

# ESL SYSTEMS

## EXTENDED SHELF LIFE MILK

MGT has developed a system for ESL milk processing in an Ultra Clean environment. The final product can achieve up to 30 days shelf life. ESL technology is the most advanced technology which replaces the standard pasteurized milk product. ESL maintains the quality and extends the shelf life of the milk under cold chain of below 8°C. The system is based on an indirect heating system with Ultra Pasteurization which reaches the temperature of 127°C to 130°C for 2-3 sec.

After the Ultra Pasteurization, the milk is almost sterile and it is then transferred to buffer tanks that are fitted with special HEPA filtration for preserving the Ultra Clean environment inside these buffer tanks and to avoid contamination of the milk. The final step of ESL processing and the most complicated is the filling stage. Special filling systems and HEPA filtration in order to maintain the milk under Ultra Clean environment are used, up to the final stage of sealed and packed product ready for the market.

### What Is ESL – Extended Shelf Life Milk?

Extended Shelf Life Milk can be achieved using Ultra pasteurization and proper treatment during all of the production stages. The fundamental principle of this process is to reduce bacteria levels and prevent the spores from forming units in the product during processing and packaging. MGT ESL Systems are designed to perform with extremely high levels of production hygiene and together with our special MGT ESL pasteurizer, the state of the art pasteurizing line is designed to achieve extended shelf life for our customer's milk.

### ESL advantages

- Reduction in product spoilage
- Improved competitiveness
- Fresh milk products (not UHT)
- Reduces the high cost of distribution and logistic
- Enables Exporting dairy products.

### Six Keys To Extending Product Shelf Life

- 1 Raw Product Quality
- 2 Processing Time and Temperatures
- 3 Intermediate Storage (tanks) and Ultra Clean Environment
- 4 Equipment Condition (Valves and Piping)
- 5 Packaging Environment, packaging material, Filler Characteristics
- 6 Retail distribution storage environment



### MGT-PROCESS offers a turnkey solution for Milk processing plants.



### Our quality standards:



Custom made



High quality standards



Cost-effective solution



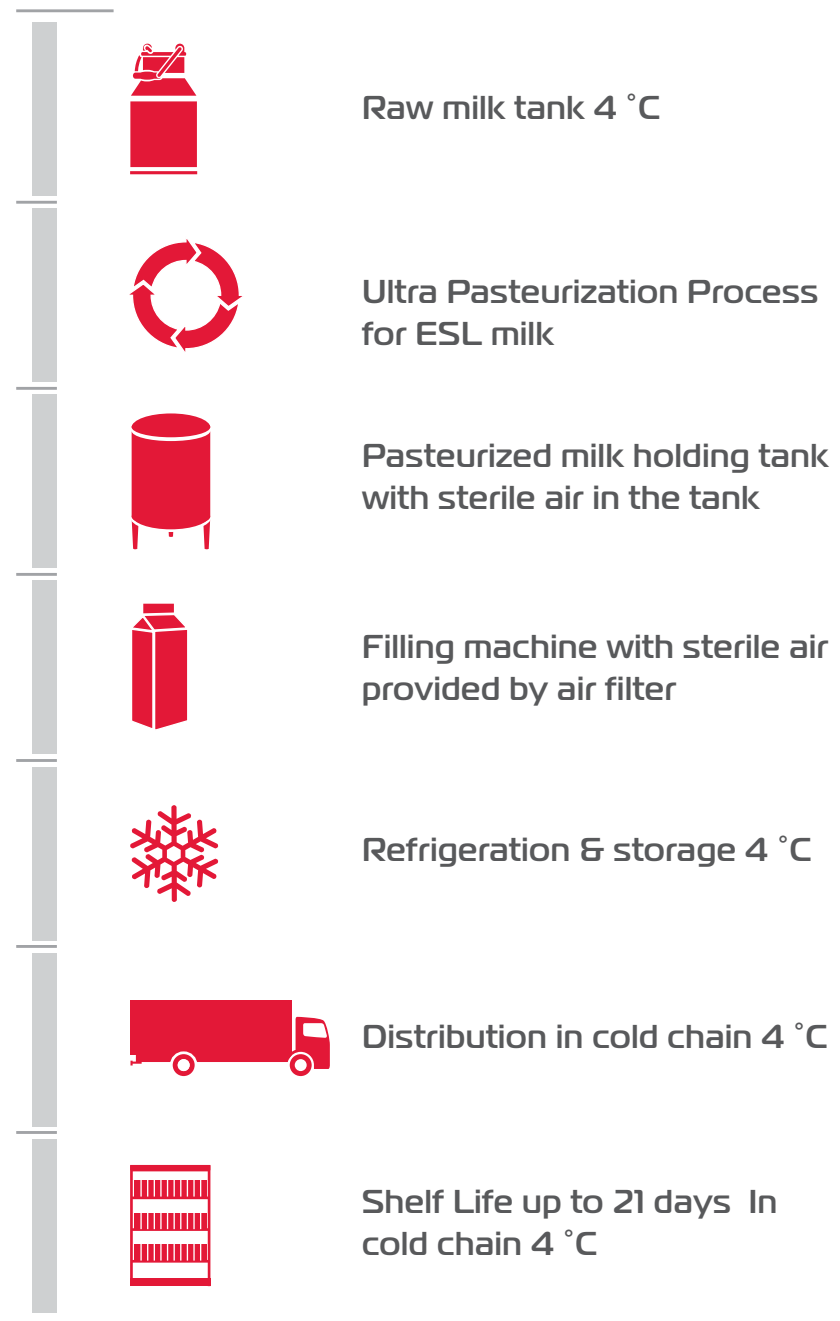
On-time delivery worldwide



Creative solutions

# ESL Milk Production

## Processing ESL milk and achieving longer shelf life



By combining more than 40 years of experience supplying food processing plants worldwide and by utilizing state of the art technology, MGT-PROCESS provides its customers with superior solutions adapted to their unique requirements.

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**MGT**  **PROCESS**  
LIQUID & PROCESS SYSTEMS

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