

## REFRIGERATION

# Keeping Your Cool

*The latest technology can help distributors save money and boost customer service.*

**C**old plate technology for transport refrigeration was introduced by Johnson Refrigerated Truck Bodies more than 50 years ago, but its use has been increasing in recent years due to the reliability of the technology, its simple, inexpensive maintenance and its gentler impact on the environment.

Cold plate systems are mounted on the body ceiling and/or interior walls. During the day, the plates act like ice packs in a picnic cooler and absorb heat. At night the compressor/condensing unit is plugged in to shore power. Refrigerant passes through the plates, refreezing the salt-brine/eutectic solution in approximately six to eight hours. In addition, by utilizing Johnson's new RouteMax system, which recharges the

plates while driving, cold plates may be used for extended route delivery with even less downtime and lower consumption of energy. The benefits of cold plates include:

- **Initial Cost:** Estimated to be about 40 percent lower than a mechanical system.
- **Operating Cost:** Over the course of a 12-hour delivery cycle, they significantly lower the operating expense associated with refrigerated technology by as much as 90 percent less than the typical mechanical blower system.
- **Life Span:** Cold plate systems typically last the life of the truck body, often 15 years or more. This is compared to mechanical systems that last an average of five to seven years with proper maintenance.

« **MICROBREWER BERKSHIRE BREWERY** in Massachusetts uses International trucks equipped with Johnson's POWERplatform, a drop floor delivery system designed to speed multi-stop DSD of refrigerated product.





• **Product Protection:** In case of a breakdown, perishables are protected for up to two days with cold plate refrigeration, compared with only about two hours of protection with a mechanical system.

• **Green Technology:** Cold plates require less fuel to operate and result in lower emissions into the environment. Also they are clean and quieter, creating less of a disturbance. When paired with RouteMax, cold plates are recharged while driving, consuming even less electricity.

Johnson Refrigerated Truck Bodies is fully integrated with Navistar Electronics' Diamond Logic Electrical System.

Johnson Bodies also can be remote monitored through AWARE Vehicle Intelligence, which is telematics that provides GPS vehicle tracking, geo fencing, temperature and truck body door monitoring to help ensure food-safe deliveries.

Navistar Electronics' PowerPack3 is the onboard power source driving RouteMax, "the self-generating extended route Cold Plate delivery system." PowerPack3 provides 3,000 watts of on-board AC power at idle or over-the-road truck operation. The PowerPack3 will recharge the refrigeration system between stops as the truck travels on DSD delivery routes.

Another product used in beverage distribution is the Johnson Refrigerated Fiberglass Custom Kegger, a custom refrigerated double drop frame for a 27- to 36-ft. trailer for the delivery of keg beer. Also available in the Premium Body design are 18- to 24-ft. straight bodies.

Features of the Kegger include a scuff liner, protective sidewalls, reinforced floors and doors, hinged keg holders at doors and stainless or powder-coated hardware and safety items such as cameras, alarms and sensors, and LED light packages.

The option of eutectic cold plate or mechanical blower refrigeration delivers the ultimate product quality, according to Johnson. Driver safety is addressed with easy access, 3-point contact with grab handles and steps and an available POWERplatform.

The POWERplatform from Johnson is a very fast drop floor platform delivery system that holds up to 3,000 lbs. of refrigerated product to speed multi-stop

direct store delivery of refrigerated product. It is an integral part of the truck floor that can quickly lower both the driver and product to street level for fast delivery. Time-savings for a typical multi-stop delivery route is estimated to be more than one hour a day.

In addition, it eliminates the need for the driver to fold and unfold a traditional liftgate at each stop. Also, mechanisms of the platform, such as the pump and motor assembly, hydraulic piston assembly and hydraulic hoses, are installed in such a way as to avoid exposure to the elements and the potential for rust and corrosion. This also ensures very low maintenance cost.

One brewer making use of these refrigerated technologies is the South Deerfield, Massachusetts-based Berkshire Brewing Company, marketer of such brands as Steel Rail Extra Pale, Shabadoo Black and Tan Ale,

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Imperial Stout and Drayman's Porter. The company handles most of its deliveries with its own fleet of refrigerated trucks.

Partners Chris Lalli and Gary Bogoff feel that in addition to the quality of their beers, they also pride themselves on excellent customer service, delivering only the freshest, highest quality product. They say this is in large part due to their use of Johnson Refrigerated Truck Bodies and, for driver satisfaction and safety, POWERplatforms. The latter helps to reduce driver back injuries and fatigue that were reported using the old-style, foldout, tuck-under lift gates. Lalli and Bogoff found that the use of POWERplatforms saves at least five minutes a stop, and on a 25- to 35-stop delivery route, that can add up to a substantial three hours a day. ■

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