



**NEU**

## Improved Die Lubrication Process

### Synergistic benefits from two industry specialists

New developments in application technology as well as the die lubricant chemistry create a new process that reduces the environmental impact as well as improves die life.

The right **combination of chemistry and spray technology** enable **positive impacts** on:

- Spray time
- Die life
- Piece quality
- Die lubricant waste
- Waste water
- Noise emission
- Air consumption
- Energy costs

New developments in the raw materials used in die lubricants allow us to develop products with increased temperature stability, improved die lubrication, as well as reduced build-up on the die.

The spray systems currently available are limited to those applications where exact quantities of die lubricant are not required.

New developments in die lubricant technology required the development of a new spray system that could deliver the following:

- Reliable, reproducible dosing of small quantities of die lubricant
- Simple adaptation of existing spray systems

Wollin has modernized spray technology through development of the dosing systems.

Wollin developed a new spray nozzle technology that applies the same preset quantity of die lubricant every time.

The nozzles are designed to meter the same amount of fluid each pulse regardless of the fluid or air pressure.

The quantity per dose can be set between 0 – 0.075 ml / Pulse. You may also have multiple pulses per spray cycle. Once set, each pulse applies the same amount of lubricant- every time.

The newly developed technology is adaptable to the current Wollin spray technology at low cost.



Initial tests on a complex die with different wall thicknesses cast on a 630 metric ton die cast machine showed that the chemical and technical objectives could be fulfilled.

- Reduction of spray time from 25 sec. to 9 sec.
- Reduction of die lubricant consumption from 14 ml die lubricant concentrate to 1.5 ml oil-based die lubricant
- Waste water reduction, because no lubricant drains from the tool
- Extension of die life-spans, due to elimination of thermo shock

Follow-up tests have confirmed these results on a variety of dies.

The experience of Geiger + Co in die lubricant development coupled with the new spray technology developed by Wollin is what yielded these positive results.

From a financial perspective, the payback on this investment is achieved in a very short time.

It is worth it for the user to think about - and eventually take- this new direction of spray technology.

Approach Wollin and Geiger as experts, so that we can support you with our experience. We are at your disposal –also on-site- in order to install the new technology.



Wollin GmbH  
Kiesäckerstraße 23  
73547 Lorch

Tel.: +49 (0) 7172 - 9105-0  
Email: [wollin@wollin.de](mailto:wollin@wollin.de)



Geiger + Co.  
Schmierstoff-Chemie GmbH  
Austrasse 45

Tel.: +49 (0)7131 1563 0  
Email: [info@trennex.de](mailto:info@trennex.de)