

Ensuring Process Stability through Efficient Application Technology

18th March 2026

Sebastian Wenzel | Raziol Zibulla & Sohn GmbH

3rd Czech-German Business Meeting: Transforming Industry
with Intelligent Production and Energy Solutions

The Company at a Glance

Key figures

Foundation: 1941 by Raimund Zibulla

Certification: ISO 9001:2015

Management:

- Christian Zibulla, Managing Partner

Main business fields:

- Contact lubrication systems (roller lubrication systems)
- Non-contact lubrication systems (spray systems)
- (Precision) metering systems
- Special lubricants for metalworking



Number of employees: 120 (as of 2026)

Production area: approx. 3,800 m² at the Iserlohn site

Representations in:

- Spanien & Portugal
- Italien & Schweiz
- Österreich
- USA/Kanada/Mexiko

The Company at a Glance

Customers

- Automotive and automotive supply industries
- Household goods (white goods)
- General metal and electrical contact industry
- Press manufacturer
- Conveyer systems manufacturer
- Roll mills
- Chemical industry
- etc.



Sustainability & process stability united

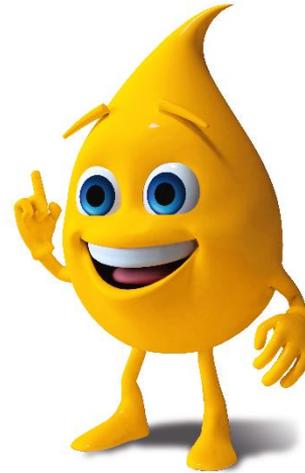
Challenges & goals of today and tomorrow

Growing Challenges:

- Geopolitical events
- Resource scarcity
- Globalization
- Climate goals

Producing economically:

- Capturing process fluctuations
- Adjusting parameters
- Creating uniform manufacturing conditions
- -Reducing wear & increasing service life



Capture order quantities, **classify** them process-specifically & **optimize** their settings

Methods for capturing consumption quantities

Conventional solutions for oil film determination



„Calibrated finger“

- Visual gloss level inspection
- Manual surface touch
- Offline, cost-effective
- User-dependent, not calibratable



Gravimetry

- Weight measurement with precision scale of oiled, cleaned surfaces
- High accuracy of oil quantity
- Offline, sampling required
- No info about spatial distribution



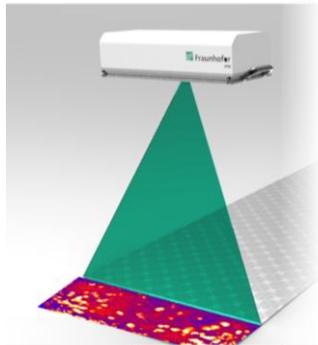
Flow measurement

- Measurement of transported oil volume flow
- Online, no sampling required
- Consideration of distribution & reflection



Coating thickness gauge:

- Commonly used in the field
- Suitable for checking oiling and correct application quantity
- 0.1 - 5 g/m²
- Single & average measurement



Fluorescence Analysis with F-Scanner:

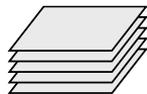
- High-resolution representation of oiling thickness
- Compatible with post-oiling
- From 0.01 g/m² inline measurement

Fluorescence measurement technology

Practical application

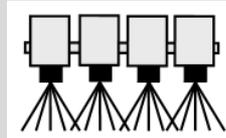
Ordering coils or sheets for the stamping and forming process with pre-oiling from the manufacturer

- Corrosion protection
- Dry lubricant
- Hot melt



No reuse of pre-oiling possible

-> Cleaning of the material

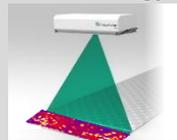


Oiling of the material with suitable lubricant



Reuse possible, but
Made difficult by diffuse pre-oiling

→ Capture of current state through
measurement technology



Oiling of the material at the
required locations for
homogeneous surface wetting

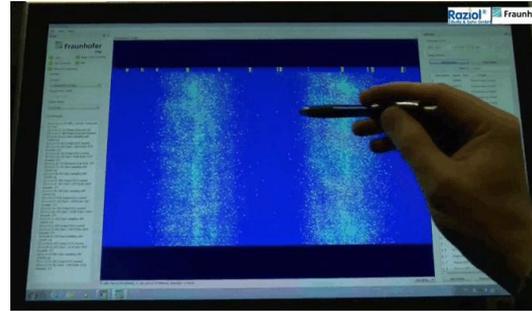


Fluorescence measurement technology

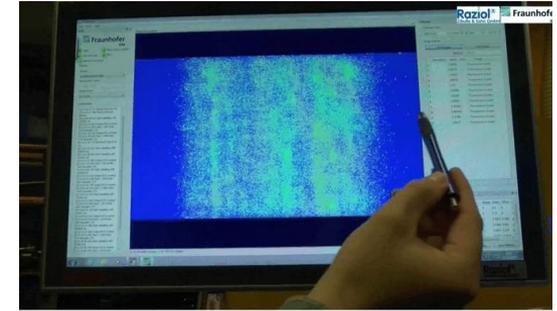
Practical application



Setting the required oiling
with the oiling editor



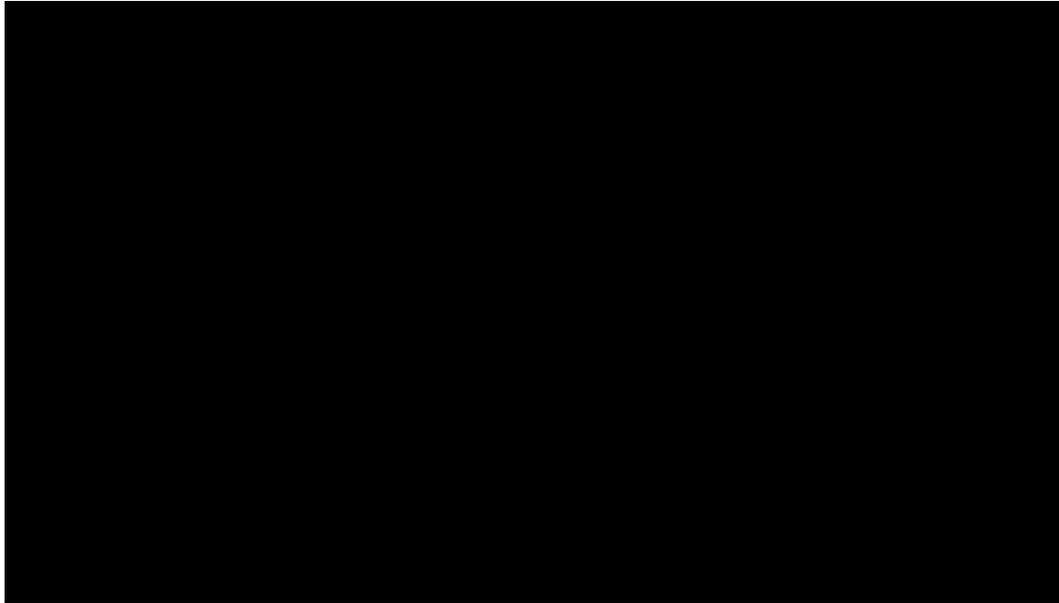
Detection of pre-oiling using
fluorescence measurement
technology



Adjusting and creating the
required oiling depending on
the pre-oiling

Dosing and Cleaning Technology in the Press Shop

Oiling system with upstream cleaning brush



Spraying system with upstream cleaning brush and integrated suction for use in the press shop for formed parts with high precision and process stability requirements.

Oiling system with upstream cleaning brush



Entry and exit from the press line for oil-free production and optimal accessibility during maintenance work.

Simplified by automatic coupling of the efficient extraction concept.

Depending on the requirements profile, the extraction can also be integrated directly into the system.

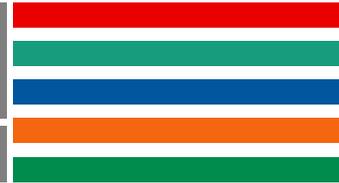
Entry and exit-side wiper blades

In addition to structural drainage channels, this significantly increases the prevention of droplet formation.

Media recirculation



Oiling system with upstream cleaning brush



Enclosed supply unit for reduced maintenance effort and security against unauthorized access.

All important indicators and instruments in view.

Easy monitoring and quick troubleshooting.

A "digital twin" of the system enables user-friendly control and monitoring of the system via a control PC or service handheld device.

Ready for all digitalization requirements using the OPC UA interface.



Oiling system with upstream cleaning brush



Accessibility of the spray nozzles for quick adjustment.

Access to the heart of the spray chamber without the need for tools.

Fast and intuitive removal enables repair and cleaning without long downtimes of the press line.

Determining the optimal oil quantity for the forming process.

Checking and calibrating each individual nozzle.

Quick and easy overview.



Oiling system with upstream cleaning brush



Creating lubrication patterns based on imported .dxf files.

Influencing material flow by partially adjusting the application quantity.

Savings of lubricant in areas of components that do not require oil.

Utilization of QR codes for innovative maintenance.

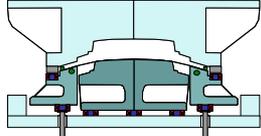
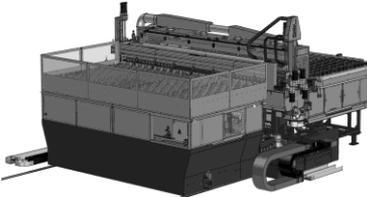
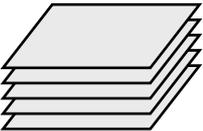
Enabling quick access to documentation, checklists, and schematics for efficient upkeep.

Contribution to sustainable, paperless manufacturing.



„Vision” to Simplify Processes

„New tool for line integration – “Adaptive Dose Modulation”



Sheets or Coil Material

Application of the forming medium using a spray system

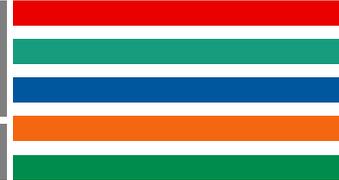
Automatic reading of lubrication data into our surface system

Forming operation in the press

Communication after inspection of the finished part via TriboSim

Possibility to transfer part of the AutoForm technology directly to the production level

Vision – Optimization Directly on the Production Line



**Ich habe Risse in der mittleren Verprägung (ZoneXY).
Kannst Du mir Maßnahmen nennen für eine Verbesserung?**

Der dominante Einflussfaktor ist mit 96 % der Reibwert auf der Unterseite. Die Blechhalterkraft zeigt hingegen nur einen minimalen Einfluss.

An zweiter Stelle folgt der Spalt des Blechhalters mit knapp 8 %. Je größer dieser Spalt, desto näher liegt das Bauteil an einem Versagen in diesem Bereich.

Bitte prüfe, ob der Blechhalter über die gesamte Fläche hinweg zuverlässig schließt.

**Ich habe auch Probleme mit Falten im Bereich XZ.
Kannst Du hier sagen, was man verändern kann?**

Die entscheidenden Einflussfaktoren sind hier die Reibung Pad (oben) und Stempel (unten) sowie die Blechhalterkraft. Empfehlenswert ist, die Reibung an Pad oben und Blechhalter möglichst hochzuhalten.

Empfehlung. Die Schmierung ausschließlich im Bereich der Stempelunterseite. Alle übrigen Bereiche, insbesondere das Pad oben, sollten möglichst trocken bleiben.

Sollte es zu Faltenbildung kommen, ist eine Erhöhung der Blechhalterkraft zu empfehlen.

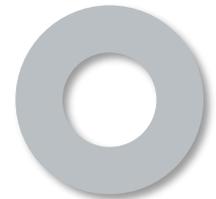
Daten

- Tribo Optimizer
- Camera Technology
- Sensor Monitoring
- CO₂ Data Acquisition
- Lubricant Selection
- Brush
- Abrasion
- XXX
- XXX

Raziol®
Zibulla & Sohn GmbH

- Startbild
- 1 Produktdaten
- 2
- 3 Meldungen
- 4 **TriboSim**
- 5 Status
- 6
- 7 Betriebsdaten
- 8
- 9
- 10+ Service

4 **Aus** Not-Halt und schwere Fehler quittieren 27.10.2025 13:50:23



Overview of Your Benefits

- Simplified maintenance
- Longer tool lifespans
- Better workpiece quality & reduced scrap
- Reduced lubricant consumption
- Optimal starting point for subsequent processes

Thank you very much for your attention!

Děkuji vám velmi za vaši pozornost!

Vielen Dank für Ihre Aufmerksamkeit!