



SULZER



**Sulzer Pumps
for Sugar Refinery Applications**

The **Heart**
of Your
Process





Sulzer Pumps at Your Service

AHLSTAR™ APP/APT* the standard process pumps are designed according to ISO 5199/ISO 2858 standards for all normal pumping applications for clean, abrasive or corrosive liquids and also for liquids containing fibers.



AHLSTAR™ WPP/WPT wear resistant pumps are designed for applications where durability is essential, like pumping both abrasive and corrosive liquids and slurries containing particles.



AHLSTAR™ ASP/AST self priming gas removal pumps enable efficient and trouble-free pumping of liquids containing gas up to 70% or when self priming pumps are needed.



ADVANTAGE CPT chemical process pumps series is designed according to ANSI/ASME B73.1 M standards for all normal pumping applications for clean, abrasive or corrosive liquids and also for liquids containing fibers.



SALOMIX™ LA agitators the belt driven fast-running agitator with CP-propellers for refinery applications. The LA model is best where good agitation is needed. Due to its robust construction, the need for maintenance is minimal.



Vertical agitators with six blade special SALOMIX™ propellers for crystallization pans. These agitators are always tailored to the pan.



HPP/HPT high pressure multistage pumps for pumping of clean or slightly contaminated liquids in high pressure applications.



PUMPS FOR OTHER UTILITIES
we also have wide range of pumps for applications in water transport, boiler feed and dewatering.

* P and T versions refer to metric and inch measures



Advanced Pumping Solutions for the Sugar Industries

Sulzer Pumps has hundreds of pumps running in demanding applications in the sugar industry. Our high quality products and deep understanding of sugar processes generate reliable pumping solutions to meet the needs of our customers.

One crucial factor in the sugar industry is reliable sealing. In the Dynamic Seal there are no narrow areas corresponding to the sealing face area in mechanical seals where sugar can crystallize and cause sealing damage. Furthermore, there are no wearing parts, nor sealing water system requirements. That's why Sulzer Pumps' Dynamic Seal is used in every sugar pumping application, whenever possible!

Sulzer Pumps' AHLSTAR™ series is designed according to ISO 5199 standards for continuous operation in industrial processes. One of the key features of this product line is the interchangeability of parts and components. This allows new technology to be easily incorporated into the full range of product offerings.

Material selection has a major effect on pump lifetime. The general drive to increase efficiency throughout the sugar process, including the use of one-pump -systems, makes the selection of every pump and its material more important than ever before.

Let's make the best out of your sugar pumping!





Affination

Special features: gas content

For juices, waters and chemicals

The AHLSTAR™ APP/APT process pump with

- high efficiency, low NPSHr open impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

The ADVANTAGE CPT chemical process pump (ANSI dimensional pump) with

- open, high efficiency, low NPSHr impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

For affinated and melted liquors and collected floor juices

The AHLSTAR™ ASP/AST self priming gas removal process pump with

- high efficiency, low NPSHr open impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- internal vacuum system

For mixing melted liquors

The SALOMIX™ LA -agitator with

- belt drive
- SALOMIX™ -bearing frame
- high efficient CP-propeller(s); several impeller options
- specialized SS2343 material for parts in contact with liquid





Purification

Special features: alkalinity, low speed pumping

For limed juices and lime slurries

The AHLSTAR™ WPP/WPT wear and corrosion resistant process pump with

- wear resistant closed impeller
- corrosion and wear resistant chromium iron ASTM A532 IIIA or
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

For filtrates, washing waters and condensates

The AHLSTAR™ APP/APT process pump with

- high efficiency, low NPSHr closed impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

The ADVANTAGE CPT chemical process pump (ANSI dimensional pump) with

- open, high efficiency, low NPSHr impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

For high pressure waters

The HPP/HPT high pressure multi-stage pump with

- closed impellers
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

For filtering aids (silicon earth)

The AHLSTAR™ WPP/WPT wear and corrosion resistant process pump with

- wear resistant closed impeller
- corrosion and wear resistant chromium iron ASTM A532 IIIA
- unique dynamic shaft seal

For mixing liquids (lime milk and water)

The SALOMIX™ LA -agitator with

- belt drive
- SALOMIX™ -bearing frame
- high efficient CP-propeller(s); several impeller options
- SS2343 material for parts in contact with liquid

For maintaining properties of the fluid

The SALOMIX™ LV -agitator with

- versatile gear drive
- high efficiency SALOMIX™ paddles (AF/AFX -type)
- SS2343 material for parts in contact with liquid.

Evaporation

Special features: low NPSH values, high temperature

For liquors

The AHLSTAR™ APP/APT process pump with

- high efficiency, low NPSHr open impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal for non-boiling liquors
- mechanical shaft seal for boiling liquors



For condensates

The AHLSTAR™ APP/APT process pump with

- high efficiency, low NPSHr closed impeller
- corrosion and wear resistant stainless steel ASTM A890 3A or
- cast iron A48 CL 30 B
- unique dynamic shaft seal for non-boiling condensates
- mechanical shaft seal for boiling condensates

The ADVANTAGE CPT chemical process pump (ANSI dimensional pump) with

- open, high efficiency, low NPSHr impeller
- corrosion and wear resistant stainless steel ASTM A890 3A or
- cast iron A278M CL 200 (for temperatures below 120 °C)
- mechanical shaft seal for boiling condensates
- unique dynamic shaft seal for non-boiling condensates

Crystallization

For liquors and waters

The AHLSTAR™ APP/APT process pump with

- high efficiency, low NPSHr open impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- unique dynamic shaft seal

For molasses and collected floor juices and re-melt liquors

The AHLSTAR™ ASP/AST self priming gas removal process pump with

- high efficiency, low NPSHr open impeller
- corrosion and wear resistant stainless steel ASTM A890 3A
- internal vacuum system

For strikes

The SALOMIX™ LV -agitator with

- versatile gear drive
- special SALOMIX™ impeller
- SS2343/Fe material for parts in contact with liquid

Other Utilities

Water transport

The B series of vertical line shaft pumps consist of BK, BS and BP ranges. They are primarily used in water lift, transfer and cooling water applications.

AHLSTAR™ NVP/NVT non-clogging vertical pumps are intended for all kinds of hard applications with waste water, slurries or waste stock.

SM/SMN single stage double entry pumps are used across a broad range of industries in liquid transport and transfer applications.

ZPP double suction pumps are designed for applications including cooling and circulating water pumping.

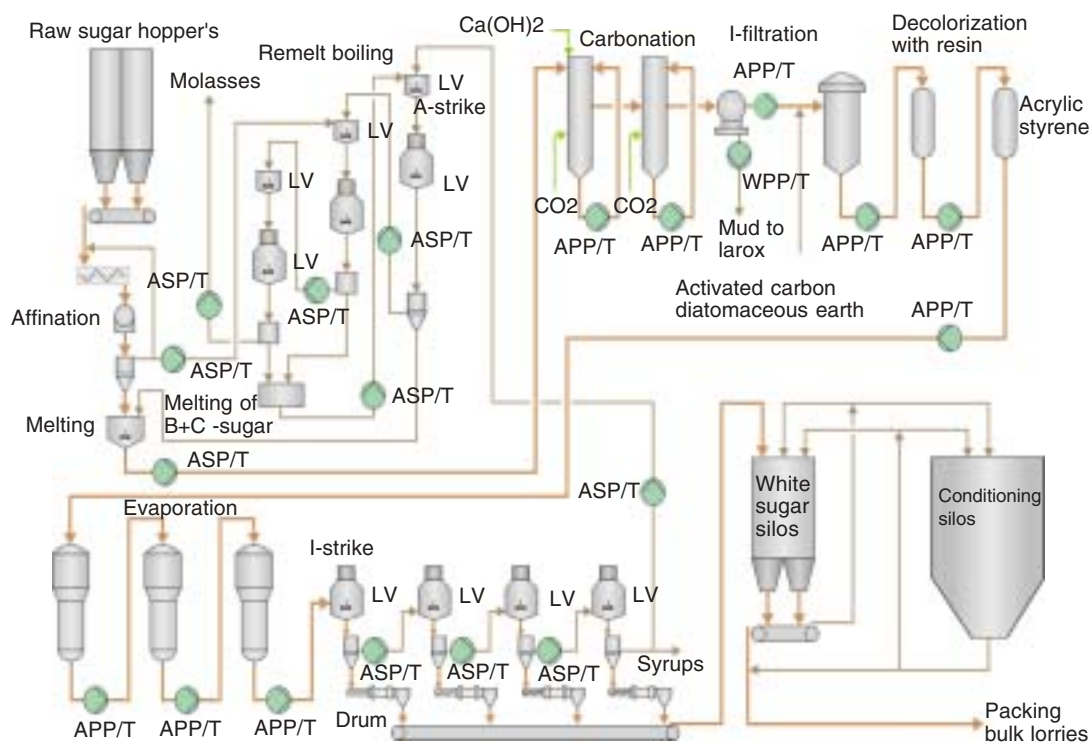
Boiler feed

The HPP/HPT high pressure multi-stage pumps are used for pumping clean or slightly contaminated liquids in high pressure applications in various industries.

The M series of ring section multi-stage pumps consist of MB, MD and ME ranges. A wide range of common hydraulic components and bearing assemblies are used within the 4 standard pressure ranges.



General Flowsheet



The Sulzer logo is displayed in a bold, white, sans-serif font in the upper right corner of the image. The background of the entire page is a close-up photograph of a light-colored, granular material, possibly a pump component or a type of fuel, with several white, rectangular sugar cubes scattered on its surface. In the upper left, there are several cylindrical objects, likely pump shafts or rollers, with a metallic, textured end and a smooth, light-colored body.

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Check our worldwide offices at
www.sulzerpumps.com