



Webber Industrial Freezers



Custom Freezers

Webber Manufacturing has earned a reputation for the design and manufacture of Industrial Freezers and Environmental Test Chambers of the highest quality. We have proudly served thousands of satisfied customers across a wide variety of international industries since 1946.

We have listed several styles and configurations of freezers as part of Webber's "Standard Literature." Please consider these Standards a humble starting point. Webber's business was founded on custom applications. Even today, we enjoy meeting the challenge of our customer's "one-off" applications.

Since 1946, Webber has designed and built industrial freezers of almost every imaginable configuration and capacity. We have built them for most of the top industrial manufacturers in the world.

Webber describes this particular product line as Industrial Freezers to differentiate our product from other would-be contenders.

Maximum Strength Freezers!

Webber builds freezers that survive and even thrive in the cryogenic temperature zones and beyond. Webber's freezers will operate 24 hours per day, 7 days per week, and 365 days per year for decades. Our history and our customers support these claims on a weekly basis.

Webber's Industrial Freezers are constructed to survive the abuses that are a daily ritual in today's heavy manufacturing industries. Railroad car axles, baskets of gears, hi-precision aircraft parts; torx, phillips, straight, and socket end, screwdriver shafts and bits; wrenches, drill bits, hammers, parabolic reflectors, camshafts, crankshafts, valves, and pistons; helicopter blades...are all frozen in Webber freezers. That's just a small part of the list for the manufacturing sector.

The Federal Government regularly contracts with Webber for specialized freezers that we aren't allowed to talk about. So, we won't.

When your freezing application requires, durable, dependable, accurate equipment backed by factory service and parts, let Webber fill your freezing requirements.

Webber Model Numbering System

ATJ6-120

A - Air cooled condenser
W - Water cooled condenser
L - Liquid nitrogen

Ultimate low temperature
in degrees fahrenheit

T - Top opening lid
F - Front opening door

Internal Cubic footage capacity

J - No internal fan circulation



Type A Freezers are designed with the mechanicals on the side.



Type B Freezers are designed with front opening doors.



Type C Freezers are designed with the mechanicals on the bottom.

The following charts define our standard freezer line. Often these standards are the departure point for custom builds. See our list of options to design a freezer that meets your specific requirements.

WT and WF Series Industrial Freezers - Temperature Range: Ambient to -120° F. Heavy duty industrial freezers utilizing **MECHANICAL** refrigeration and forced air circulation for rapid cooling of heavy production loads.

Model Number	Vol. (cu. Ft.)	Refrigeration System (H.P.)	Power (Standard)	Lid/Door Style	Dimensions (inches) L x D x H	Cooling Capacity with prechilled Freezer*	Shipping Weight (approx. lbs.)	Style
WT15-120	15	3 x 3	230-3-60 460-3-60	Top Opening Counter-Balanced	Int. 30 30 30 Ext. 88 47 43	100 lbs. In 60 min.	2000	"A"
WT25-120	25	6 x 6	230-3-60 460-3-60	Top Opening Counter-Balanced	Int. 48 30 30 Ext. 106 47 43	500 lbs. In 90 min.	2200	"A"
WT35-120	35	6 x 6	230-3-60 460-3-60	Top Opening Air Lifted	Int. 51 34 ¹ / ₂ 34 ¹ / ₂ Ext. 109 59 50	500 lbs. In 90 min.	2700	"A"
WT45-120	45	Std. 6 x 6 Opt. 7 ¹ / ₂ x 7 ¹ / ₂	230-3-60 460-3-60	Top Opening Air Lifted	Int. 56 ¹ / ₂ 40 ¹ / ₄ 34 ¹ / ₄ Ext. 115 77 50	Std. 500 lbs. In 90 min. Opt. 500 lbs. In 60 min.	3600	"A"
WT53-120	53	Std. 7 ¹ / ₂ x 7 ¹ / ₂ Opt. 6 x 6	230-3-60 460-3-60	Top Opening Air Lifted	Int. 56 48 34 ¹ / ₄ Ext. 104 85 50	Std. 500 lbs. In 60 min. Opt. 500 lbs. In 90 min.	4400	"A"
WF60-120	60	Std. 15 x 15 Opt. 7 ¹ / ₂ x 7 ¹ / ₂	460-3-60	Vertical Front Opening Air Lifted	Int. 42 55 46 ¹ / ₄ Ext. 89 69 170	Std. 2000 lbs. In 90 min. Opt. 1000 lbs. in 2 hrs.	4700	"B"

*Capacity Notes: (1) Freezers have sufficient cooling capacity to return air temperature to -120°Fahrenheit in stated time with loads shown (load at ambient 75°Fahrenheit). (2) The production capacity of the freezer may vary with the size, shape, surface conditions, loading geometry and temperature of the load when entered into the freezer. Varying ambient temperatures will also affect the capacity.

ATJ Series Industrial Freezers Heavy duty industrial freezers utilizing **MECHANICAL** refrigeration without forced air circulation for applications which do not require rapid cooling rates.

Model Number	Vol. (cu. Ft.)	Temperature Range	Refrigeration System (H.P.)	Power (Standard)	Dimensions (inches) L x D x H	Shipping Weight (approx. lbs.)	Style
ATJ6-40	6	Ambient to -40° F.	1	230-3-60	Int. 36 18 16	500	"C"
ATJ6-110		Ambient to -110° F.	1 x 1	460-3-60	Ext. 55 34 51	750	
ATJ8-40	8	Ambient to -40° F.	1	230-3-60	Int. 24 24 24	550	"C"
ATJ8-110		Ambient to -110° F.	1 x 1	460-3-60	Ext. 42 40 54	800	
ATJ12-40	12	Ambient to -40° F.	1	230-3-60	Int. 36 24 24	900	"C"
ATJ12-110		Ambient to -110° F.	1 x 1	460-3-60	Ext. 80 40 37	1100	
ATJ18-40	18	Ambient to -40° F.	1½	230-3-60	Int. 48 27 24	1200	"C"
ATJ18-110		Ambient to -110° F.	1½ x 1½	460-3-60	Ext. 67 43 54	1400	
ATJ20-40	20	Ambient to -40° F.	1½	230-3-60	Int. 65½ 20 26¼	1500	"C"
ATJ20-110		Ambient to -110° F.	1½ x 1½	460-3-60	Ext. 85 36 560	1700	

LT and LF Series Industrial Freezers Heavy duty industrial freezers utilizing **LIQUID NITROGEN** refrigeration, forced air circulation and fast cooling rates for heavy production loads.

Model Number	Vol. (cu. Ft.)	Temperature Range	Power (Standard)	Lid/Door Style	Dimensions (inches) L x D x H	Cooling Capacity*	Shipping Weight (approx. lbs.)	Style
LT15-125	15	Ambient to -125° F.	230-3-60 460-3-60	Top Opening Counter-Balanced	Int. 30 30 30 Ext. 75 47 43	200 lbs. In 15 min.	800	"A"
LT25-125	25	Ambient to -125° F.	230-3-60 460-3-60	Top Opening Counter-Balanced	Int. 48 30 30 Ext. 93 47 43	500 lbs. In 30 min.	950	"A"
LT35-125	35	Ambient to -125° F.	230-3-60 460-3-60	Top Opening Air Lifted	Int. 51 34½ 34¼ Ext. 96 59 50	1000 lbs. In 45 min.	1150	"A"
LT45-125	45	Ambient to -125° F.	230-3-60 460-3-60	Top Opening Air Lifted	Int. 56½ 40¼ 34¼ Ext. 89 77 50	1500 lbs. In 60 min.	1500	"A"
LT53-125	53	Ambient to -125° F.	230-3-60 460-3-60	Top Opening Air Lifted	Int. 56 48 34¼ Ext. 88 85 50	1500 lbs. In 60 min.	1800	"A"
LF60-125	60	Ambient to -125° F.	230-3-60 460-3-60	Vertical Front Opening Air Lifted	Int. 42 55 46¼ Ext. 89 69 170	2000 lbs. In 60 min.	2000	"B"

*Capacity Notes: (1) Cooling capacity to reduce air temperature to -120°Fahrenheit when loaded with indicated steel load at ambient 75°Fahrenheit). (2) The production capacity of the freezer may vary with the size, shape, surface conditions, loading geometry and temperature of the load when entered into the freezer. Varying ambient temperatures will also affect the capacity.

STANDARD FEATURES

Temperature Control: The temperature is controlled by an adjustable microprocessor based digital temperature controller. The controller incorporates the following features:

- Digital Display
- Self-diagnostics
- Simple English Prompts
- Open Sensor Protection
- High Noise Immunity
- Keyboard Security
- Configurable C/F

Interior: Webber Industrial freezers are supplied with a heavy gauge type 304 stainless steel. The interior is vapor tight, wear resistant, non-corrosive and capable of supporting a 300 psf uniform static load. All seams are heliarc welded.

Exterior: The frame is constructed heavy duty steel, structural angle, tube and flat stock. The exterior is rust resistant steel sheet and is primed and finished in enamel paint.

Drain: All freezers have a drain of corrosion resistant material.

Positive Seal Lid/Door: All ATJ Series and WT LT Series 15 and 25 cubic foot freezers are equipped with counterbalanced lids that utilize special neoprene gaskets and a positive seal latch.

The WT and LT Series 35,45,53 and 60 cubic foot freezers utilize air cylinders and air lift controls coupled with a special neoprene gasket to insure a positive seal. The mullion of all Webber freezers is heated, eliminating the possibility of frosting and sticking of the lid gasket to the mullion.

Mechanical Refrigeration Systems: Cooling is accomplished by a water or air cooled, forced air convection refrigeration system. The system utilizes heavy duty semi-hermetic serviceable type compressors. Compressor motors are refrigerant cooled and are provided with motor overload protection. The compressors are also spring mounted to reduce noise and vibration. Thermal expansion valves allow the system to operate at peak efficiency under a wide range of operating conditions.

The cooling system is designed to efficiently remove heat with emphasis on prolonging refrigerant component life. (WT and WF Series, ATJ Series)

Liquid Nitrogen Refrigeration: (LT-LF Series)

Refrigeration in the LT Series freezers is accomplished by expanding customer supplied liquid nitrogen through special spray nozzles, allowing liquid nitrogen to atomize in the air flow. The spray nozzles are separated from the work space by the shroud, preventing liquid nitrogen from spraying directly onto the product load.

Air Circulation: Air circulation is accomplished by using propeller type fan(s). The fan(s) is driven by an externally mounted motor with a specially designed stainless steel shaft. Motor bearings are located external to the chamber environment and are permanently lubricated. (ATJ Series freezers do not have forced air circulation).

Pressure Equalization: Each freezer interior comes with pressure equalization port(s) to assure internal and external pressures are equalized at temperature extremes.

Electrical System: All freezers are operated from a main power supply (see options). The control circuit is 115 volt, single phase, 60 Hertz and is provided through a built-in, step-down transformer.

All line starters, contactors, relays and related controls are identified and mounted in a metal enclosure. Motors and other components are protected by either fuses, thermal overloads or circuit breakers. All wiring is in accordance with the NEC. The wiring is color coded per JIC specifications and either laced or enclosed in wiring duct.

Four Day Inspection and Test Run: All Webber freezers are thoroughly inspected during the production process for adherence to quality standards. In addition, each unit is subjected to a rigorous performance test run for a minimum of four days prior to shipment. We invite your personnel to witness this test run at our factory.



AVAILABLE OPTIONS

Recorder: The temperature may be recorded by a circular chart recorder which provides a written verification of temperature/time.

Cycle Timer: The optional manually cycle timer, when timed out, will give an audio and visual indication that the cycle is complete. The time cycle is 0 to 5 hours.

Cycle Timer with Beacon: A rotating amber beacon can be incorporated with the cycle timer, and visually notifies the operator that the cycle has been completed.

Seven Day Timer: The optional seven day timer controls the secondary control voltage, allowing automatic startup and/or shutdown of the system.

Running Time Meter: An optional running time meter monitors and totals the amount of time the freezer is in operation.

Optional Power: Alternate power systems are available. Contact the factory for information on other special voltages.

Custom Exterior: Freezers may be painted per customer specifications.

Portholes: Stainless steel, heliarc welded portholes are available in 2", 4" and 6" diameters. Portholes allow access to the interior for customer supplied temperature sensors.

Liquid Nitrogen Assist: An LN-2 assist system is available to decrease the temperature pulldown time and increase the capacity of the system.

Water Mizer: For the mechanical refrigeration system. Water mizer option minimizes water usage. It monitors the need for cooling water by the condenser and a preset timer regulates or totally closes off water flow when needed.

Electric Defrost: (Not available on ATJ Series freezers) A rapid defrost system may be supplied with the freezer. This option reduces down time due to defrosting.

Electrical Enclosure with Primary Power Interlock: This option prevents the electrical enclosure door from being opened when the primary power is on.

Casters: The freezer may be equipped with 4 casters; two rigid locking and two swivel locking for easy portability.

Air or Water Cooled Condenser: The refrigeration system may be provided with an alternate condenser system (air or water cooled) that allows flexibility in matching customer supplied utilities.

Increased or Decreased Refrigeration Capacities: are available.

Extended Performance Ranges: Heating ranges are available for the WT and WF/LT and LF Series. Extended cooling ranges are available for the LT and LF Series.

Compressed Air Conditioning Unit: The compressed air conditioning unit filters, regulates and lubricates compressed air before it enters the cylinders.

Conveyer Systems: The WF and LF Series front opening freezers are available with conveyer systems to interface with all major furnace manufacturer's conveyor systems and charge cars. The conveyer heights are selected before manufacture.

NOTE: *Certain optional accessories not available on all freezer models. Please contact a Webber Sales Engineer for assistance.*