

# ASEPTIC TECHNOLOGY

**REDA**  
Food Processing Plants



**REDA Aseptic Tank**



# REDA ASEPTIC TANK

The best solution for maximum production flexibility

## Application

Modern aseptic buffer tanks are the best way for storage and preservation for general liquid foods thanks to their safety characteristics, hygiene and duration in the time.

Their main application is to maintain sterilized and refrigerated the product under conditions of total sterility, waiting for its filling by one or more aseptic fillers.

They are suitable for fluid or dense products, also with contained particles or filaments in suspension, and they can be integrated with special agitators (with aseptic barriers) guaranteeing in this way the homogeneity of the product in the tank even after a long term storage.

What goes out from REDA's aseptic tank to your filling machine has precisely the same quality, flavour, nutrition and asepticity as what came into the tank from your UHT treatment.



## Why use an aseptic tank REDA

Usually the next step after UHT treatment is to fill the product with one or more aseptic filling machines. Since dairy processing equipment and the machinery may be switched off sometime for many reasons (restore of consumables, cleaning, maintenance, etc.), this may stop the entire line.

This not only has a very negative effect on throughput, but may result in considerable product losses due to compromised quality during a standstill, particularly for products that cannot be recirculated.

The best solution to keep production up and running is to install an aseptic tank between



your UHT unit and your filling machine. Aseptic buffer tank prevents therefore any impact on the asepticity of your product, and keep the aseptic chain unbroken.

It also grants the product safety and quality by making unnecessary to recirculate during UHT production stops.

An aseptic tank lets you continue your UHT treatment while cleaning your filling machine, or conversely, continue filling while cleaning your UHT unit. Or you can hold one product while producing and filling another. And by consequence the number of production stops can be greatly reduced.

## GENERAL CHARACTERISTICS



### Robust, implosion-proof construction

REDA Aseptic Tank has a unique tank construction entirely in stainless steel, designed for absolute vacuum pressure, which completely eliminates the risk of implosion. It has vertical cylindrical shape with thermal isolation in the cylindrical part and capacity from 1,000 to 30,000 liters.

### Simplified base

REDA Aseptic Tank stands on three legs and each include a load cell for an accurate managing/control of levels and other operation phases. The Aseptic Tank REDA is furnished with a series of premounted elements and accessories on a stainless steel frame, including hydraulic, pneumatic and electrical connections. Its concept foresees a CIP equipment to perform automatic cleaning phases.

### Controls

The Aseptic Tank is controlled by a PLC mounted on its electric board with an operator control panel. The panel of the UHT plant can be used as operator interface, if the tank is delivered with a REDA UHT plant (ATR-UHT, STERIFLEX or DIRECT UHT REDA).

### Optimal performance

REDA Aseptic Tank have a long and efficient operating time with reduced product losses. It is designed to be possible to clean thoroughly and get back up and running quickly. This also minimizes the consumption of energy, water and detergents.

### Sterile air producer

Every REDA Aseptic Tank includes its group of preparation and regulation air/sterile inactive gas with air filtering system to guarantee the most high safety for sterility conditions. Aseptic safety is also granted through a group of pneumatic valves with steam barrier to prevent loss of asepticity.

Its special design provides an inlet-outlet air regulation from the top and allows the unloading/loading of the product without the use of any pump. The product has a separate inlet and outlet for even better product rotation.



## Advantages of REDA Aseptic Tank:

- Fully aseptic
- Outstanding production flexibility
- Consistent product quality
- Reduced product losses
- Extremely short pre-sterilization time
- Designed for absolute vacuum (no implosion risk)
- Operator-friendly touch-screen controls
- Fast and easy cleaning

## TECHNICAL DATAS

Tank capacity	: 20 000 Lts	Inlet steam pressure	: 6-8 bar
Tank pressure	: 5 bar max.	Steam working pressure	: 3-4 bar
Tank vacuum	: -1 bar max.	Operating voltage	: 3x400 V, 50Hz
Working temperature	: +160°C max.	Control voltage	: 24 V AC
Feeding pressure	: 1-3 bar		

Note: All REDA Aseptic Tanks are fully manufactured in compliance with European safety standards (PED normatives).



Example of complete REDA line for UHT milk production with Aseptic Tank of 20 000 liters