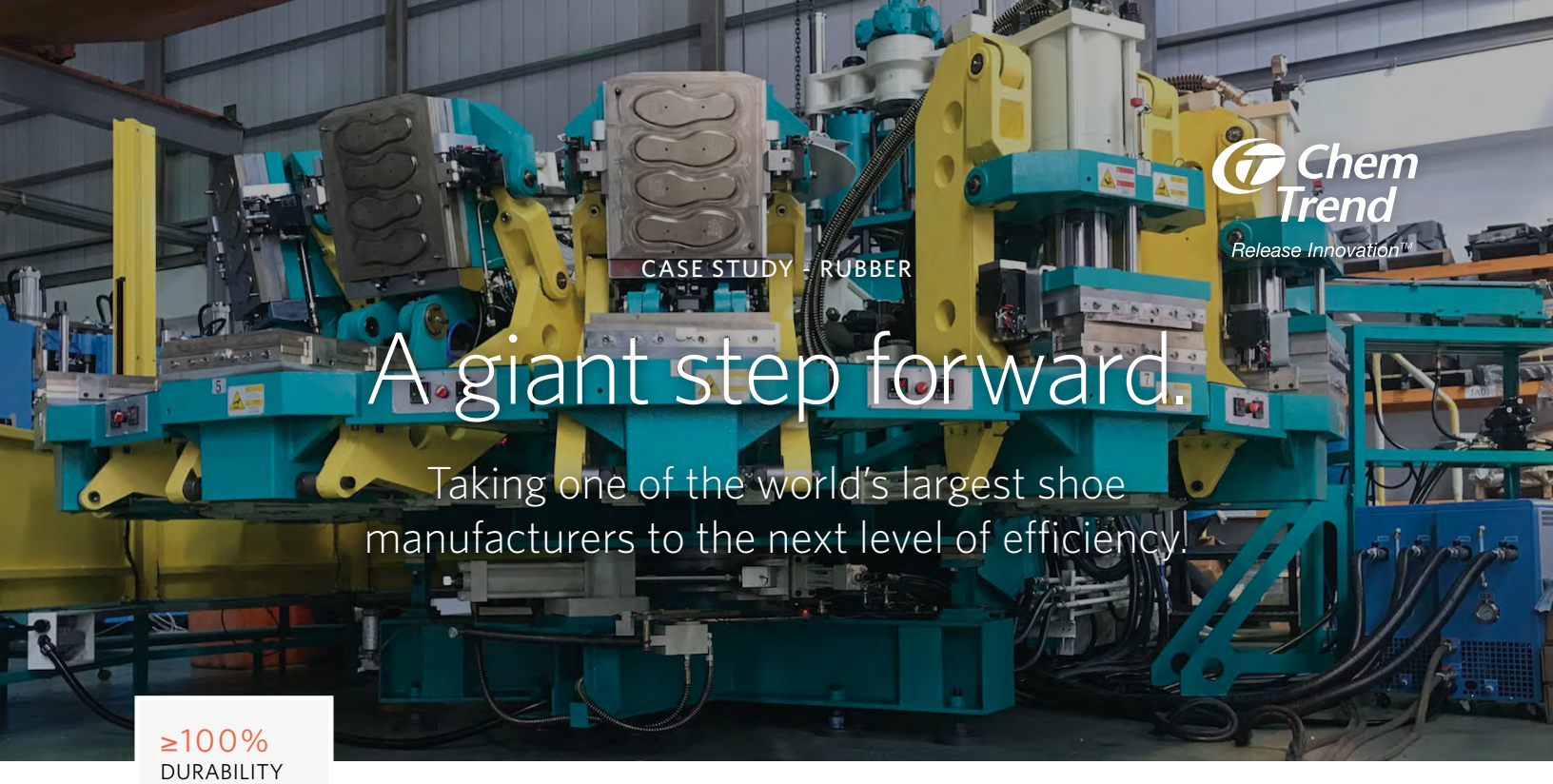


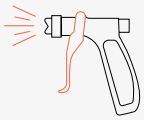
Chem Trend
Release Innovation™

CASE STUDY - RUBBER

A giant step forward.

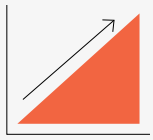
Taking one of the world's largest shoe manufacturers to the next level of efficiency!

≥100%
DURABILITY IMPROVEMENT



Release agent application reduced from every 3-5 cycles to every 10

≥300%
IMPROVEMENT IN CYCLE TIME



Time of molding every two pairs reduced from 35-45 seconds to 10-12

WHAT WE ACHIEVED.

A customer was looking for a way to improve their mold release process in their new rotary injection machine to reduce scrap rate and maximize productivity.

As an already highly successful and sophisticated manufacturer, the customer wanted any possible edge to become more efficient. We worked alongside the customer to test and select the ideal solution for their new rotary injection molding process.

Ultimately, we helped them realize a scrap rate of less than 1.5% by improving their bonding, creating significant improvements in production speed, and achieving a more consistent product quality. All with an environmentally responsible, water-based solution that was regulatory compliant, while requiring less release agent.

LESS THAN 1.5%

We achieved a scrap rate of less than 1.5%

REDUCED COSTS

Due to a more efficient, predictable process using less than half the release agent

HOW WE GOT THERE.

At Chem-Trend, we love a challenge. When faced with exceptionally high customer goals, our highly driven team went to work.

We discovered a number of issues:

- The outsole was not properly demolding
- Unnecessary manual work using a pin to dig the outsole from the mold
- High scrap rates caused by mold fouling, bonding failure and improper demolding

We began a series of trials to help alleviate the issues.

OUR SOLUTION.

We developed a new product that created more consistent release and minimized its transfer or migration, leading to a lower scrap rate.

Our impact did not stop there. The new Chem-Trend solution lasted longer, requiring applications every ten cycles vs. the previous 3-5, reducing both the amount of product used and the time needed for additional application. In addition, the ease of release helped reduce the time of demolding from 35-45 seconds per two pairs to 10-12 seconds. The cumulative effect was game-changing in terms of efficiency, productivity, and consistent product quality.

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

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:

- Greater product quality, leading to reduced scrap rate
- Reduced energy waste resulting from lower levels of transportation required due to less release agent being used
- Greater overall energy efficiency based on improved cycle time