THE EXPERTS IN INK TRANSFER TECHNOLOGIES

DRAMATIC EFFICIENCY GAINS FROM DISTILLATION UNIT OPTIMIZATION

Daetwyler

WHEN EXPERT SERVICE = UNEXPECTED PROFITABILITY

Clogged Demister Filter

A recent service visit by one of Daetwyler's Service Technicians revealed a significant, yet previously unnoticed, inefficiency in a customer's distillation unit. This unanticipated discovery led to an impressive improvement in the unit's output by 35%, resulting in substantial savings for the customer. This case study outlines the challenges identified, the services performed, and the financial impact of the improvements.

CHALLENGES IDENTIFIED

A packaging client who has a strong maintenance program called Daetwyler when a DW Renzmann washing machine was recognized to be underperforming. The primary reason for the service visit was to address two issues with the client's washing machine:

- A leak in the main gasket.
- A pneumatic diaphragm pump that had ceased functioning.

While these issues were addressed during the visit, Daetwyler took the initiative to inspect the distillation unit in full. It was averaging 16.4 gallons per hour in refill mode, and the client was unaware of the degree of inefficiency, believing that their regular maintenance regimen was sufficient.

SOLUTION

Daetwyler identified several additional key areas for improvement:

- The demister filter was near saturation, significantly affecting the distillation unit's performance. After replacing the filter and cleaning other components, the distillation output improved dramatically.
- Additional maintenance on the washing machine, such as replacing wash nozzles, and on the distillation unit, replacing hatch gaskets and thermal oil, further enhanced overall operational efficiency.

Even though this particular company takes excellent care of their equipment, their Rotomax distillation unit for solvent recovery was found to be performing well below minimum standards.

Daetwyler's technician not only serviced the machine on the spot, but also conducted a brief hands-on training with on-site operators and team members so they could perform the same maintenance themselves going forward.

Clogged Demister Filter

RESULTS

- The distillation unit's output increased by 35%, from 16.4 gallons per hour to 22.3 gallons per hour.
- This improvement translates to the recovery of an additional 137 gallons of solvent per day.
- With solvent costs averaging $9.00 per gallon, the customer can now save approximately $1,233 per day.
- Assuming the distillation unit operates for at least 200 days per year, this results in an annual savings of $246,600+.

FINANCIAL IMPACT

The total service cost, including travel, was $9,753.25. With the daily savings from the distillation improvements, the cost of the service was recovered in less than two weeks. This rapid return on investment highlights the value of Daetwyler's proactive approach to equipment maintenance and optimization.

Daetwyler's expert technicians can uncover hidden inefficiencies, even when customers believe their equipment is running optimally. By identifying and addressing these issues, Daetwyler helps customers achieve significant cost savings and improve operational performance.

Clean Demister Filter

Daetwyler

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