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AZO Intelligent Container with emptying station Safety and control in intra- and extralogistics

All information at a glance

Best protection for sensitive raw materials

GPS location monitoring and road approval

Preferred applications

As a transport and storage container for critical and costintensive bulk goods in intraand extra-logistics. Also suitable as an automation-capable, mobile storage container for bulk materials delivered in small containers. The bulk material is transferred into containers via corresponding transfer stations or filled directly into containers by the raw material supplier.

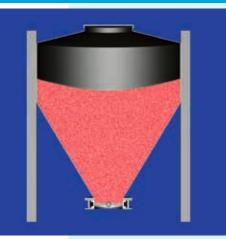
Special advantages Container:

- Display of important parameters after filling and emptying the container via the Active Label with QR code on voltage-free e-paper display.
- High product and operator safety thanks to analogue and digital pressure display as well as mechanical overpressure valve and spring-closing disc valves.
- Monitoring of the transport by an attached tracker with GPS, shock and environment monitoring.

Emptying station:

- High operating convenience through automatic docking of the container as well as gas and compressed air lines (e.g. for inerting).
- Connection to downstream systems (pneumatic conveying, gravimetric systems).
- Simple level control and monitoring of the container contents by means of weighing cells and O2 monitoring.
- No interfering cables thanks to wireless power and signal transmission.

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How it works

The container continuously monitors the transport and storage situation via an IoT transport data logger. When the container is undocked from the filling or emptying station, important parameters such as raw material, manufacturer, date and oxygen level are also recorded and displayed on the Active Label. In addition, a QR code is generated that makes this information machine-readable and retrievable. This digital fingerprint of the content enables complete traceability and the highest

safety standards. The safety of the container is of paramount importance, which is why it is equipped with mechanical pressure relief valves and springclosing disc valves. This ensures the optimal condition of the container.

In addition, the Aspion L-Track provides GPS location monitoring, shock monitoring and monitoring of environmental data such as humidity and temperature, documenting the storage, emptying and transport of the container. The associated emptying station enables the fully automatic emptying of the container. Both the docking to the downstream system and the connection of gas and compressed air take place automatically. A weighing cell for level control and an O2 sensor for monitoring the container atmosphere contribute to the control and safety of the emptying process.



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Technical data and features

Capacity: 150 litres, designed for high bulk densities (other sizes on request) **Material:** 1.4301 or 1.4404



Active Label



- Electronically recordable display as a sustainable replacement for the printed paper label.
- The voltage-free e-ink display enables use in potentially explosive areas.
- The display is integrated into the AZO control system at important points in the process and can be rewritten after a change in the container's condition.
- NFC-enabled devices (e.g. PDAs) can be used to write directly to the display at the point of use.

GPS monitoring





- IoT transport data logger for continuous real-time monitoring and recording of comprehensive, transportrelevant data.
- Around-the-clock access to the current location and condition of the container via the connected loT platform hosted in Germany.
- Transmission of position, time, shock/impact, temperature, humidity,...
- Use in over 140 countries thanks to mobile communications.
- Does not require labelling thanks to alkaline batteries.
- Replaceable batteries for multiyear, resource-saving use.



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