Product description

Software Q PLANT

The mixing plant, the digital hub in the construction process.
Q Plant is a comprehensive application for operators of mixing plants that can integrate all relevant information from plant control, weighing systems, laboratory programs, CRM, and order management into a single platform. This cloud-based web solution offers, depending on the edition, access to all important data such as plant and production data, customer orders, delivery and production status, operation times, delivery notes, reports, batch protocols, energy consumption, and much more, anytime, and anywhere.

The solution is divided into editions, allowing it to grow with the individual maturity level of the company and be modularly expanded to meet the company's needs.

Q Plant Essential
This edition serves as the entry-level solution for optimizing mixing plants with Q Plant. Its focus lies on the digital ordering and delivery process as the foundation for optimizing production sequences. Each customer of the mixing plant can be provided with a digital ordering solution via app or web portal. The digitally created mix orders are managed in the ordering portal, and communication with the construction site also takes place digitally and at any time. Changes in the ordering process are automatically documented and visible to everyone.

For on-demand construction deliveries, the application offers planning capabilities and real-time information about the delivery process. Using the free TruckBuddy app, own truck drivers or third-party freight forwarders can be provided with digital transport information. The current location of the truck is shown on a map in Q Plant so that the logistics chain can be optimally planned.

Q Plant Essential also includes an interface for importing digital delivery note information. This information is not only provided in Q Plant but also forwarded directly to the customer. Additionally, this edition provides access to Q Directories, the industry directory for road construction. Here, customers can find information about the offered concrete types of mix, which laying the foundation for a flawless ordering process. Q Plant Essential can be implemented without significant effort and comprehensively digitizes the core process of order and delivery management.

Q Plant Professional
In addition to the functionality of Q Plant Essential, this edition offers comprehensive integration options for integrating Q Plant into the plant's IT infrastructure. With Q Plant Professional, a seamless, digital process that is largely usable without manual intervention can be realized. Q Plant Professional connects process and master data from existing commercial systems through production to the construction site, along the entire digital value chain. Useful analyses and dashboards complement the range of functions and make the application an ideal tool for professional plant management.

Q Plant Add-On
The Q Plant Add-Ons can be individually supplemented to either a Q Plant Essential or a Q Plant Professional Edition. They contain solutions for integrating Q Plant with the plant control systems. Important plant parameters are displayed in the software, and plants can be compared based on key performance indicators (e.g., recipe changes, batch protocols, actual vs. target comparisons, component tolerance, kiln operations, temperature profiles, etc.). Moreover, laboratory systems and other quality assurance applications can be integrated into the digital value chain. Additionally, the Add-Ons support production planning and transmit the planned production program to the plant control system via an interface. This enables optimization of processes and more efficient production processes.

The deployment of the Add-Ons depends on the respective system for plant control and quality assurance.

Matrix of Q Plant function levels

Q Plant	Essential	Professional	Add-Ons
Components			
Q Plant web portal (Cloud application)	●	●	
Q Site Entry (SiteBuddy App and Web portal)	●	●	
TruckBuddy App	●	●	
Q Plant Customer portal	●	●	
Q Directories (Industry directory)	●	●	
Features			
Management of master data	●	●	
Settings and user management	●	●	
Project and order overview	●	●	
Ordering process	●	●	
Delivery process	●	●	
Communication	●	●	
Dashboards order	●	●	
Dashboards delivery	●	●	
Delivery monitor		●	
Dashboards operation and production[1]	○	○	●
Batch reports and document archive[1]	○	○	●
Dynamic production planning	○	○	●
Interfaces			
Delivery note receipt and forwarding (weighbridge, customer)	●	●	
Master data comparison orders, articles (ERP)		●	
Process optimization software (customer)		●	
Operation and production data (system control)[1]	○	○	●
Production planning	○	○	●
Production data forwarding (quality assurance)	○	○	●
Caption	Included	●	
	Optionally	○	

[1]only available in connection with the respective interface.

Product components

- **Q Plant web portal**
  The web portal supplies access to all mixing plant information through an internet browser. In addition to displaying all construction projects on a map, order management, which includes the digital ordering and delivery process, can be managed entirely digitally. Delivery notes are also displayed digitally. Depending on the specific edition, plant, and production data as well as other documents are also available. Dashboards enhance the overview of production operations. On-demand construction deliveries can also be managed easily. By using the TruckBuddy app, the position of all trucks is displayed on a map.

- **Q Site Entry**
  Q Plant includes the capability to provide its customers with a free digital ordering solution. This solution can be used by customers via mobile (with the SiteBuddy app) and through an internet browser for the digital ordering and delivery process. The customer can use these functions only in conjunction with the Q Plant licensee. Orders can be recorded, information exchanged with the mixing plant, and digital delivery information received. The entire order and delivery process is managed within the Q Plant web portal.

- **TruckBuddy App**
  Each Q Plant license allows the integration of truck drivers into the digital process. By activating their phone number, the driver is invited to download and use the TruckBuddy app for free. Subsequently, transport orders can be easily transmitted digitally. The driver receives a digital transport order in the form of a delivery note on their smartphone and continuously shares their current location with the plant during the journey. Additionally, the truck driver is well-informed about the construction site (e.g., access routes, turnaround areas, waiting zones, etc.). The integration of the vehicle fleet connects the plant with the construction site an ensures coordinated and scheduled production through seamless networking.

- **Customer portal**
  This web access allows customers to access delivery notes and, if applicable, invoices in digital form (as a PDF or MS Excel downloads) at any time. The documents are automatically transferred to the portal and made available there. The contents can be viewed, downloaded, and emailed from anywhere. This is an added service for mixing plant customers.

- **Q Directories industry directory**
  This directory for mixing plant providers offers the opportunity to present locations online. Information such as contact details, opening hours, and offered products, including related documents, can be published. Q Directories forms the foundation for all digital ordering systems in the order and delivery process.

Features

- **Management of master data (from Essential)**
  The master data management feature enables the easy and clearly structured entry and maintenance of master data such as customer information, construction site details, or product data. Import and export functions ease automated data exchange using MS Excel. This is beneficial when there is no ERP connection or when integration cannot be set up for compatibility reasons.

- **Settings and user management (from Essential)**
  With these functions, users can manage general settings as well as access permissions, invitations for employees, and group administrations. Additionally, order overviews can be subscribed to via email, and integrations with third-party systems can be managed and set up.

- **Project and order overview (from Essential)**
  They include an interactive map view with truck and construction site information, as well as the delivery schedule and transport planning resulting from order data. Each order is supplemented by the corresponding delivery note data, which can be retrieved in a structured manner and downloaded as a list.

- Ordering process (from Essential)
  Incoming order entries stay in focus through incoming notifications and organized using simple feedback, transmitted to customers in real time. There is also the possibility of entering orders manually at any time. The convenient use of calendar, daily, weekly, agenda, or list views supplies a customized overview. With the help of the current use overviews that are always available in the field of vision, the system can be used according to requirements.

- Delivery process (from Essential)
  The vehicle master data is stored for the “free construction delivery” logistics chain and can be accessed with every material order in order to distribute the transport information. By activating the phone number, drivers are invited to use the TruckBuddy app to be ready for any transport orders. When vehicles are connected via the TruckBuddy app or a telematics solution, the transport plans and positions of the transport vehicles are displayed in Q Plant. This supplies an overview of the expected arrival times of the vehicles at the mixing plant and allows production and silo inventory to be coordinated accordingly.

- Communication (from Essential)
  The 24/7 digitally available communication possibility with project stakeholders supports the entire order and delivery process. Understandable, automatically generated messages and input options for messages prevent misunderstandings and ensure clarity in the order processing process. The change history shows all content adjustments and status changes of the order.

- Dashboards order (from Essential)
  These graphical views provide an individual overview of one or multiple locations and their orders. The configurable widgets can be designed according to personal needs and interests.

- Dashboards delivery (from Essential)
  These graphical representations provide an overview of the delivered quantities. The display can be customized according to various criteria.

- Delivery monitor (from Professional)
  The delivery monitor displays the dynamic schedule that is transmitted from construction process control software to the mixing plant. It supports demand-driven delivery, with a focus on the punctuality of daily orders.

- Dashboards operation and production (Add-On)
  This dashboard requires the "Operational and Production Data" interface. Here, key figures of all plants connected to Q Plant can be compared and analyzed. For example, production metrics, efficiency, and energy indicators, as well as operational data, can be graphically processed and compared. The analysis period can be defined individually.

- Batch reports and document archive (Add-On)
  The protocols provide information about recipe changes, batch duration, and batch sizes in production. The target-actual comparisons show quantity deviations of recipe components, taking tolerance values into account, and form a building block for production optimization. This function requires the "Operational and production data" interface.

- Dynamic production planning (Add-On)
  With a focus on on-time delivery, an optimized production proposal is automatically generated based on the order data, creating individual loading batches for each order. The expected production batches to be produced and the resulting recipe changes are immediately visible. This production proposal can then be manually adjusted as needed. Orders can be combined, split, or rescheduled to individually customize the production proposal.

Interfaces

To connect the different systems into a fully integrated digital data flow, Q Point provides the PlantX interfaces. This opens various possibilities for stronger integration with other IT systems.

- **Delivery note receipt and forwarding (weighbridge, customer)**
  Enabling seamless digital transmission, this interface functionality allows delivery note information from a weighing system (or another system that manages delivery note data in a structured manner) to be sent to Q Plant. Q Plant then processes the delivery note information and, if supported by the interface, forwards it to the respective customer's software (e.g., Q Site).

- **Master data comparison orders, articles (ERP)**
  This functionality of the interface allows information about customers, construction projects, and sales items to be sent from a commercial system to Q Plant, so that they are available without manual input.

- **Process optimization software (customer)**
  Using this interface, process optimization solutions from third-party providers can be integrated into the digital process. The software of the third-party provider can transmit orders to Q Plant, while feedback, information about transportation, the current position of a delivery truck, and delivery note information are transferred back to the third-party system. The third-party system must support the PlantX interface.

- **Production planning**
  Through this interface, operational and production data can be received from a compatible plant control system and displayed in Q Plant.

- **Operation and production data (system control)**
  Facilitated by this interface, the production schedule generated in Q Plant can be automatically transmitted to the control system without manual intervention. A compatible plant control system is required for this interface.

- **Production data forwarding (quality assurance)**
  Empowering the transmission of pertinent information to laboratory systems and other quality assurance applications, this interface necessitates compatible applications for utilization.