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# What is SMART SILO?



## What is SMART SILO?

- A new bulk cement supply service from CEMEX
- Combines convenience with reliability
- Automatically monitors bulk cement silo stock levels
- Analyses and predicts usage
- Seamlessly replenishes stock

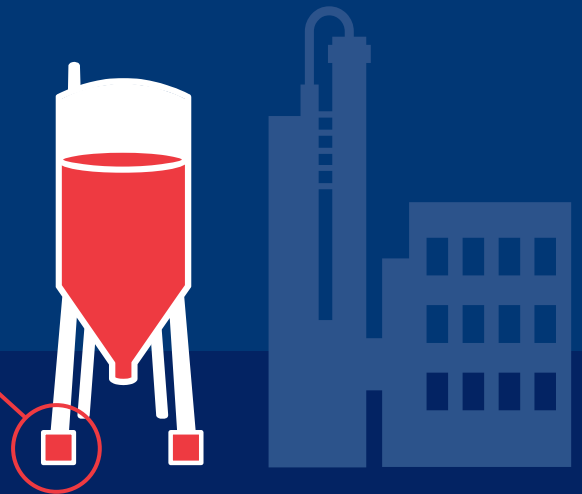
# How does it work?



## How does it work?

- After an initial site audit, strain gauges are fitted to existing silos. The gauges monitor usage and provide real-time inventory information

Strain gauge



## How does it work?

- The cement stock level is monitored every hour and readings are transmitted via gprs satellite directly to CEMEX's integral service



# How does it work?

- Data is logged and processed by integral service, plotting future usage based on recent trends. CEMEX logistics and customer service use this information to place orders automatically on the customer's behalf

Status	Customer	Customer Plant	Silo number	Product	Capacity	Last reading	Last reading time
	Cemex Materials	Aston	1	Cement Default	100 MT	63 MT	27/10 09:07
	Cemex Materials	Coventry	1	OPC	40 MT	25 MT	27/10 09:07
	Cemex Materials	Coventry	2	Anhydrite	35 MT	38 MT	27/10 09:07
	Cemex Materials	Coventry	3	GGBS	60 MT	25 MT	27/10 09:07
	Cemex Materials	Hatfield	1	GGBS	38 MT	28 MT	27/10 09:09
	Cemex Materials	Hatfield	2	OPC	85 MT	42 MT	27/10 09:09
	Cemex Materials	Hatfield	4	GGBS	60 MT	55 MT	27/10 09:09
	Cemex Materials	Hatfield	5	OPC	75 MT	72 MT	27/10 09:09
	CEMEX CONCRETE UK	Newark 3	2	Cement Default	52 MT	38 MT	27/10 09:09



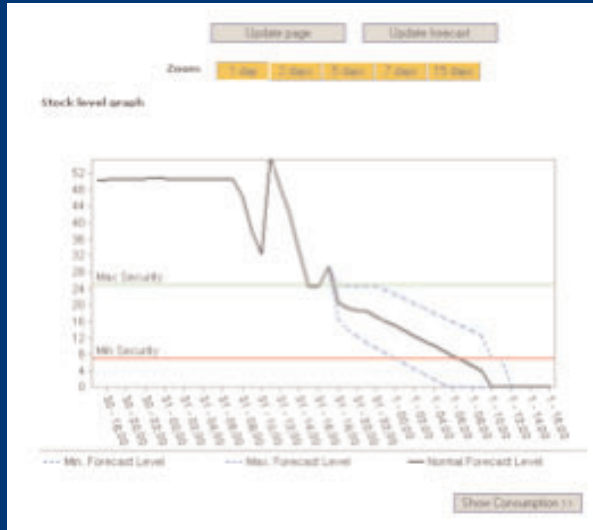
## How does it work?

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- Cement is despatched to site efficiently and effectively ensuring a seamless and continuous supply

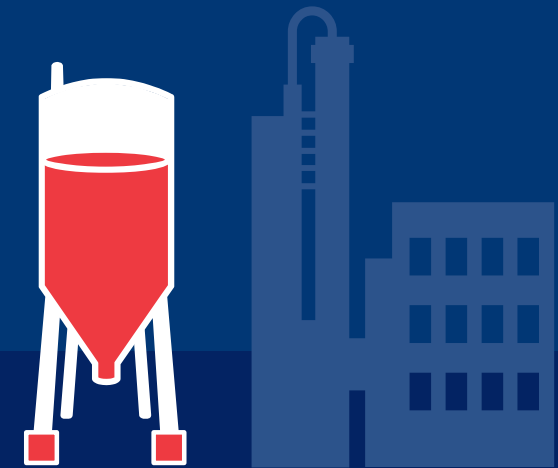


# How does it work?



- Customers can log on and view historic consumption, current stock levels and future usage trends. SMART SILO eliminates administration and takes the guess work out of cement supply.

A smarter way to do business



# Features & Benefits

Features & Benefits



# Features & Benefits

## Features

- Reduces the need to measure the silo
- Automated service
- Saves time on site
- Shared information
- More reliable measurement
- Free installation

## Benefits

- Improved site safety
- Significant reduction in calls and administration
- Allows greater concentration on plant productivity
- Transparent reporting
- Reduction in the error rate of stock gains and losses
- No additional cost to the customer

**Next steps**



## Next steps – Site audit/risk assessment

- Silos are assessed for suitability of retro-fitting SMART SILO equipment
- Ideally silos are metal in construction and are of stand alone design
- An Isolatable power supply is required (voltage and capacity rating to be determined either 110v or 240V)
- A suitable mobile signal from our service provider needs to be attained in the local area
- Suitable access around the silos to effect a safe working environment to install the equipment is required (all installers are safety passport accredited)
- Suitable access for a site survey to be carried out is required

## Next steps – Installation

- Silos are prepped prior to fitting strain gauges



- Test gauge used prior to fitting load cells



- Wiring is protected in water proof casings



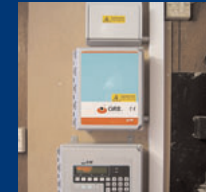
- A transformer box is fixed and wired to the support leg



- Installation is required in the batchers' cabin



- Finished installation in the batchers cabin



- SMART SILO branding on the orb box



- SMART SILO branding on the fixed support leg



- Finished silo installation



## Next steps – Calibration

- Customer co-operation is required to effect the calibration of silos fitted with SMART SILO technology
- Vessels are required to be emptied and then refilled to at least 70% capacity
- Material can not be drawn out during filling as this defeats the calibration process
- There may be some process disruption during calibration. This will be assessed and discussed at site survey stage

## Next steps – Transfer of Control Process

- **Week 1** – Begin transfer of transparent data between customer and CEMEX Customer Services
- **Week 2** – CEMEX Customer Services closely facilitate with customer to build better data and gain increases confidence
- **End of week 2** – Complete handover of cement delivery process to CEMEX Customer Services

## Next steps – Commercial

- Develop specific lever agreements for customer and CEMEX
- Sales person to arrange regular on-going review of SMART SILO service with customer

## Contact



## Contact

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