



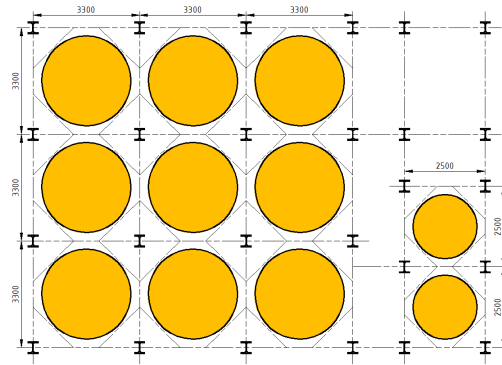
SCE - Innovative design of storage bins

#Think different

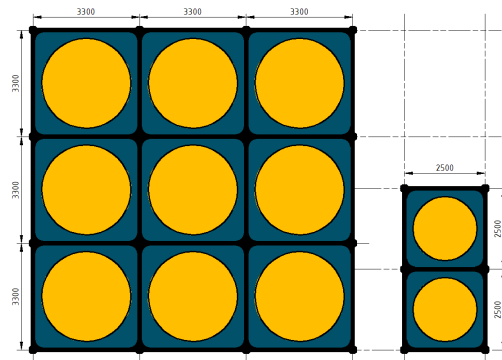


Square silo

Typical Round silo storage lay-out design



40% more storage possible in square silos than round silos



Resulted in **Hygienic** and efficient building

- Optimum space utilisation
- Minimum dead-space
- Better Hygiene
- Easy division into smaller sections
- Self-Supporting Bin/Silo walls
- Seamless Connections
- Easy, Fast and Safe Assembly
- Easy Shipment



50% productivity improvement possible during construction.

30% cost savings possible.

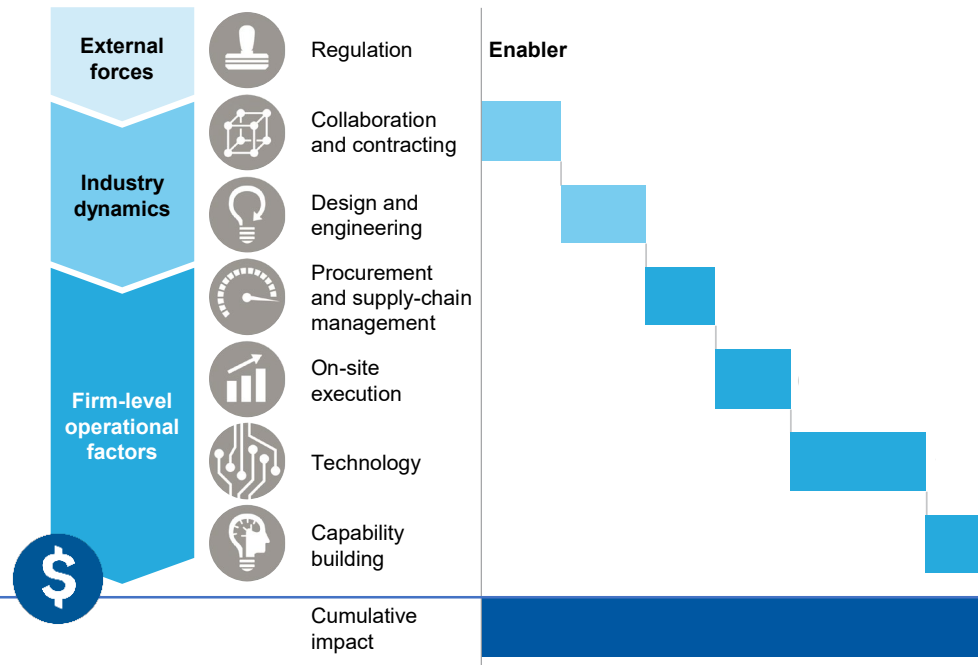
#Think best practices

SOURCE: McKinsey Global Institute analysis



50% productivity improvement possible during construction

implementation of best practices¹
Impact on productivity (%)²



Cost savings
%



First time right co-engineering & clear scope agreement.

Designed for easy assembly with precise pre-manufactured parts with a food safe result.

Lean manufacturing and just in time delivery.

Fastest assembly time in the industry and supported by dedicated project manager.

Early exchange of 3D design models to improve on-site execution. (BIM)

On-site hands-on training.

27-38 % cost savings possible

¹ The impact numbers have been scaled down from a best case project number to reflect current levels of adoption and applicability across projects, based on respondents to the MGI Construction Productivity Survey who responded "agree" or "strongly agree" to the questions around implementation of the solutions.

² Range reflects expected difference in impact between emerging and developed markets.

Traditional bulk storage building versus SCE solution

Total Installed Cost

Visible cost of a storage & process building
(=Delivered At Place contract price)



Invisible
cost

Installation work & tools cost
(No pre-assembled parts)

Foundation civil work
(Larger building)

Coordination costs
(Storage & Building not integrated)

Maintenance & Cleaning Cost
(Separate silo lay-out design)

Faster Installation
(Pre-assembled parts)

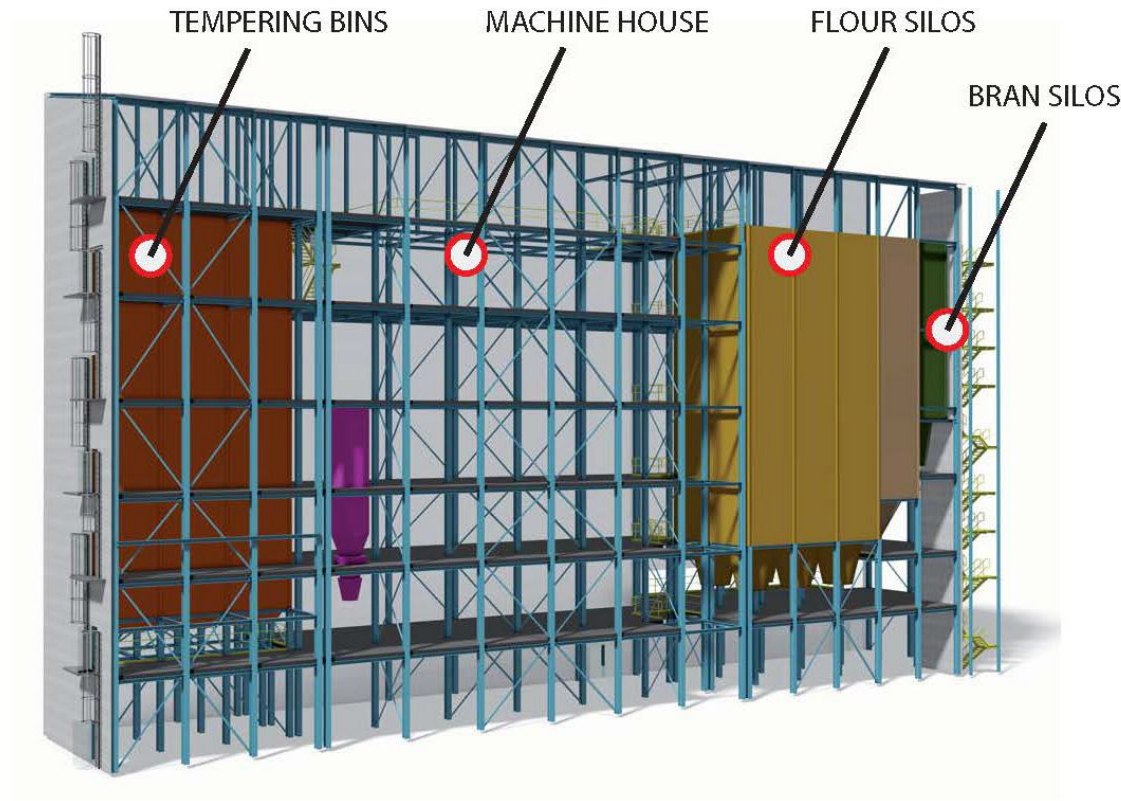
Less civil work
(Smaller & lighter footprint)

Easier Project Management
(Integrated storage & building facility)

Self-cleaning silos
(Modular & integrated hygienic silos)

Save  up to 30%

○ FLOUR MILL BY SCE – Building design



FLOUR MILLING - Specifics

Process specific requirements

- High level of hygiene needed
- Importance of FIFO in storage of the products
- Different products with different properties require different solutions:

Product specific requirements

Product	Requirements
Wheat tempering	Not so free flowing, need for FIFO
Bran	Sticky when compressed or humid need for decompression noses
Flour / Semolina	Avoid all slits that could contain product Avoid condensation Avoid product batches to mix

○ Silo walls for tempering, flour and bran bins

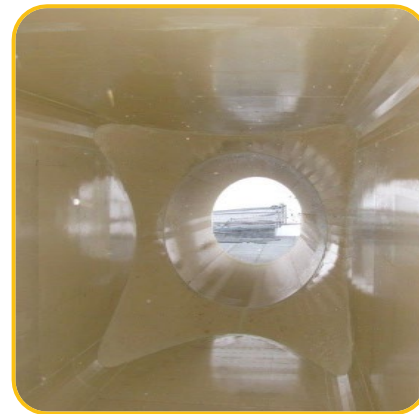
>> SMOOTH WALLS



- Self-cleaning, Twin skin panel prevents condensation
- No tension-rods
- Flour: **vertical rounded corners** inside the bin
- Bran : **decompression noses** to prevent bridging

Hopper design specifically for wheat | flour | bran

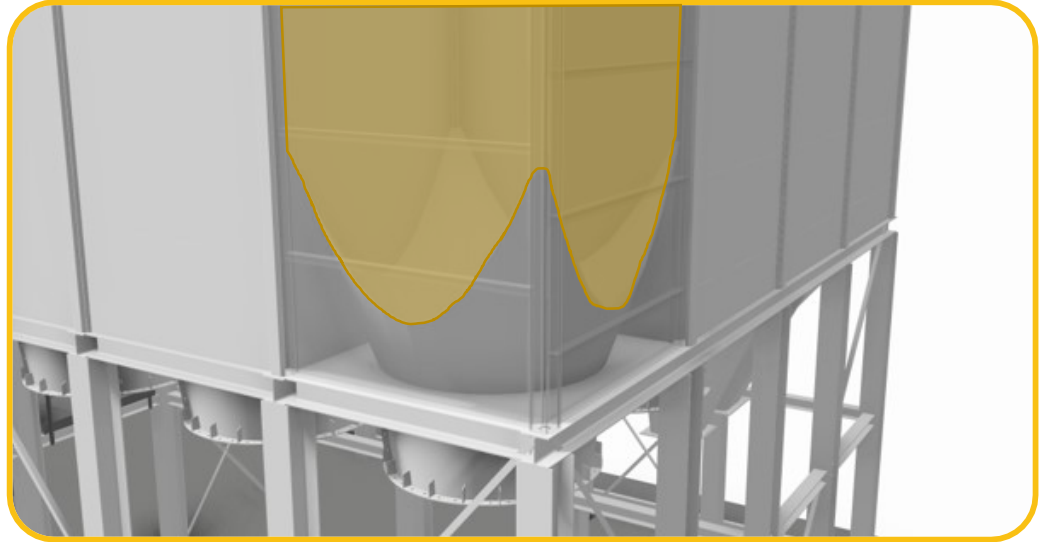
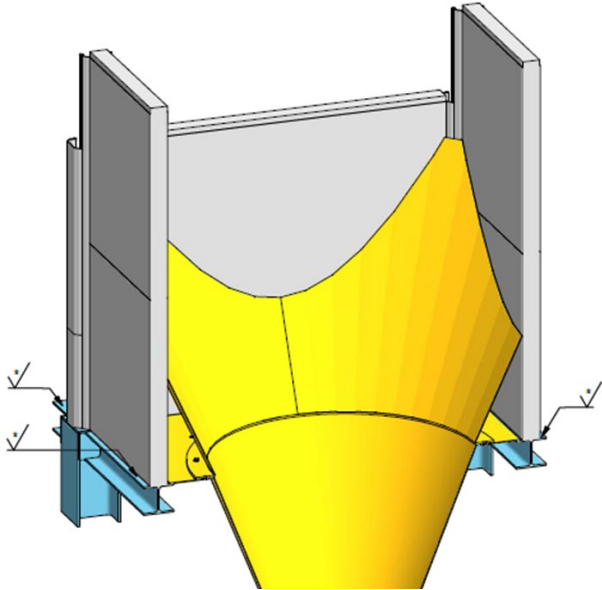
>> RIGHT CHOICE is essential TO ENSURE FIFO



- No dead corners
- Design according to product flowing properties:
 - Flour/ Bran min. 70° all around
 - Daily/tempering bins angle valley min. 50°

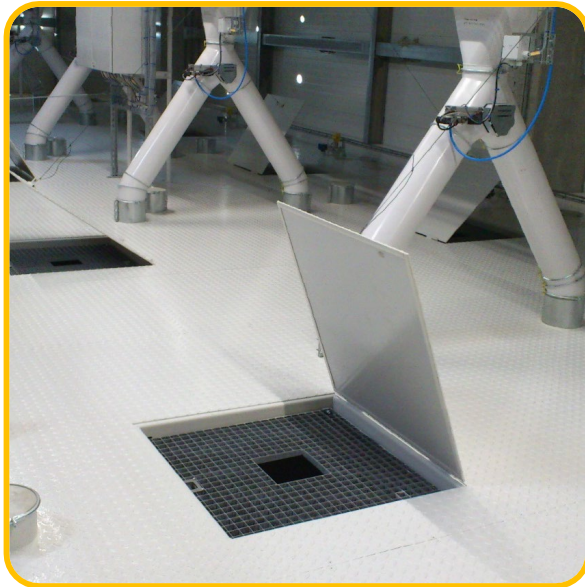
Butterfly hopper : SCE patent ensures optimal outflow

>> SAME ANGLE ALL AROUND AVOIDS FUNNEL FLOW



Bintops & Floors

>> HYGIENIC DESIGN



- **Walkable** neat surface – tear plate 5/7 mm
- Standard 2,50 kN/m²
- Customised options
 - Access hatch
 - Connection for filters
 - Filling hole
 - (Sunken) Connection for high level detection
 - Hand railing
 - ...

○ Excellent protection & hygiene for flour

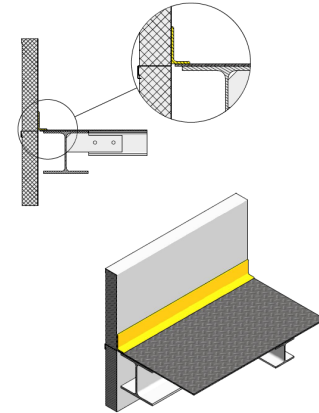
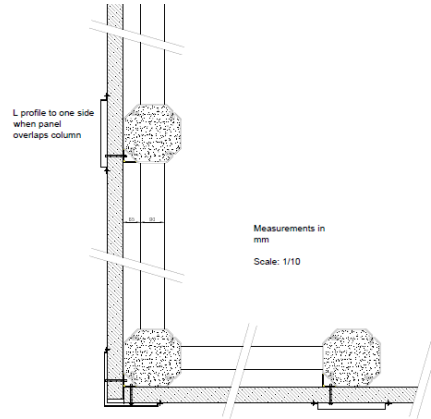
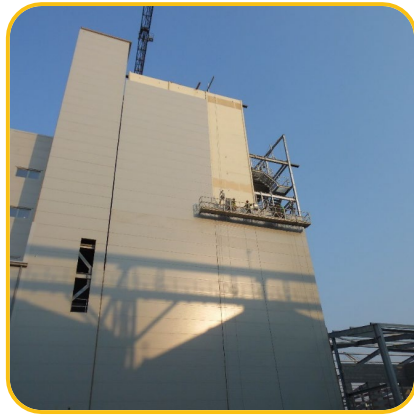
>> WALLS AND HOPPERS ARE POWDER COATED



- Pre-painted silo system
- No sand blasting and painting at site
- High resistance: more protection than normal paint
- Allows better flow of the product
- Foodgrade – on demand
- Acc. to EN ISO 12944
- Free of solvents and heavy metals
- Environmental friendly paint system

Sandwich panels for optimal hygiene

>> HORIZONTAL INSTALLATION



Kickplate prevents dust falling down

- Attached directly to the bin columns to reduce dust
- Marginal space between bin wall and cladding (closed off at bin top level!)
- Smooth wall inside allows for fast cleaning and maintenance



The co-engineering with the machine supplier and SCE resulted in the most efficient footprint and installation of the feed mill.

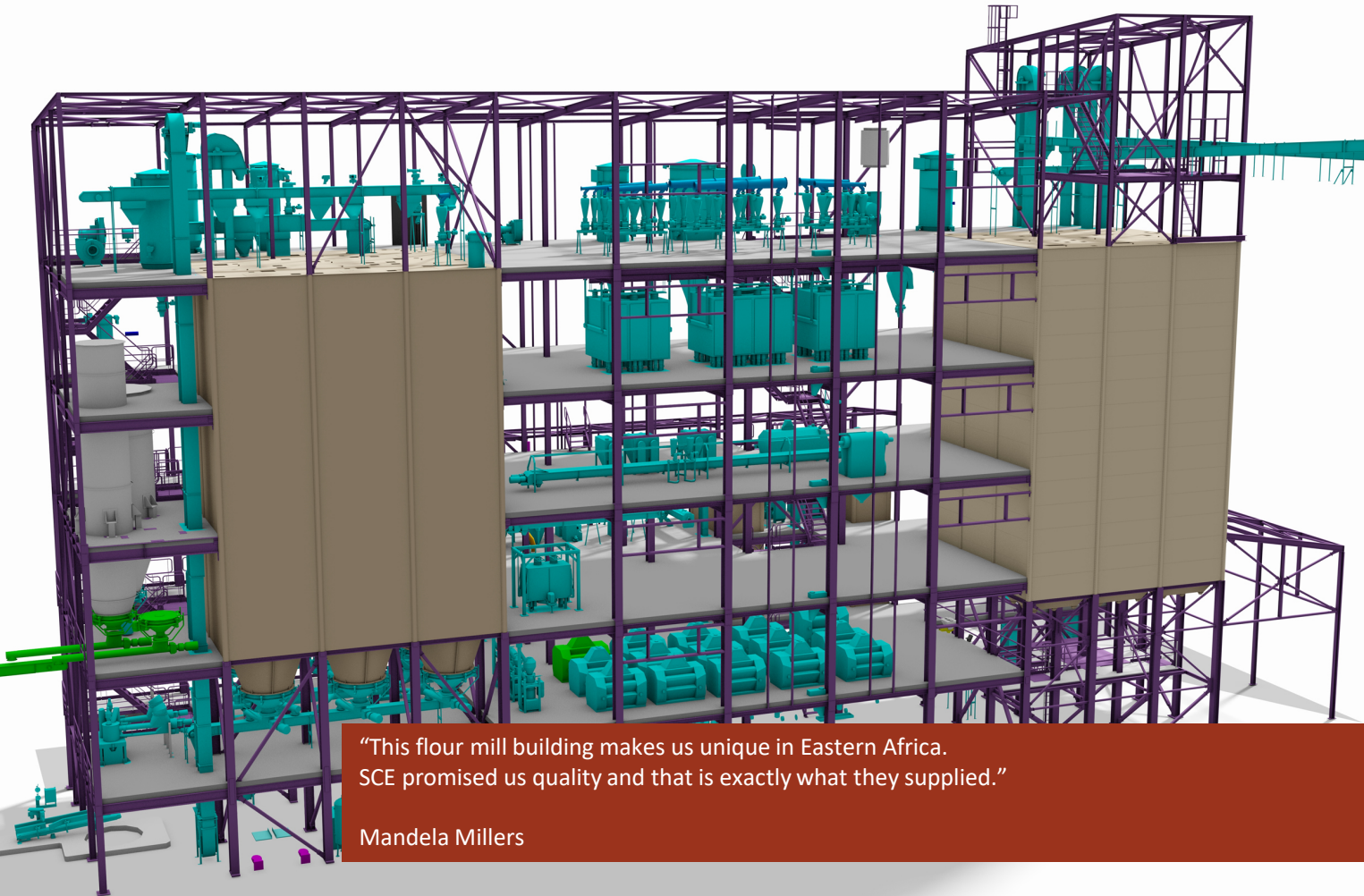
HAWA CHICKEN - Lebanon

A detailed 3D architectural rendering of a large, multi-story industrial building, identified as a flour mill. The structure is composed of a complex steel framework with numerous vertical and horizontal beams. The building is divided into several sections, some of which are covered with light-colored, rectangular panels. The interior of the building is visible, showing multiple levels and a dense arrangement of structural elements. The overall design is functional and industrial, typical of large-scale manufacturing facilities.

**NTAKE BAKERY
COMPANY LIMITED.**

‘SCE, I thank you very much for the way you designed and installed our flour mill building. Everything came well prepared, well manufactured and well painted, so installation went very smooth.

Gaster Lule - Founder & Managing Director



“This flour mill building makes us unique in Eastern Africa.
SCE promised us quality and that is exactly what they supplied.”

Mandela Millers

“SCE has been very effective during the project in interactions with all our feed mill stakeholders, including other suppliers involved”

Walter Figgemeier - MD - RLB Feed mill



Served Industries



Grain & oilseeds

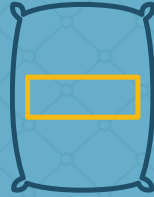
Flour Milling

Rice Milling

Seed Processing

Malt/Brewers

Grain Logistics



Feed

Animal feed

Pet food

Aqua feed



Food

Coffee

Cocoa

Bakery, Biscuits, Cereal,
Noodle, Pasta, Malt



Others

Granulates

Fertilizers

Orchid substrate

Projects around the globe



Thanks!

ABOUT OUR SQUARE SILOS



Optimum space utilisation



Easy, fast and
safe assembly



Better
hygiene

ABOUT US




Personal
approach



+30 years of
experience



Greatest attention
and care



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