The ABCs of IBCs: How Tank Monitoring Can Save Money

As professionals in the global bulk liquids storage industry, you’re no doubt aware of the inefficiencies native to the business, especially when it comes to intermediate bulk containers (IBCs). IBCs, because of their portability and “stackability” are indeed popular and useful storage solutions. However, IBCs, when not properly monitored, have drawbacks. Specifically, they have drawbacks that may be hurting your bottom line.

Monitoring via remote telemetry has already improved the margins of those working in mini-bulk by streamlining the delivery process — i.e., trucks now drive targeted routes and leave the distributor with full payloads, and that’s because monitoring lets the mini-bulk distributor know what and how much their customers need. No more costly guesswork: more product delivered, fewer miles driven. In some instances, distributors are seeing a 50 percent drop in truck mileage and driver hours. Needless to say, improved cost controls and increased revenues are the end results.

And that brings us back to IBCs. Remote telemetry has revolutionized the mini-bulk niche, and the capacities for doing the same with IBCs are even greater. Proper monitoring of tanks of course allows customers and their suppliers to know how much of a particular chemical is on hand, as with mini-bulk. But then come the monitoring benefits unique to IBCs.

As you know, IBCs are extremely mobile tanks, which is a large part of their appeal. However, one negative consequence of that mobility is that IBCs tend to get lost. Once emptied, tanks get set aside and forgotten. After all, they’re the property of the chemical company, and as such the end user typically lacks strong financial incentive to keep track of them. In fact, one large-volume manufacturer reported losing track of roughly 2,000 tanks in a calendar year. Since the replacement costs for a single 500-700-gallon stainless-steel tank can run $5,000 to $6,000, that’s a substantial expense. It’s also an unnecessary one.

Some of today’s remote-telemetry systems tailored, for the IBC market, monitor not only tank levels and internal temperatures, but also location, thanks to a GPS-tracking component. Via a barcode system, tank data — including exact location — is scanned and immediately uploaded to a secure web portal that can be accessed by both customer and supplier. All of this valuable information remains accessible until a tank is reclaimed by the manufacturer or a contracted refurbisher. All the while, your sales department knows when tanks need to be replenished and where

those tanks are at any given moment in time. Needless to say, such a system steeply improves routing and tank-fill efficiency and also reduces the need to replace IBCs that have fallen off the radar. Divisive blame-shifting within your company as a result of those lost tanks? That's gone, too.

Another benefit of IBC monitoring and the data stream it provides is easier regulatory compliance. Whether it's the EPA wanting to keep track of hazardous materials or the local fire department needing to know the precise coordinates and internal temperature of an overheated tank, the necessary information is but a click away. The chemicals business is necessarily one that depends heavily upon stakeholder collaboration and a sense of stewardship, and IBC monitoring makes those things simpler than ever.

Now consider yet another beneficial scenario. It's not unusual for a high-capacity tank to hold, say, $100,000 or more of a particular commodity chemical. As with anything of such value, it can be a target of theft. With tank-level data and GPS monitoring, it becomes that much more difficult for any quantity of inventory to be stolen. While we don't necessarily associate our industry with such "shrinkage," it's a real concern, and remote telemetry addresses it directly.

To be sure, these monitoring systems would be far less appealing if they compromised what's best about the IBC — that aforementioned portability and stackability. Fortunately, the best systems provide for seamless integration. The latest models have internal antennae and are designed so that the bulk of electrical components are housed within the tank. Not only does this design make the monitoring device less likely to be damaged, but also the modest physical profile fits entirely within the tank's existing dimensions — i.e., the tanks/totes can still be stacked and arranged, vertically and horizontally, as usual.

So if IBCs are a necessary part of your business, then those IBCs need to be monitored via remote telemetry in order to operate efficiently. What you need from your third-party logistics provider is a monitoring system that's fully reusable, that fits entirely within the standard clearance space between stackable IBCs and that features internal and GPS-location monitoring. Without state-of-the-art remote telemetry, your supply chain — and by extension your business — isn't what it could be.

Pat Barron, VP and General Manager for TankLink, is an IT Industry veteran with many years of experience developing sales channels for Software-as-a-Service (Saas) organizations that use cellular networks to deliver data for M2M applications. At TankLink, Pat is responsible for all sales, channel strategy, market penetration, customer service, and budget P&L.

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