


RESERVOIRS

Size and shape for most specific requirements. Available in carbon steel, stainless steel or aluminum steel plate, with glass clad or all stainless steel plate. Roofs welded. Internal surfaces of most tanks welded and coated with a hot steel sandblasted and coated with a rust-preventative. Sloping bottoms and baffling to provide proper internal flow and minimize generation of static charge. Furnished with manways, ladders, vents, drains, level gauge and switch. Steam heating coils and low wind density aluminum heaters available.

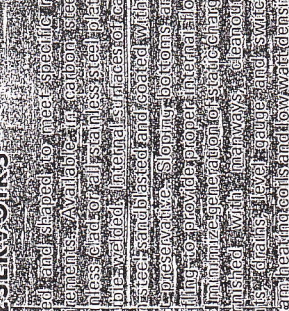
Turbines – Cast iron or steel casing as required for all pressures and temperatures. Constant speed governors, safety trip and brake construction available. Adequately sized to meet maximum demand. **Motors** – All enclosures available at standard voltages and frequencies. Sized with sufficient horsepower to meet maximum pressure and capacity requirements at maximum viscosity.



RESERVOIRS

Size and shape for most specific requirements. Available in carbon steel, stainless steel or aluminum steel plate, with glass clad or all stainless steel plate. Roofs welded. Internal surfaces of most tanks welded and coated with a hot steel sandblasted and coated with a rust-preventative. Sloping bottoms and baffling to provide proper internal flow and minimize generation of static charge. Furnished with manways, ladders, vents, drains, level gauge and switch. Steam heating coils and low wind density aluminum heaters available.

Designed and manufactured to meet system requirements using materials as specified, ASME certification and Canadian Registration available as well as various TEMA classifications. Cooling by either water or air.



RESERVOIRS

Size and shape for most specific requirements. Available in carbon steel, stainless steel or aluminum steel plate, with glass clad or all stainless steel plate. Roofs welded. Internal surfaces of main body, skirt and base coated with a hot-dip zinc-bath and coated with a rust-preventative. Sloping bottoms and baffling to provide proper internal flow and minimize generation of static charge. Furnished with manways, ladders, vents, drains, level gauge and switch. Steam heating coils and low wind density aluminum heaters available.

Sized to handle maximum flow with minimal pressure drop. Vessels can be per ASME code or Canadian Registration. Cart-ridges of standard micron ratings of various types and materials available.

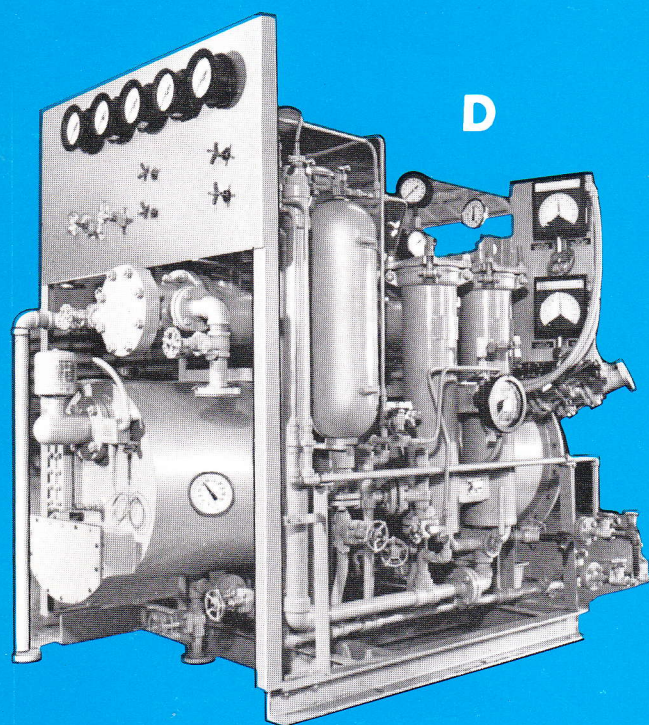
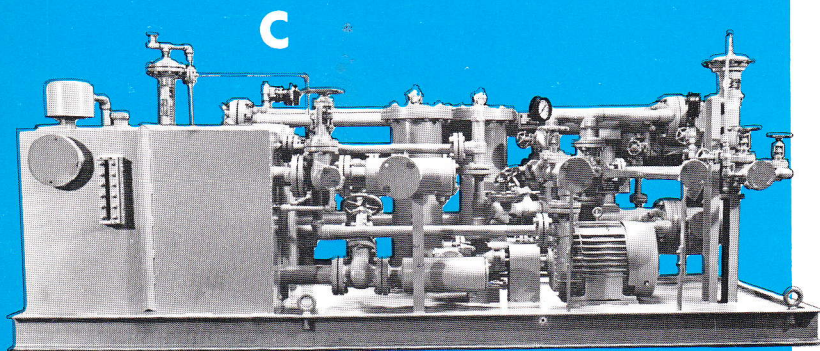
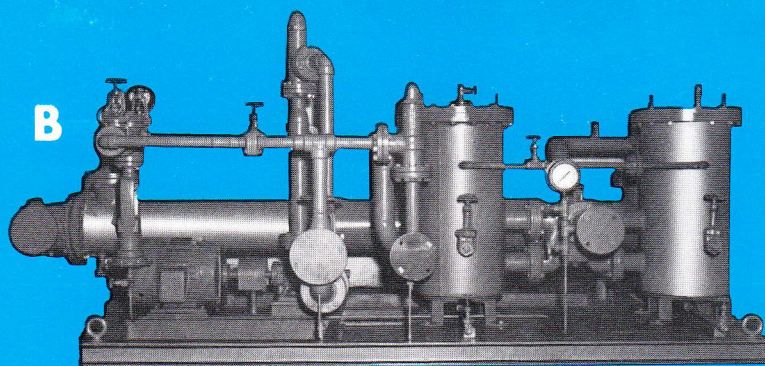
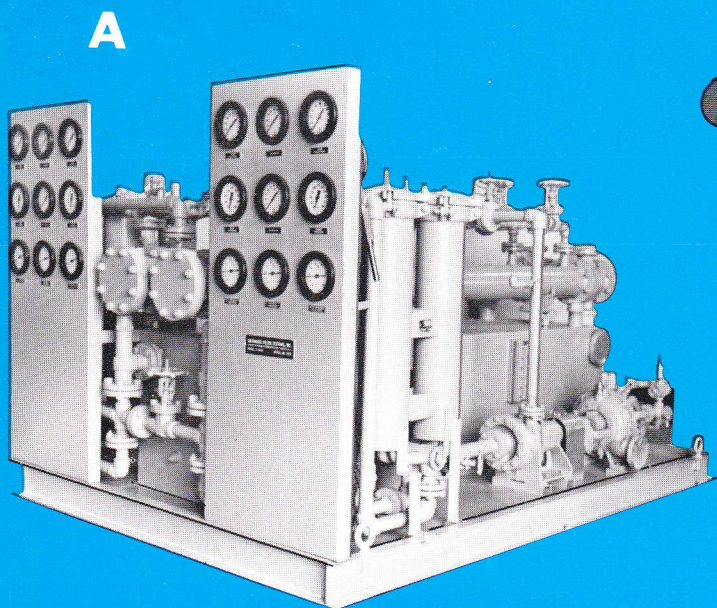
INSTRUMENTATION

Indicating meters can be provided for all levels. Switches for alarm, shut down or other functions in all types of enclosures available. U/L and C.S.A. approval as required. Panel mounting available.

The diagram illustrates a ship's ventilation system. Air is drawn from a fan (1) through a filter (2) and a duct (3) into a large room (4) labeled 'HIGH'. This room is connected to a 'LOW' room (5) and a 'MIN' room (6). A 'BREATHING DISPOSIT' (7) is connected to the 'HIGH' room. A 'BAFFLE' (8) is located between the 'LOW' and 'MIN' rooms. The air then flows through a 'TUB' (9) and a 'MAIN' engine room (10) to an 'AUXILIARY' engine room (11). The system includes various valves (12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100) and a 'PILL' (101). The system is controlled by a 'MANNING' (102) and a 'PILL' (103).

All components so arranged to be readily accessible for easy maintenance. Interconnecting piping of either carbon or stainless steel includes necessary valves to permit removal of items without shut down. All welding by ASME code welders.

All consoles are flushed clean and tested at operating pressures prior to shipment to obtain proper setting of control valves and switches. Piping is hydro-tested at 1½ times maximum system pressure.



A TURBINE LUBE SYSTEM

Duplex system to supply oil to 2 steam turbines. Interconnecting piping and valves permit oil flow from either system to one or both turbines. Separate gauge boards, including steam gauges, are mounted on the base.

B COMPRESSOR LUBE SYSTEM

Used in conjunction with a "Multi-Stage" Compressor with self-contained reservoir and shaft driven pump. Includes auxiliary motor driven pump, cooler, duplex filters and pressure control valve to maintain constant pressure at compressor bearings.

C LUBE and SEAL SYSTEM

Required seal oil pressure is provided by dual pumps cooled and filtered at high pressure. Lube oil pressure is controlled by pressure reducing valve downstream of filters. All components arranged in a compact design to meet limited space requirements.

D LUBE OIL SYSTEM for HELIUM EXPANDER

Designed to supply accurately regulated pressure and temperature oil to the bearings of the expander and to provide controlled flow of helium.

Custom-designed systems with capacities from **2 GPM** to **600 GPM** and at pressures up to **4000 PSI**.

Applications include: Lube and Seal Oil Systems for Centrifugal Compressors; Flood Lube Systems for Rolling Mills; Lube Systems for Turbines, Generators, Gears & Pumps. Special Fluid Handling Applications for Heat Transfer and Filtration Systems are also included in our capabilities.

All design, fabrication and testing are done under supervision of Licensed Professional Engineers.

PUMPS

Positive displacement or centrifugal with all types of mechanical seals. Selected to provide required flow with sufficient additional capacity for proper pressure regulation. Available in cast iron, nodular iron or steel.

DRIVERS

Turbines — Cast iron or steel casing as required for all pressures and temperatures. Constant speed governors, safety trip and brake rim construction available. Adequately sized to meet maximum demand. Motors — All enclosures available at standard voltages and frequencies. Sized with sufficient horsepower to meet maximum pressure and capacity requirements at maximum viscosity.

COOLERS

Designed and manufactured to meet system requirements using materials as specified. ASME certification and Canadian Registration available as well as various TEMA classifications. Cooling by either water or air.

FILTERS

Sized to handle maximum flow with minimal pressure drop. Vessels can be per ASME code or Canadian Registration. Cart-ridges of standard micron ratings of various types and materials available.

PRESSURE and TEMPERATURE CONTROL

Required levels are maintained by air operated, direct-operated or spring-loaded valves.

INSTRUMENTATION

Indicating meters can be provided for all levels. Switches for alarm, shut down or other functions in all types of enclosures available. U/L and C.S.A. approval as required. Panel mounting available.

ARRANGEMENT

All components so arranged to be readily accessible for easy maintenance. Interconnecting piping of either carbon or stainless steel includes necessary valves to permit removal of items without shut down. All welding by ASME code welders.

TESTING

All consoles are flushed clean and tested at operating pressures prior to shipment to obtain proper setting of control valves and switches. Piping is hydro-tested at 1½ times maximum system pressure.

