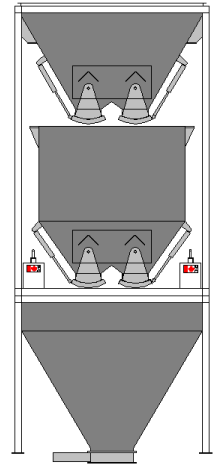


# SUPERIOR

## TECHNOLOGIES

WEIGHING & CONTROLS INC.

ISO 9001  
ISO 9001



### Bulk Weigh System

- **Specifically Designed for the Potash Industry**

Superior Technologies' widely used bulk load-out systems are ideal for use wherever bulk weighing of Potash is required. Supporting Legal-for-Trade receiving and shipping operations, all products are weighed within  $\frac{1}{10}$  of 1% accuracy. All weighing components are Measurement Canada approved.

### **PBW Scale Structure**

The Bulk Weigh Structure is designed to deal with the highly corrosive/abrasive environment in the Potash industry. The system consists of an upper, weigh and lower garner all contained in one structure. The upper garner is flanged to interface with a customer supplied holding bin. Product is continuously fed into the system and weighed & discharged into the lower garner to continue along the selected flow path. Product is stored in the upper garner until the weighment is complete and the weigh hopper is ready to accept another draft. All Superior bulk weigh structures are custom designed and fabricated to fit the customer's specific application and capacity.

- Cladded, weatherproof, enclosed, structural steel support framework.
- Dual level access doors on two sides.
- Dual level access panels on the other two sides to access gate bearings for maintenance.
- Access to upper and weigh garner hoppers for product cleanout.
- Hydraulic actuation with power unit. Gate cylinders are 2.5" bore (1.375" rod).
- High efficiency, zero friction, clam style gates. Gate bearings are 2".
- All hoppers fabricated from abrasion resistant (AR) plate and replaceable abrasion resistant (AR400) plate liners.
- All hoppers supplied with bridge corner plates to minimize product hang-up and double reinforce hopper corner integrity.
- All Hopper slopes exceed 55°.
- Product sheds are incorporated on internal flat surfaces to prevent product build-up.
- Lower garner modulating gate to assist in product discharge flow and to allow for pre-weighing prior to spotting railcar.
- All external hardware (door latches, hinges, etc.) are stainless steel to reduce corrosion.
- Internal inter-venting between hoppers - no additional external vent required.
- Four (4) Measurement Canada certified test weights (test weights housed within structure).
- Automatic lift system for application of test weights.
- NEMA 4X rated proximity switches (to confirm gate position).
- NEMA 4X rated level switch (for scale hopper high level).
- Each weigh hopper is supported by high precision stainless steel load cells.
- Digital diagnostics for load cells.
- Superior Technologies utilizes its Load-out Modeling Analysis Software to size the structure to meet your throughput and structural support requirements.

### **SSC-920i-P Control System Features**

The Superior Technologies' "SSC-920i-P" (Single Scale Controller) is an Industrial Controller programmed specifically for controlling a single scale bulk weigh structure to perform various weighing tasks optimized for the Potash

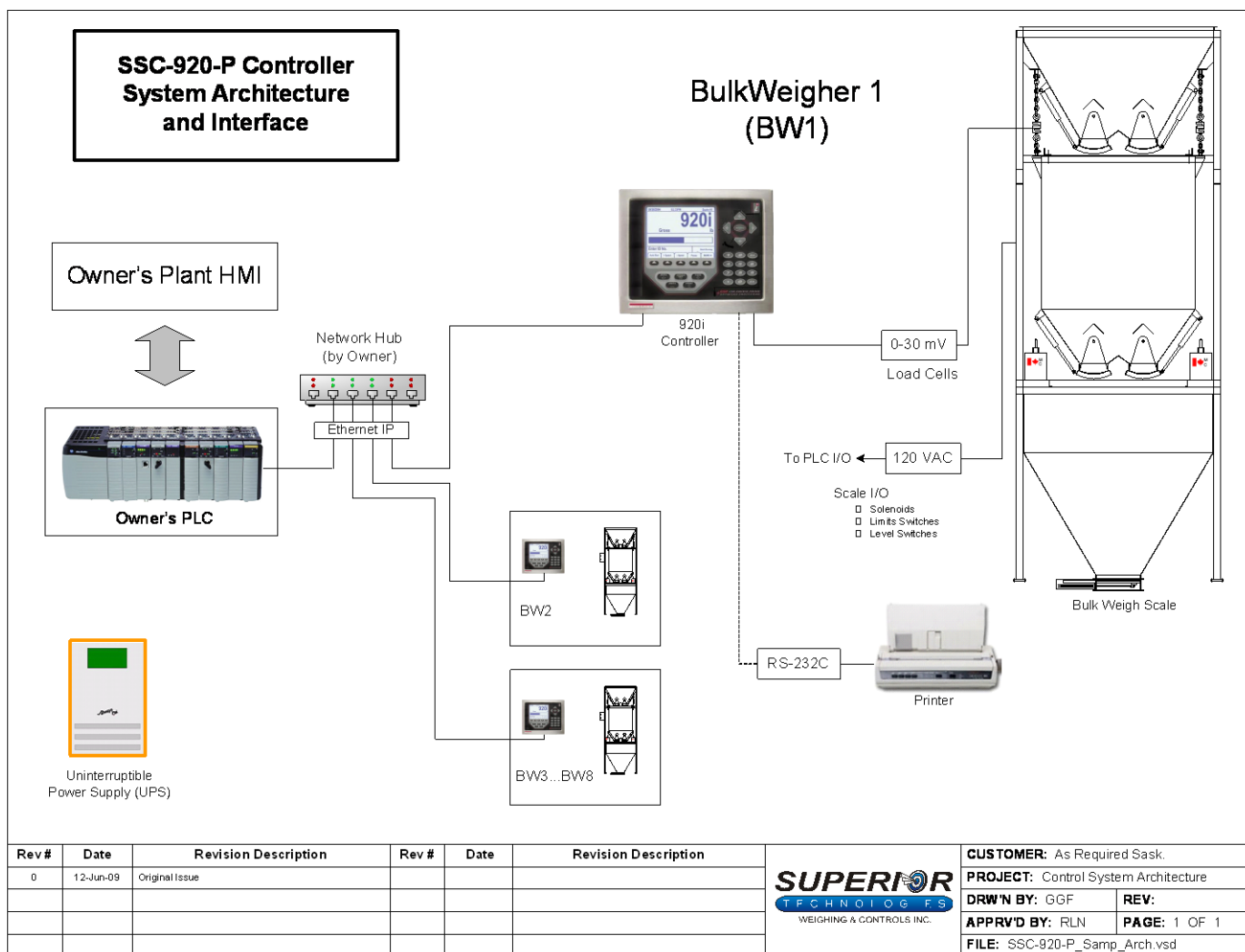


Measurement  
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industry. The SSC-920i-P package communicates with a PLC (Programmable Logic Controller) to sequence bulk weigh scale gate operation according to Legal-for-Trade specifications. See below for an example of a typical system architecture.

- Large (4.6" W x 3.4" H, 320 x 240 pixel) back-lit LCD graphical display.
- NEMA 4X/IP66 stainless steel enclosure available in universal (shown), panel & wall mount.
- Four bidirectional communication ports.
- Performs Shipping, Audit and Legal-for-Trade Receiving tasks.
- Full manual mode for performing testing and diagnostics as well as application of automated test weights.
- Capable of being remotely controlled from an HMI via standard interfaces such as Modbus, Modbus Ethernet, Ethernet/IP, DeviceNet, etc.
- Supports compartment targeting in shipping mode.
- Incorporates continuous display/independent gate control to accurately dispense product for compartment and final weight targets.
- Additional serial port for custom requirements.



For more information please contact:

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