size, and menus and program elements are distributed evenly, making fully use of wide screens.

Remote control of the driver terminal

With the Show terminal function, the operator can operate the driver terminal screen directly on his own pc. The operator can thus guide the driver or completely take over the operation and complete the registration.
The view is two-way - that is, the operator on his PC can see what the driver is doing, and the driver can see on the terminal what the operator is doing.

Overview of recent registrations

The function **Most Recent Registrations** provides the operator quick overview of recently completed registrations. It appears as a small list below Active registrations.
In case of corrections in the registration, the operator simply just right-click - then it can be changed, e.g. in case of wrong item no. If the same vehicle is to be weighed several times, the operator must simply double-click on the previous weighing – then it is ready for a new registration.

Flexible application use

Maximum freedom of movement

The flexible system design of ScanX.NET makes it possible to run the system on different devices, e.g. tablets and smart-phones. This increases efficiency and application utilization when handling registration and control jobs.

The tablets and smartphones can used for weighing-in and out of the vehicles – the questions displayed on both devices are identical to the ones displayed on the data terminal and the process is carried out in the same way.

Jobs like Delivery Inspection and Ransom Sample Control can also be handled on smartphone or tablet. This is done via ScanPortal, which is a web-based solution that can be used on both i-phones and Android phones.

Future-oriented system

All elements in ScanX.NET – database communication, report design and other support functions – are based on the newest Windows-technology. The system is developed in .NET-technology and setup in a SQL database as a Client/Server solution. ScanX.NET runs on servers from SQL Server 2012 up to SQL Server 2017.
As newer versions of SQL servers are released, ScanX.NET is adapted to also support those versions.

System requirements

ScanX.NET Client: Windows 7 SP1, Windows 8 or Windows 10

ScanX.NET Server: Windows Server2008 R2 SP1, 2012 or 2016

Database: SQL Server 2012, 2014, 2016 or 2017

ScanX.Net modules

ScanX.NET has a modular system design, consisting of a basic package and standard tools for registration and capture of data from weighing systems and data terminals. Dependent on the line of business and the tasks, more individual modules can be added to the basic package, forming a customized system, capable of solving the job in the most efficient manner.

ADS – Waste Data System

The ADS registers waste types for reporting to the Environmental Protection Authorities. The system can register waste types for incoming as well as outgoing vehicles. Once the waste type has been registered, it's saved in ScanX.NETs database and then in the ADS-database, from where the reporting to the authorities takes place.

Energy Calculation

The Energy Calculation determines the water percentage and caloric energy content of wood chips, for the district heating stations to calculate the price for their suppliers. This is done on basis of a sample of the delivered wood chips, which is weighed on the laboratory scale, dried and then weighed again. Based on these registrations, the net weight and energy content can now be determined.

Delivery Inspection

With this module the operator can easily perform a mobile inspection of a specific delivery – and do a re-classification of vehicles with waste for landfills, using a tablet or smartphone. The module handles compulsory delivery inspection at weighing-in waste fractions as well as registration of deviations from the declared waste fractions with photo documentation and weighing-out of the vehicle.

Online Declaration

The Online Declaration module handles registration and traceability of materials for landfills. On a specific website the information about the materials is keyed-in for approval. Upon arrival to the waste facility the name of carrier is registered on the declaration and a visual inspection of the materials is carried out – either manually or using video camera – before the materials are placed in the landfill.

Multi Articles

Multi Articles is a module for registration and management of traffic and waste delivery to recycling stations. The module can separate waste from private citizens and from companies, which is relevant where companies must pay for waste disposal. The module also provides a complete overview over the visiting frequency.

Electronic Signature

Using the module Electronic Signature the driver can give his signature directly on a tablet, which replaces writing his signature on paper. When the driver has signed, the data is transferred directly to the ScanX.NET-program and saved along with the registration.

Extended Pendulum Weighing

Using this module, a vehicle containing several fractions can be weighed and registered continuously (per article) without having to finish the weighing in-between each fraction.
The module automates and simplifies the process performing more weight registrations for the same customer and connecting them together, which saves time.

Sample Control

This module makes it easy to perform random sample controls in connection with weighing-in vehicles. Based on pre-defined rules the operator will be asked to do a random sample control on a specific vehicle. During the control the operator can add comments, categories and pictures. The module can also send an e-mail with the registrations and print reports.

License Plate Recognition

This function handles automatic identification of the car's license plate by means of a video camera that reads the license plate and transfers the info to ScanX.NET, where the customer's data is retrieved.

This feature replaces the troublesome RFID card identification process, making the identification easier and faster. At the same time, it prevents use of wrong cards.

Access Control

This module controls access and opening hours for different customer groups. It's possible to regulate the time a certain customer group has access to the site. The access can the restricted to whole days as well as to a time interval on a specific day.

Camera Surveillance

The Camera Surveillance module monitors the weighing process and ensures correct registration of the licence plate and the content of the vehicle. The pictures from the camera can be saved with the registration and used for documentation and re-classification, if required.

Import/Export

The import and export of data is carried out, using CSV-files. This makes it simple to import and setup/maintain data in the ScanX.NET-system and to export data from ScanX.NET to external economy and invoicing systems, administrative systems and ERP-systems.

Gate management

This module manages the access to areas within the site, dependent on which article/product that is registered to the vehicle.
The system can be setup to just opening the gate to vehicles with a specific article/product or to provide directions to a specific area – e.g. gate N – within the site.

Botek Integration

This module makes it possible to connect ScanX.NET to the Botek mobile weighing system. The integration takes place on database level, meaning that when a waste truck arrives to the weighbridge, the ScanX.NET has already received data for the collected waste.

Language

In the Language module the driver can choose language by means of flag icons directly on the VT-terminal. This ensures optimum communication and eliminates misunderstandings and errors.
ScanX.NET is available with Danish, Swedish, Norwegian and English as standard. In addition to this Language modules for both German, Polish, Ukranian and others languages are also available.

Traffic Light Control

ScanX.NET incorporates a module for management of traffic lights as well as barriers at the weighbridge.
The traffic light is red and the barrier down, until weight registration and identification is completed – then the traffic light turns green and the barrier opens. ScanX.NET automatically controls the barriers and traffic lights, but the operator can also take-over and manually control the units.

e-mail Reports

This module automatically generates reports and sends a PDF-copy with the confirmation of the registration, an individual e-mail text and an extra, individually customized file, e.g. an XML-file with registration data.
Using the module Extended E-Mail the reports can be send at fixed intervals (e.g. every month) for selected customers or producers etc.

Data/Site Replication

The ScanX.NET system can replicate data between multiple locations, thereby ensuring identical data on more facilities as well as synchronizing data between facilities.

Individually customized modules

Besides the many standard modules, described on these pages, it's also possible to have developed individual modules, customized to the company and the specific jobs. This takes places in close cooperation with the customer and Scanvaegt's team of software developers.

Market-leading supplier

Scanvaegt Systems is a Danish-owned company, established in 1932. We develop, produce and market weighing systems, portioning solutions, labelling lines, inspection equipment, related IT-systems and traceability solutions.
Scanvaegt Systems has its head office in Aarhus, Denmark, and subsidiaries in Norway, Sweden, Germany and Poland, and distributors in a number of other countries. The staff is of app. 200 employees.

Service and support are crucial factors in any type of production company and keywords for us. For this reason we place comprehensive service and support facilities at our customers' disposal. The Scanvaegt service package comprises: Preventive maintenance, training and instruction, installation and on-site repairs, spare parts, hotline & online supportsoftware service, verification and calibration.