UniPrep® ISOtect

Specialized oil elimination equipment

General Metal Finishing | Paint support technology | atotech.com

A superior approach to degreasing

High oil loading – a hardship for applicators

A natural by-product of cleaning a stamped or formed metal part is the introduction of oil into the degreasing solution. Typically, conventional degreasers have a limited, often short solution life due to the organic soils removed during the cleaning process. The low oil loading capacity causes several inconveniences for applicators: decreased cleaning performance as the solution ages, increased waste for disposal or wastewater treatment, higher chemical cost, and increased maintenance requirement.



A systems approach to long life cleaning

UniPrep ISOtect is a specialized equipment that, when used in combination with UniPrep long life cleaning processes, improves the efficiency of oil degradation. UniPrep ISOtect is suitable for use in all UniPrep long life cleaning applications but is especially effective in high oil loading applications. Degrading the oil in a UniPrep long life cleaner ensures a far longer solution life than that of conventional cleaners. UniPrep ISOtect offers a turnkey solution that decreases maintenance requirements, chemical consumption, and overall operating cost.



Features and benefits

- Supports extended solution life when paired with UniPrep long life cleaners, ideal in high oil loading applications
- Promotes improved cleaning consistency and finished part quality through reduction of oil in the UniPrep longllife cleaner solution
- Simplifies maintenance and wastewater treatment requirements, improving facility efficiency
- No consumable materials used to support in situ oil degradation (reusable filling material)
- Overall process cost reduction achieved through lower chemical consumption and waste generation

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Stable high cleaning performance

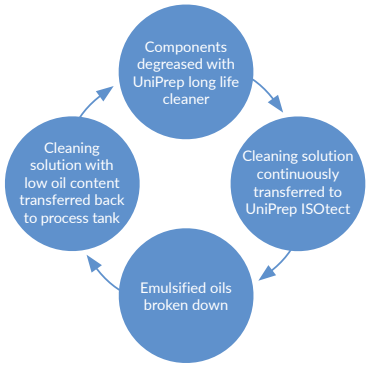


Fig. 1:
Process cycle with UniPrep ISOtect

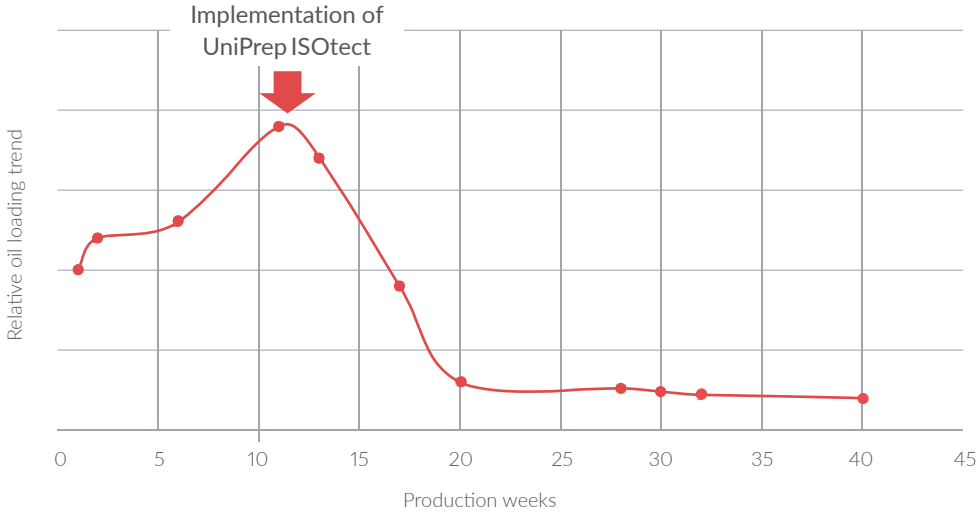
Extended solution life and reduced waste

UniPrep ISOtect offers applicators a low-maintenance tool to further extend solution life. Unlike traditional oil separators, UniPrep ISOtect does not create an oil-based waste that must be treated or disposed. Instead, it breaks down the oils in the cleaning solution, creating a simplified waste stream for treatment.

Decreasing oil content in standard production

The implementation of UniPrep ISOtect at a customer's production facility exhibits the benefits of the equipment in combination with UniPrep long life cleaners. The result is a cleaning solution that has significantly less oil than a conventional cleaner, offering longer solution life and more consistent cleaning performance.

Oil content of degreasing solution



The above graphic exhibits how one customer was able to reduce the amount of oil in the cleaning solution by as much as 90%. The oil reduction amount is dependent on several production parameters and results may vary.

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