

Cold Storage & Food Processing Complex

Integrated refrigeration, MEP & infrastructure design for a 5,370 m² industrial development

5,370 m²
TOTAL SITE AREA

3
CHILLED STORAGE
ROOMS

940 m²
FROZEN STORAGE
FACILITY

1,000 m²
INDUSTRIAL
WAREHOUSE

PROJECT OVERVIEW

A 5,370 m² industrial development designed as a modern cold storage and food processing complex. As the Owner's Design Consultant, Mirage Consulting Group was responsible for the planning, engineering design, and technical coordination of the entire project — transforming the site into a fully integrated industrial facility comprising an administration building, three chilled storage rooms for fruit preservation, a frozen storage facility for French fries, and an additional industrial warehouse.

KEY FACTS



Administration Bldg.

Full architectural & MEP design



3 Chilled Rooms

Fruit preservation (320–425 m²)



940 m² Frozen Storage

Dedicated French fries facility



1,000 m² Warehouse

Additional industrial storage



DESIGN PHILOSOPHY

Refrigeration systems were engineered based on required storage temperatures, product characteristics, and daily loading capacity to ensure optimum cooling performance and reliable operation. Every aspect of the design follows applicable international standards and engineering best practices — maximizing product preservation, operational reliability, and energy-efficient performance while minimizing long-term operating costs.

SCOPE OF WORK

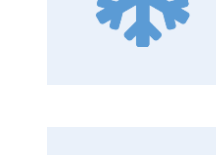
-  Master planning of the entire site
-  Complete architectural, structural, and MEP design
-  Chilled & frozen storage design — thermal loads, refrigeration & evaporator sizing
-  MEP design for the administration building
-  Infrastructure design for the complete development
-  Production line layout planning for the frozen French fries facility

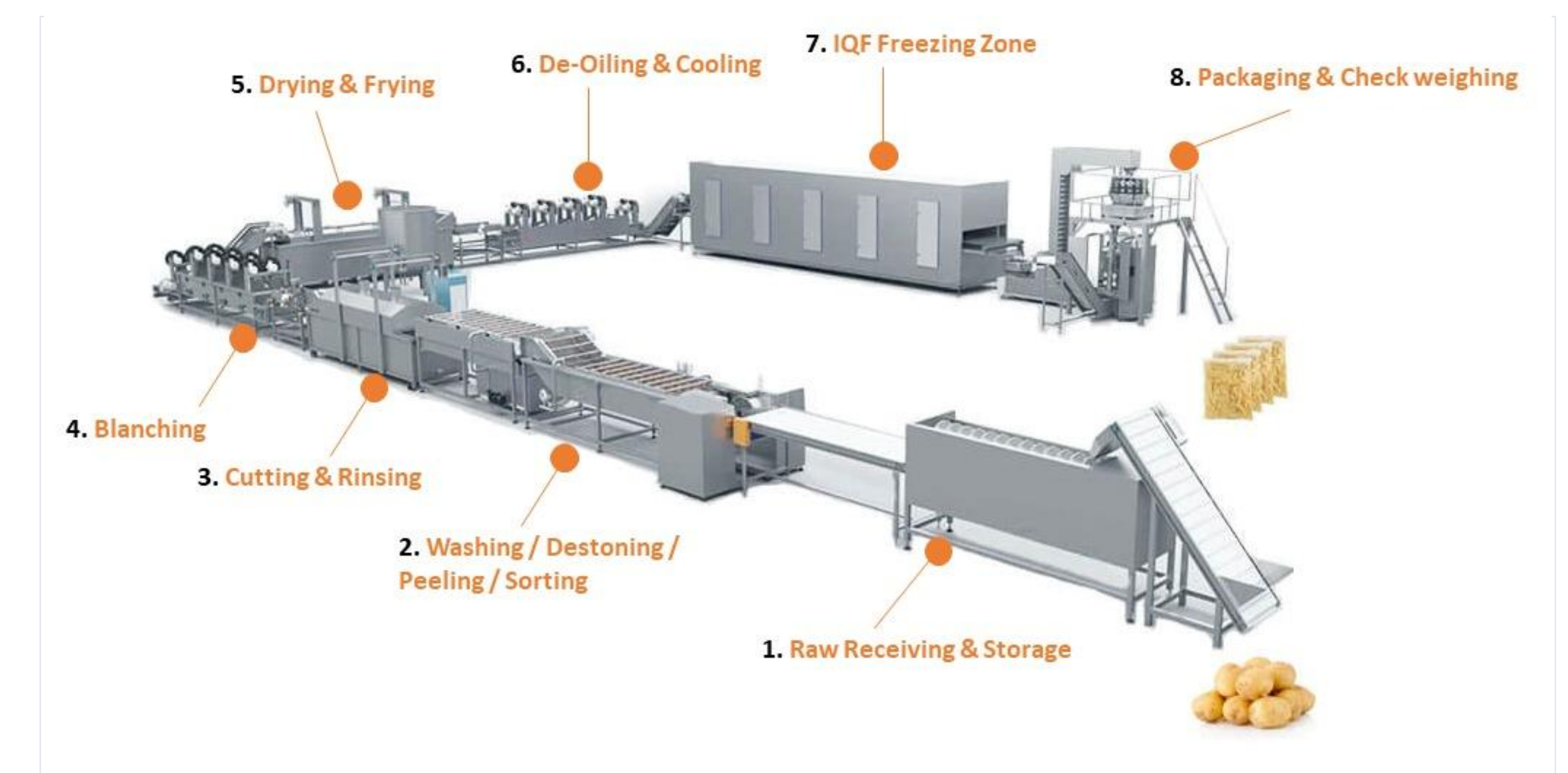
PROJECT VISUALS



Site master plan — admin building, chilled & frozen storage facilities

DELIVERABLES

-  Complete engineering design drawings
-  Thermal load calculations for all storage rooms
-  Refrigeration equipment selection & sizing
-  MEP design drawings & engineering calculations
-  Infrastructure design drawings
-  Bills of Quantities (BOQs)
-  Tender & construction documentation



Frozen French fries line — raw receiving through IQF freezing & packaging