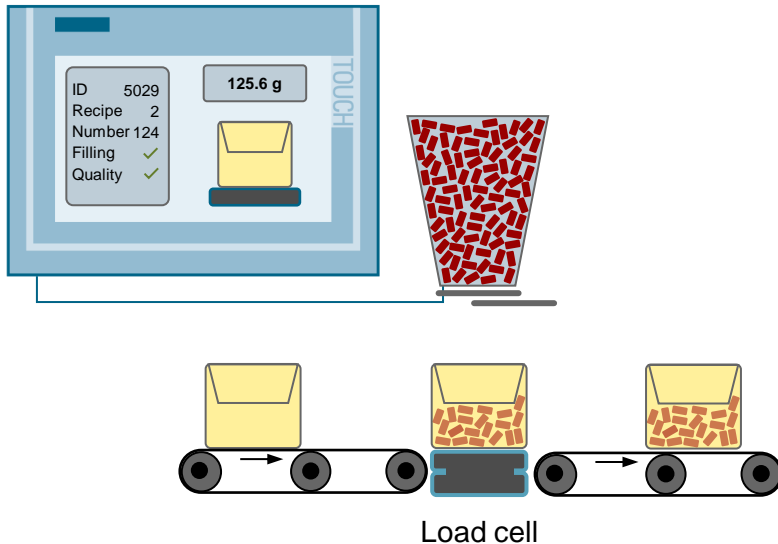


Set 6 - Quality Assurance by Weighing, Controlling and Logging

Task

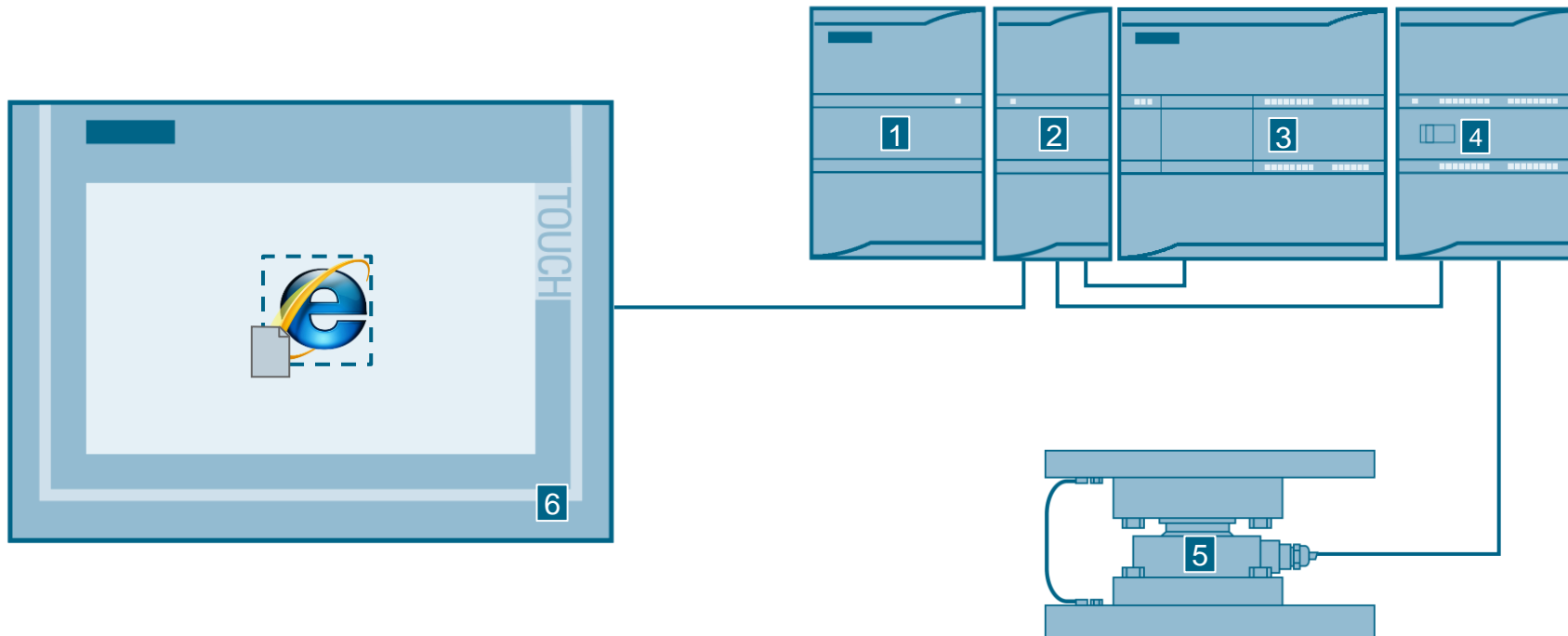


- Calibrating by means of a reference weight before the beginning of the process
- Determining the filling weight of a package for quality control in a filling plant
- Measuring the average specific weight of new articles by means of the teach function and capturing it in a recipe management
- Automatic taring of the scale before every filling process
- Filling and packaging on the basis of the measured overall weight, compared to a set target number of pieces from a recipe management
- Documenting the weight with time stamp and ID number by means of the data log function
- Operator control and monitoring of the process by means of an HMI



Set 6 - Quality Assurance by Weighing, Controlling and Logging Automation Solution





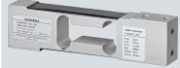
SIEMENS



- | | | | | | | | | | | | |
|---|----------------------|---|----------|---|-------------|---|----------------|---|----------------|---|----------------|
| 1 | S7-1200 power supply | 2 | CSM 1277 | 3 | S7-1200 CPU | 4 | SIWAREX WP 231 | 5 | SIWAREX WL 260 | 6 | TP 700 Comfort |
|---|----------------------|---|----------|---|-------------|---|----------------|---|----------------|---|----------------|





Set 6 - Quality Assurance by Weighing, Controlling and Logging

Main components

		Product	Function description
1		Power supply PM 1207 Article no. 6EP1332-1SH71	<ul style="list-style-type: none"> Supplies the modules with 24V DC
2		CSM 1277 Article no. 6GK7277-1AA10-0AA0	<ul style="list-style-type: none"> Connecting the network devices by using the switch functionality of the module
3		CPU 1214C DC/DC/DC Article no. 6ES7214-1AG40-0XB0	<ul style="list-style-type: none"> Evaluating the current weight and comparing it with the set target number of pieces from the selected recipe Controlling the filling slide valves and the conveyor belts on the basis of the filling weight Calculating the weight of a production unit using the teach function Storing and editing different recipes by means of web browser
4		SIWAREX WP 231 weighing electronics Article no. 7MH4960-2AA01	<ul style="list-style-type: none"> Evaluating the measured value in the load cell Forwarding the weight to the controller Configuring the load cell before the beginning of the process
5		SIWAREX WL 260 Load cell Article no. 7MH5102-1KD00	<ul style="list-style-type: none"> Detecting the measuring signal and forwarding to the SIWAREX WP 231 module

Set 6 - Quality Assurance by Weighing, Controlling and Logging

Main components

		Product	Function description
6		SIMATIC HMI TP700 Comfort Article no. 6AV2124-0GC01-0AX0	<ul style="list-style-type: none"> • Selecting the required recipe for filling • Displaying the selected recipe of the current filling weight and the quality assessment • Reading the logged data with the web browser • Configuring the SIWAREX WP 231 weighing module
		STEP 7 Basic V14 Article no. 6ES7822-0AA04-0YA5	<ul style="list-style-type: none"> • Configuration and programming of the SIMATIC S7-1200
		WinCC Comfort V14 Article no. 6AV2101-0AA04-0AA5	<ul style="list-style-type: none"> • Configuration and programming of the TP 700 Comfort
		SIWATOOL Article no. 7MH4960-2AK01	<ul style="list-style-type: none"> • (Optional) Performing a software update of the SIWAREX WP 231 weighing electronics (V3.1.1)

Set 6 - Quality Assurance by Weighing, Controlling and Logging

Further information

Benefits

- Cost-effective high-precision weighing by means of SIWAREX load cell
- Automated logging functions provides evidence for the customers
- Easy integration into existing systems due to a connection via PROFINET

Sectors of industry

- Food and packaging industry
- Mechanical engineering

Similar topics

- Extension of this set: Logging User Data by means of RFID (Set 13):
<https://support.industry.siemens.com/cs/ww/en/view/96784939>

Further information

- Topic page “Easy Entry in LOGO! and SIMATIC S7-1200”:
<https://support.industry.siemens.com/cs/ww/en/view/35923253>
- SIEMENS Industry Online Support Portal:
<https://support.industry.siemens.com/cs/ww/en/>

Set 6 - Quality Assurance by Weighing, Controlling and Logging

Security information

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Siemens' products and solutions undergo continuous development to make them even more secure. Siemens strongly recommends to carry out updates as soon as the respective updates are available and always only to use the current product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats. In order to always be informed about product updates, subscribe to the Siemens Industrial Security RSS Feed at <http://www.siemens.com/industrialsecurity>.