

# GLYCOL-PAK FLUID COOLING SYSTEMS WITH PRE-COOLER FOR SOFT SERVE FROZEN YOGURT FREEZERS

## System Design

The AIRDYNE GLYCOL-PAK: fluid cooler with Pre-Cooler is a heat exchanger designed to operate with water cooled dispensing equipment. The hot glycol from the water cooled condenser is piped to the GLYCOL-PAK fluid cooler, whereby heat is removed from the fluid and rejected into the outside air. The cooled glycol is re-circulated as required by the water cooled equipment. The system is controlled by a thermostat to shut the fans off at a predetermined temperature on GP-4s and up. Fluid cooler is completely piped and pre-wired for low cost installation in the field.

## Benefits of Glycol-Pak with Pre-Cooler

The yogurt shop's air conditioning load is reduced as the compressor heat is not rejected into the conditioned space. The additional benefit is the dramatic savings in the water usage thus reducing the water and sewer bills. The cooled glycol is re-circulated in a closed loop circuit and never comes into contact with the outside air. There is no need for adding makeup water or the expensive maintenance and chemicals typical of open type cooling systems.

In dry heat ambient conditions over 110°F. The glycol returned to the yogurt machines is designed to go off on high head pressure as 95° glycol is not enough to cool the machines and compressor may shut down causing soft

serve machines to dispense runny yogurt. In dry heat we recommend using a Pre-Cooler as it enables the Glycol-Pak system to drop the glycol temperature down another 10° which keeps the compressor running in hot ambient conditions.

## Features of the Glycol-Pak with Pre-Cooler

The system accommodates up to 12 barrels. Customer has a Choice of six standard models available from 2 to barrel soft-serve freezers for frozen yogurt/ice cream.

Each system is equipped with a durable galvanized cabinet, staggered copper tube coils with aluminum fins, centrifugal pump, fan motor assembly, thermal expansion tank with fill port, pump bypass with adjustable pressure relief valve, automatic air venting valve, fan cycle thermostat; for GP-4 & up, main fuse disconnect and fluid manifolds.



## Glycol-Pak Capabilities with Pre-Cooler

Airdyne Model No.	No. of Soft Serve Barrels	Heat of Rejection (BTU)	Total Fluid Volume (Gal)**	Fluid Flow (GPM)	Connection Hot Fluid Inlet	(OD) Cold Fluid Outlet	L	W	H	Total System Amps	Shipping Weight (lbs)
GP-1SC	2	30,000	4	4	7/8"	7/8"	30	68	36	13.2	500
GP-2SC	4	55,000	6	8	1 1/8"	1 1/8"	50	68	36	15	600
GP-3SC	6	81,000	8	10	1 1/8"	1 1/8"	50	68	36	15.3	700
GP-4SC	8	108,000	10	13	1 3/8"	1 3/8"	70	68	36	19.6	800
GP-5SC	10	135,000	12	16	1 5/8"	1 5/8"	90	68	36	24	985
GP-6SC	12	165,000	14	20	1 5/8"	1 5/8"	90	68	36	28.3	1100
GP-7SC	14	190,000	15	22	1 5/8"	1 5/8"	90	60	72	28.3	1300
GP-8SC	16	225,000	16	25	1 5/8"	1 5/8"	70	60	72	28.3	1425
GP-9SC	18	260,000	18	29	1 5/8"	1 5/8"	70	60	72	28.3	1450
GP-10SC	20	290,000	22	32	2 1/8"	2 1/8"	70	60	72	37.1	1600
GP-11SC	22	330,000	26	37	2 1/8"	2 1/8"	90	60	72	37.1	1600
GP-12SC	24	362,000	28	40	2 1/8"	2 1/8"	130	68	54	39.5	2000
GP-13SC	26	408,000	30	44	2 1/8"	2 1/8"	130	68	54	39.5	2000

NOTES: \*Heat rejection is calculated at ambient temperature of 120° degrees Fahrenheit. \*\* (208 Volts, Single Phase, and 60 Hertz)