

Omega Solvent Recycling Equipment Success Study

Omega recently delivered a machine model RS30 to a large company in the Aerospace sector to help reduce the costs of solvent usage and reduce the amount of waste the company had to dispose. The client initially found Omega Recycling Technologies through a referral from an equipment distributor.

Like many large companies, this customer of Omega was purchasing odorless mineral spirits to be used in their cleaning process for cleaning parts to remove coolant, grime and metal chips to protect the parts from any damage. Their motivation to make this purchase was driven by the need to find a solution to reducing the risks and costs associated with the handling and disposal of their waste.

The purchaser is an aerospace company that makes parts and equipment for aerospace consumption. The lead on the purchase has been with the aerospace company for 37 years with the last five in environmental compliance and respectfully advises that they have never had an environmental violation. Their responsibilities in their role focus on environmental compliance, assisting engineers in overcoming company specific problems, emergency response to internal spills and internal air and water sampling from process outputs.

Before they started to recycle they were using 200 drums of virgin solvent per year worth more than \$70,000, and disposing 160 drums of this solvent of at a cost of \$26,000 per year and then being charged by the local government for the waste generation of 160 drums.

The customer estimates that the recycling process has reduced the wasted solvent by 90% with an estimated saving of \$75-80,000 per year.

Challenges in the Purchase of the Equipment and in using Recycled Solvents:

Customer described challenges from within and outside company starting before the purchase process started, during the buying process as well as ongoing today, post equipment installation.

As noted, the original motivating driver to consider recycling their solvents was the high cost and risk of handling and disposal of their waste. They had always wanted to process the solvents they generated on site as they were unsure if they could have sent offsite for recycling. Customer advised that even if an off site solvent recycling service was available, they preferred to keep their used solvents onsite to reduce liability and keep off public highways.

The company also has an internal process they follow when considering changing a solvent they have previously approved for use in their process which considers cost, environmental impact, local and federal environmental laws and other best business

practices. The company used this internal review process to determine that the solvent they were using was the best overall choice for the company.

Another significant challenge faced by this large aerospace company was managing the change within the organization. Clients described that change is very important to a successful organization and ensuring that they met with manager and staff to calm their fears about concerns they have due to these changes. It was important that everyone feel safe and comfortable that this process change is working. Managing peoples expectations.

The site manager was instrumental in the process because the purchasing was recommending the Omega solution but the site manager had to own the ongoing management of the decision. An internal proposal had to be written and presented to the site manager and this proposal had to explain why the change would benefit the company without negatively impacting the process.

The proposal included details from testing that had been done on recycled solvent samples. The tests showed that the recycled solvent was 100% chemically the same as the virgin solvent and further testing showed that the recycled solvent could be used within the existing process.

In addition, maintenance groups who had to operate the solvent recycling machine needed to be included in the decision process. Maintenance had concerns about the time required to run the machine, whether extra hiring may be needed and just general uncertainty created by considering a change to an established company process. Omega engineers were able to help the purchaser show that the Omega machines are easy to run and maintain to help overcome these concerns.

The maintenance group truly wanted a process that was: “put the full used waste drum down, push button and walk away. Next day, add new drum, push button and walk away.” That is what they received.

The machine repair department also had concerns, as they were required to purchase the virgin oil and spirits and the idea of using a recycled product needed to be proven as an option. More testing and a sincere desire from Omega to ensure the right equipment was offered to meet the client’s needs ensured the purchaser could successfully overcome these internal concerns.

Next, the purchasing group wanted to get additional quotes and focus on the price as the key purchasing decision maker. The lead on the purchase recognized that, while price is a critical consideration, superior recycling process, technology and top notch ongoing customer support are also very important in the final decision. The purchaser found out that if they could prove Omega was best over long haul for the company then the purchasing group came on side.

Overall, the process took almost 2 yrs to place order. With all of the key stakeholders to consider, the company has built a natural process to ensure good decisions are made and this procedure takes time.

After sales care is equally important and the customer stated that Sam at Omega goes far beyond what you would expect from a company in helping solve problems. Omega's willingness to make things work comes from the passion Sam has about the Omega products.

About Omega and the RS-30

Omega Recycling Technologies is now a Maratek company and has been designing and manufacturing liquid recovery and purification systems since 1980.

With thousands of units operating throughout the world, Omega has acquired a wealth of experience that has made it a world leader in designing and manufacturing equipment for reducing, recycling and reusing industries' waste streams. Omega Recycling Technologies is dedicated to provide it's customers with the best practical solutions to minimize, recycle and reuse materials used in their production and service. These real world solutions are designed by Omega to integrate seamlessly into the plant's production and provide immediate economic benefits.

Founded in 1980 in Montreal Canada, Omega provides the broadest range of recycling solutions in the market, with equipment addressing solvent recycling, oil recovery and industrial process water purification systems.

Omega is known for their highly engineered products, which not only provide "in-house" solutions, but also provide unique "in-line" design for efficient integration into the customer's manufacturing processes. A significant portion of Omega's resources are directed toward R&D projects for customers with industry-specific needs for solving hazardous waste issues from various industries.

The Solvent Recycling Solution purchased in this Success Study

RS-30 model solvent recyclers. No matter the solvent, from acetones to white spirits, contaminated solvents can be recycled to their original form. Omega RS solvent recyclers do not use filters or any type of chemicals to achieve solvent purification. They are stand-alone units that function on the time proven concept of distillation. PLC controller, tilting capability, pneumatic valves, and digital temperature controls are but a few of the standard features offered in the RS-30 models that make them the perfect solution for recycling your waste solvent stream.

The RS-30 solvent recyclers have a true 30 gallon capacity. They can also come equipped with a unique automatic fill system that will permit them to recycle solvent on a continuous basis – yielding a daily production far exceeding their rated capacity – all automatically.

Omega RS-30 units can also come equipped with a heavy duty internal scraper/agitator. This feature permits the operator to concentrate the residues and facilitates maintenance and residue discharge. Typically residues emanating from an Omega RS unit equipped with an internal scraper will come out as a dry powder. Furthermore the RS-30 can be equipped with a vacuum system, extending their versatility to recycle waste streams containing high boiling point solvents.

Why use an Omega RS solvent recycler?

- Recycle up to 95% of waste solvent
- Explosion proof Class I Division I Group D construction (flammable solvents are no problem)
- PLC controlled
- Tilting capability
- Pneumatic valves
- Digital temperature control
- Able to operate in hazardous working areas