

CASE STUDY - DIE CAST

One product change. Remarkable improvements.

Helping a major die caster work better, cleaner, and leaner.

54%~ REDUCTION IN DIE FACE CLEANING TIME



1.4%~ LESS SCRAP



SIGNIFICANT SAVINGS



DUE TO REDUCED DOWNTIME

WHAT WE ACHIEVED.

One of the largest die casting facilities in the United States came to us looking for an edge, and we were given an opportunity to test and replace their existing die lubricant solution.

We did more than merely replace it. In the process, we were able to address a number of challenges. Their scrap rate and downtime rates were running too high, while they also experienced severe die face buildup with their existing die lubricant solution.

With our help optimizing their process, they realized 1.4% less scrap, a 54% reduction in die face cleaning time, and significant cost savings due to the reduced downtime. In addition, it also led to brighter castings.

HOW WE GOT THERE.

An on-site product-and-process analysis conducted by Chem-Trend sales and technical teams found that the customer's issues revolved around utilizing a lowperforming die lubricant/mold release that required rich dilutions and lower temperatures to meet performance criteria. In turn, this led to a significant buildup issue in the lubricant system lines as well as on tooling surfaces. Poor water quality was also addressed through appropriate mold release technology.

OUR SOLUTION.

We selected a Chem-Trend® SL-9XXXX series product as a high-performance replacement for their existing solution due to its ability to run cleaner and nearly eliminate die face buildup. This allowed us to solve a number of challenges:

- · Eliminated vent plugging and part inclusions for a reduction in scrap parts.
- Provided more consistent RZ readings due to less buildup and improved release properties.
- · Minimized downtime for die face cleaning for improved productivity rates.
- · Reduced inventory issues due to less scrap, rework, and downtime.
- · Delivered a leaner dilution, allowing the Chem-Trend solution to be more cost competitive.



HANDPRINT IMPACT

At Chem-Trend, we pride ourselves on our long history of sustainability efforts. However, it is our effect on our customers' processes that provides the greatest impact. It goes beyond our global Footprint; it is our even wider Handprint.

Here, we achieved the following:

- Reduced scrap rate by nearly eliminating die face buildup
- Energy conserved with less downtime
- · Less waste with fewer mold cleanings and polishings
- Reduced release agent and water usage



Water

Energy

For more information about our die cast capabilities, our innovations, or other stories visit CHEMTREND.COM