

YOUR PARTNER IN LUBRICATION



ROLL
LUBRICATION



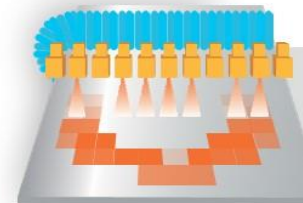
POINT
LUBRICATION



STRIP
LUBRICATION



SECTORIAL
LUBRICATION

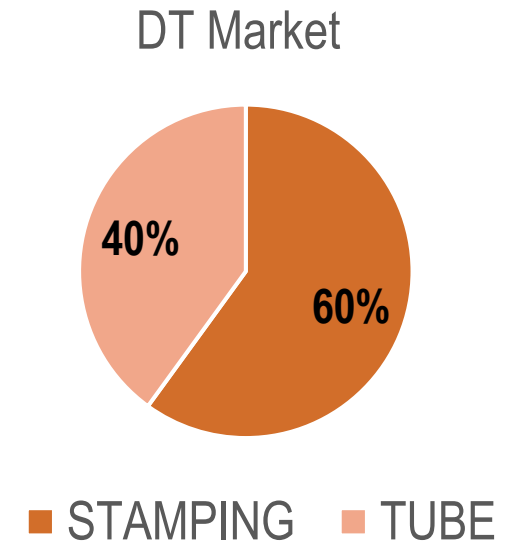


CLEANING AND SECTORIAL
LUBRICATION

- 2000 m² plant
- +18 years experience
- >700 machines produced



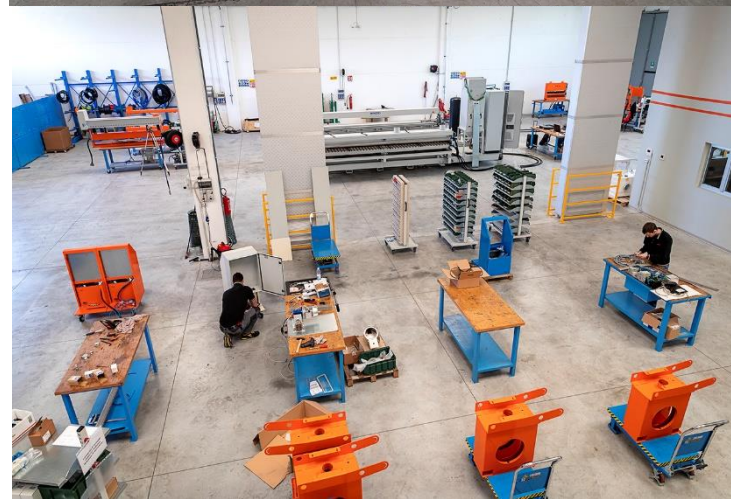
- Founded in 2003
- Specialized in **automatic spray lubrication systems** for **stamping industry**
- Developed the **Antirust spray machines** for **tube manufacturing industry**



OFFICES

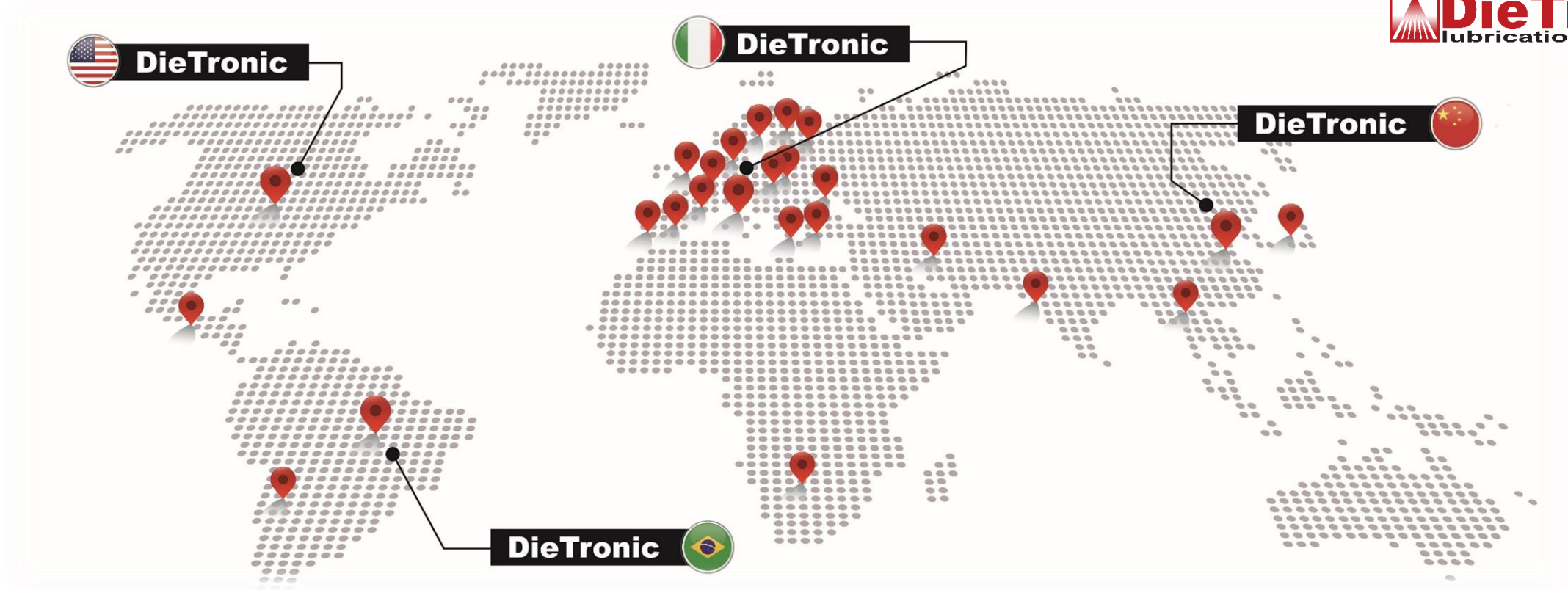


PRODUCTION



WAREHOUSE



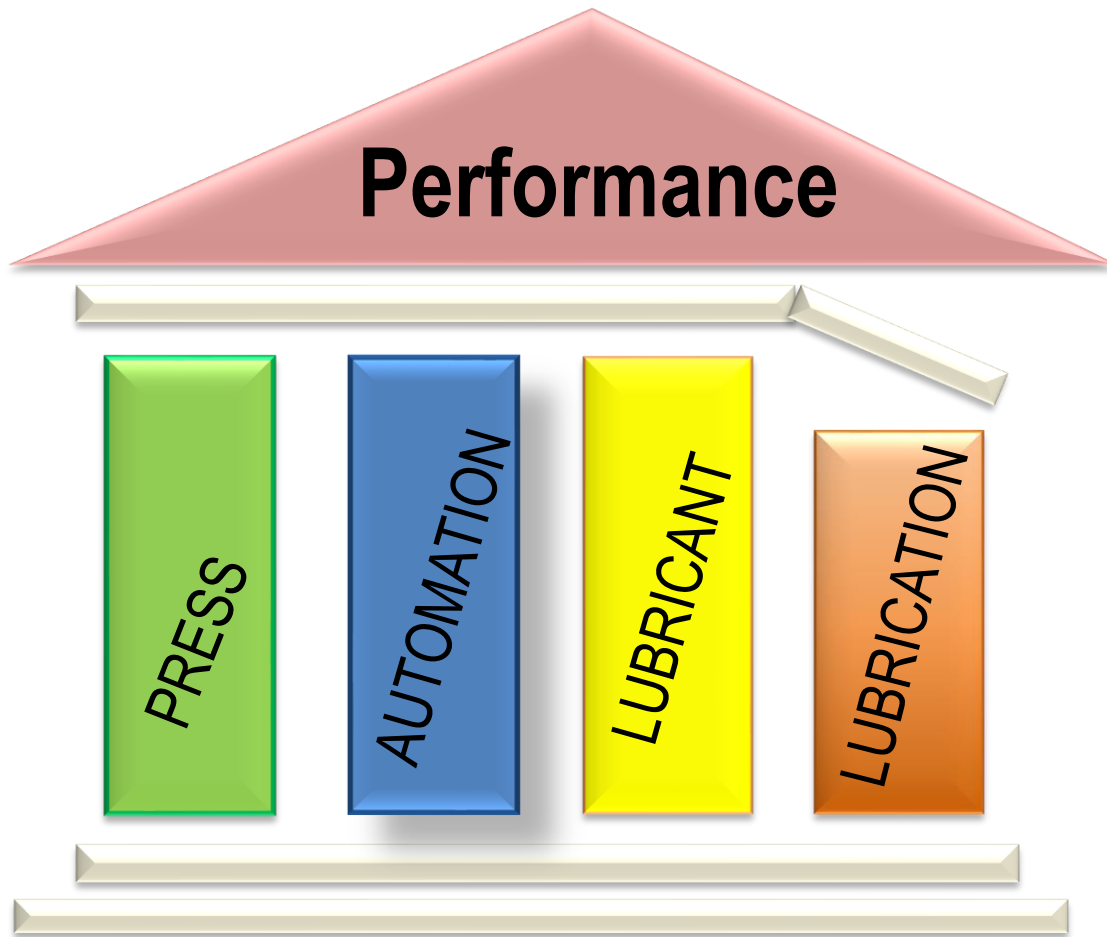


DieTronic agents and distributors network

GLOBAL PRESENCE

DieTronic boasts a long series of collaborations and partnerships with companies and well-known factories in Italy as well as in Europe and all over the world.

Our distribution network offers support to the customer starting from the consultancy to the assistance and maintenance, also through remote assistance.

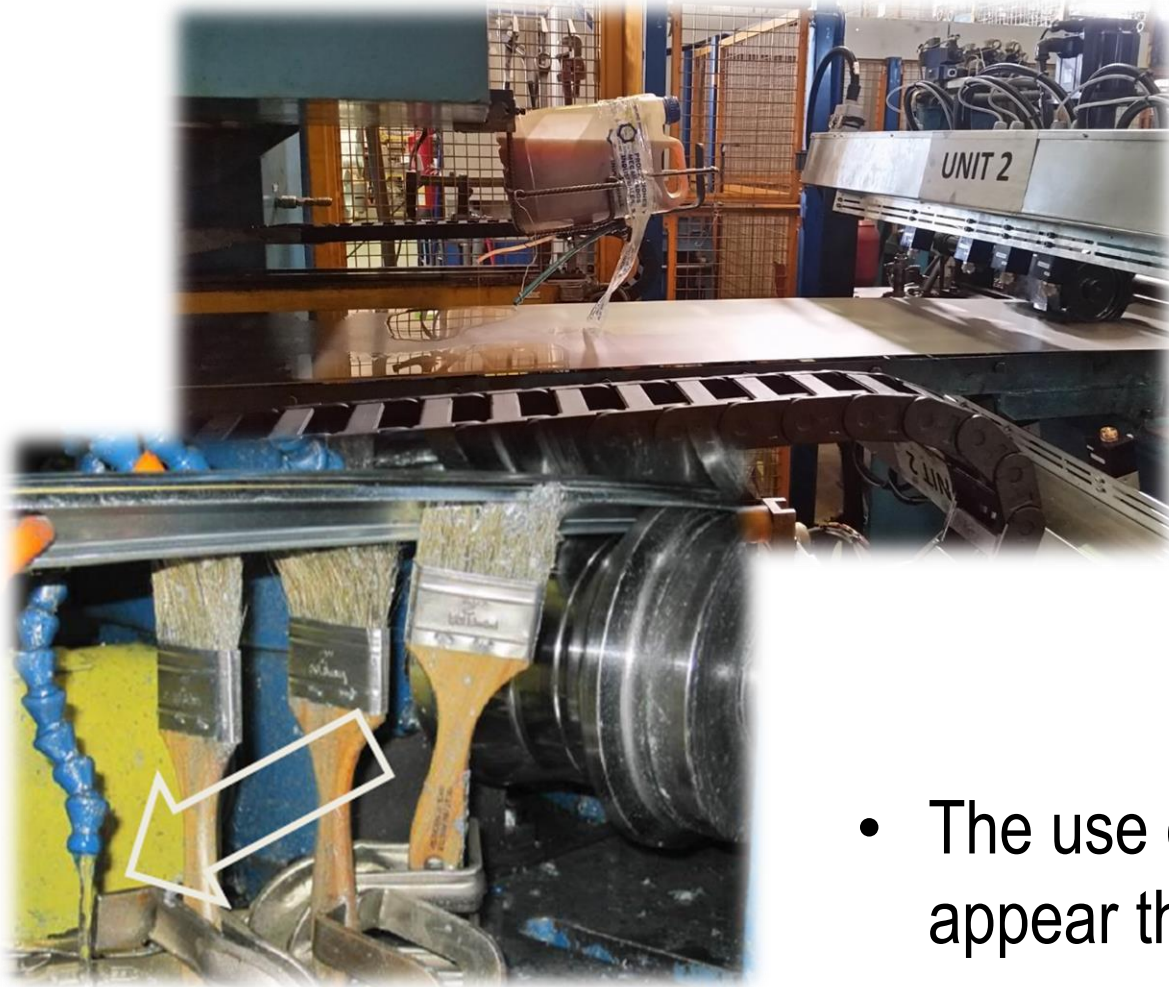


The four pillars in Metal-forming

THE FOUR PILLARS IN METAL-FORMING

When talking about metal-forming, the importance of an efficient **press/tooling**, **automation** and **lubricant** is universally recognized, but when it comes to **lubrication system**, many erroneously consider it unimportant and therefore neglect it...

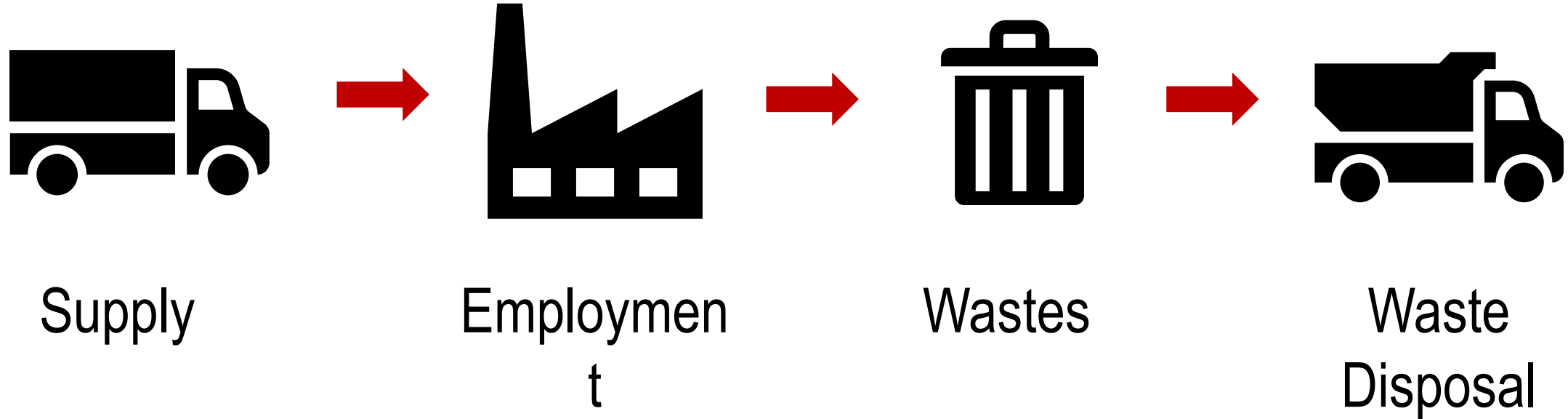
LUBRICATION IN METAL-FORMING



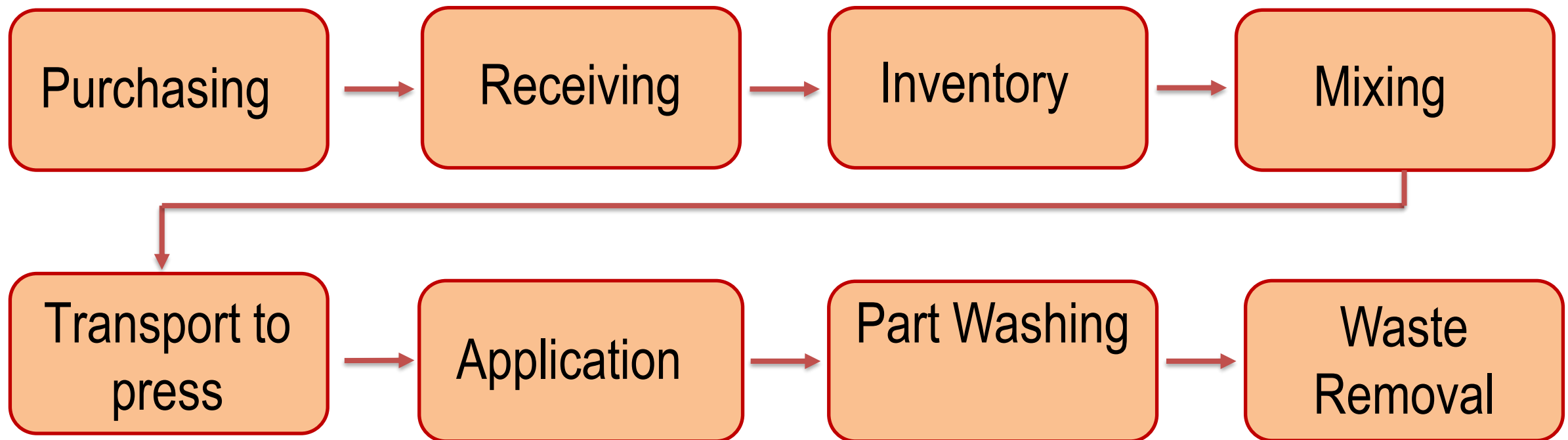
Examples of homemade lubrication solutions

- Actually, the application and type of lubricant used are important factors in metal sheet processing, as it has a direct impact on the status of the dies, on the quality of the end product, on the working environment,...
- The use of **drip methods, spray bottles, cans** might appear the easiest and cheapest solution but...

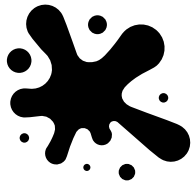
HOW IS THE TYPICAL FLOW OF STAMPING FLUIDS IN A FACTORY?



WHICH ARE THE PASSAGES OF A FLUID'S LIFECYCLE?



WHEN LUBRICATION IS UNDERRATED...



it is dirty and messy



it is dangerous

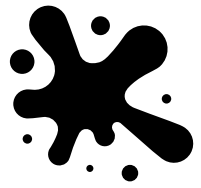


it is expensive



The consequences of an inaccurate lubrication

WHEN LUBRICATION IS UNDERRATED...



it is dirty and
messy

The uncontrolled
lubricant application
reflects directly on the
conveyor, the press,
the tool and the floor



An example of uncontrolled lubricant application

WHEN LUBRICATION IS UNDERRATED...



it is dangerous

The contamination on the environment around the press and the oil mists emission might seriously affect the health and safety of the operators



WHEN LUBRICATION IS UNDERRATED...



it is expensive



It has been proven that the total cost destined to lubricant can be anywhere from 5 to 15 times the initial lubricant cost, as also the related soft costs should be taken into account, i.e.:

floor cleaning, waste removal, rags, gloves, absorbents, press equipment degradation, influence on die lifetime, scraps parts,...

WHY IS A CONTROLLED LUBRICATION SO IMPORTANT?



1. SAVING OF LUBRICANT AND ELECTRICAL ENERGY

A FEW DATA...

***Considering an annual production of 1.500.000 pieces (on 2 working shifts per day)**

	ANNUAL CONSUMPTION	AVERAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
OIL CONSUMPTION	12.000 lt	3,00 €/lt	36.000,00 €/year	80% less	28.800,00 €

WHY IS A CONTROLLED LUBRICATION SO IMPORTANT?

2. CLEANER AND SAFER WORKING ENVIRONMENT



A FEW DATA...

*Considering an annual production of 1.500.000 pieces (on 2 working shifts per day)

	ANNUAL NUMBER	AVERAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
ENVIRONMENTAL CLEANING COST	600 h	25 €/min	15.000,00 €/year	50% less	7.500,00 €

WHY IS A CONTROLLED LUBRICATION SO IMPORTANT?



3. REDUCTION OF DOWNTIMES FOR MAINTENANCE

A FEW DATA...

*Considering an annual production of 1.500.000 pieces (on 2 working shifts per day)

	ANNUAL NUMBER	AVERAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
DOWNTIMES	6.072 min 101,20 h	5 €/min 300 €/h	30.360,00 €/year	30% less	9.108,00 €

WHY IS A CONTROLLED LUBRICATION SO IMPORTANT?

4. SCRAPS REDUCTION



A FEW DATA...

*Considering an annual production of 1.500.000 pieces (on 2 working shifts per day)

	ANNUAL NUMBER	AVERAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
SCRAPS	46.656 parts	5,00 €/parts	233.280,00 €/year	40% less	93.312,00 €

WHY IS A CONTROLLED LUBRICATION SO IMPORTANT?

TO SUMMARIZE...

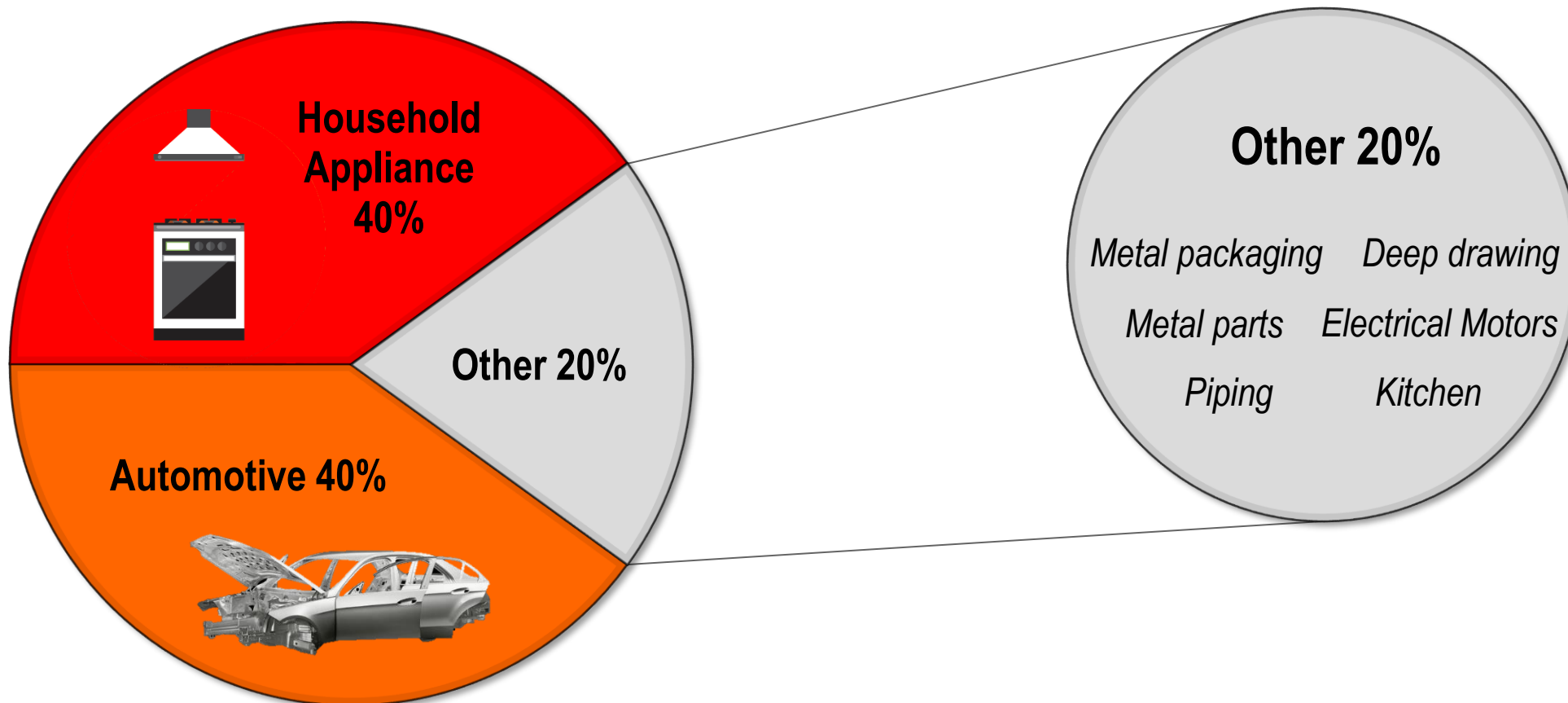
*Considering an annual production of 1.500.000 pieces (on 2 working shifts per day)

	ANNUAL NUMBER	AVERAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
OIL CONSUMPTION	12.000 lt	3,00 €/lt	36.000,00 €/year	80% less	28.800,00 €
ENVIRONMENTAL CLEANING COSTS	600 h	25 €/min	15.000,00 €/year	50% less	7.500,00 €
DOWNTIMES	6.072 min 101,20 h	5 €/min 300 €/h	30.360,00 €/year	30% less	9.108,00 €
SCRAPS	46.656 parts	5,00 €/parts	233.280,00 €/year	40% less	93.312,00 €
TOTAL			314.640,00 €/year	ca. 60%	138.720,00 €

*Not to mention other aspects that cannot be easily quantified (saving of electrical energy, extension of die-lifetime, better quality of the end products, ...)

APPLICATION FIELDS

We are suppliers of lubrication systems for different sheet metal-forming applications, mainly for the Automotive and Household Appliance.



OPERATOR / MANUAL ORIENTED APPROACH

VS MACHINE / AUTOMATIC ORIENTED APPROACH



???



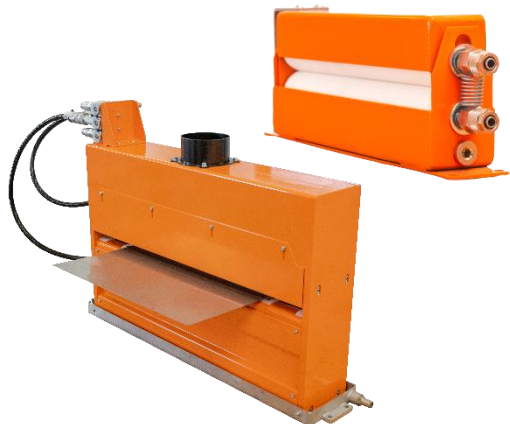
✓ Automatic parameter
setting and tracking

DIETRONIC ESSENTIALS

a solution for every application

PROGRESSIVE
STAMPING

**ROLLS &
PROMAX**
100-800 mm



HOUSEHOLD
APPLIANCE

AUTOMOTIVE
(TIER 1, 2)

EPC & SAGOMA
1000-2000 mm



AUTOMOTIVE
(OEM)

COMBI
2000-5000 mm



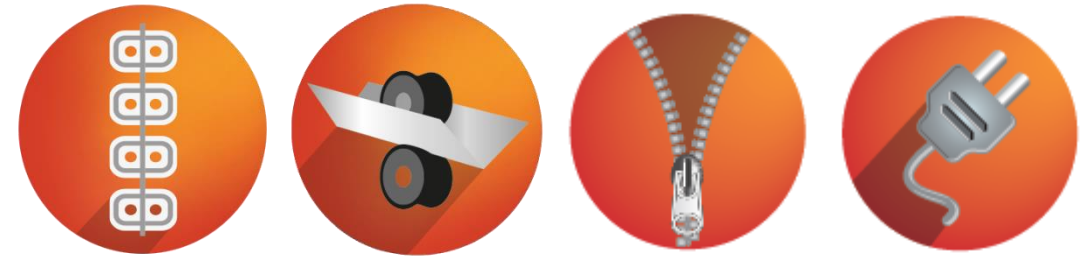


FELT ROLLS LUBRICATION

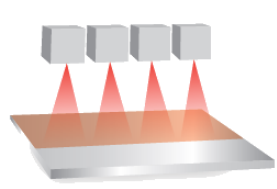
- Available in **different diameters (32-60-110)** and **dimensions**
- For thicknesses from **0,5 to 10 mm**
- **Spring or pneumatic tension adjustment**
- **Pressurised 24 lt oil dispenser**

APPLICATIONS

- Progressive Stamping
- Small Metal Parts
- Motor Lamination



DieTronic range of felt lubricators

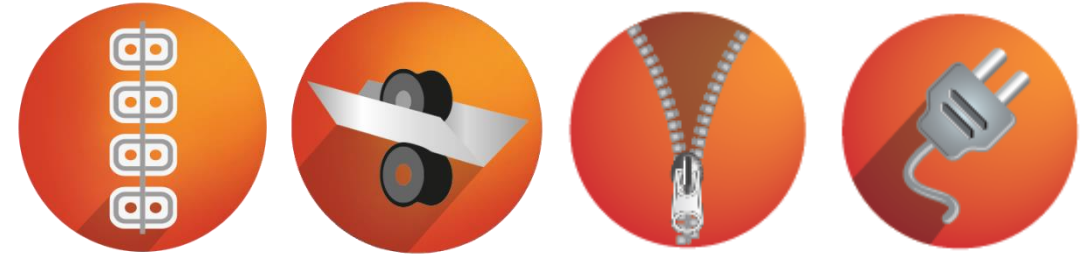


SPRAY PROMAX LUBRICATION

- **Strip Lubrication** system
- Configuration:
 - **Spray box** (available sizes from 200 800 mm)
 - **Pressurized Oil Tank** (possibility to handle more oils)
 - **Oil Mist Suction system** (optional)
 - **Waste Tank** (optional)
- **PROMAX-DIE**: possible integration to relubricate specific point on the die

APPLICATIONS

- Progressive Stamping
- Small Metal Parts
- Motor Lamination



Promax Pressurized tank, Spray box and Promax-Die



SPRAY EPC LUBRICATION

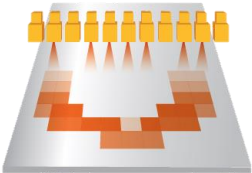
- Semi-automatic **strip lubrication system** (strip of min 100 mm)
- **Suitable for both coil and blanks** (of different shapes and dimensions)
- Available in different sizes (between **1000 and 2000 mm**)
- **Automatic oil management** (possibility to handle more oils)
- Integrable with **oil mist suction system** and **waste tank**
- **Pneumatic LVLP (Low Volume Low Pressure) spray valves** with manual adjustment

APPLICATIONS

- Appliance Stamping
- Automotive Stamping
- Miscellaneous



EPC system configuration with more oil tanks for multi-oils management

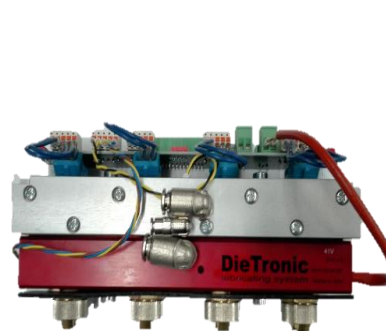
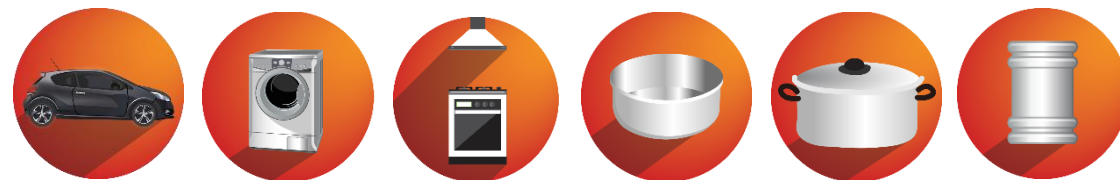


SPRAY SAGOMA LUBRICATION

- Automatic system for **sectorial lubrication** in **squares of 50x50 mm**
- **Suitable for both coil and blanks** (of different shapes and dimensions)
- Available in different sizes (between **1000 and 2000 mm**)
- **Automatic oil management** (possibility to handle more oils), oil mist suction system and **waste tank**
- **Patented Modular Manifold** with **electronic spray valves** with **automatic adjustment**

APPLICATIONS

- Appliance Stamping
- Automotive Stamping
- Miscellaneous



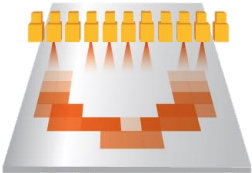
*Patented
Manifold
Technology*



*SAGOMA
System*



*Sectorial lubrication in
squares 50x50 mm*



SPRAY SAGOMA LUBRICATION

- Automatic system for **sectorial lubrication in squares of 50x50 mm**
- Presence of **Infeed and Outfeed motorized conveyors** for blank metal sheets
- **Side and front centering system**
- **Easy integration with automated systems** (blank destackers, robots)

APPLICATIONS



- Sink Manufacturing

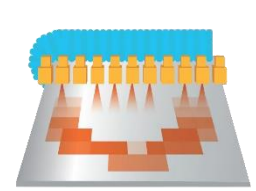


*SAGOMA System
with conveyors*

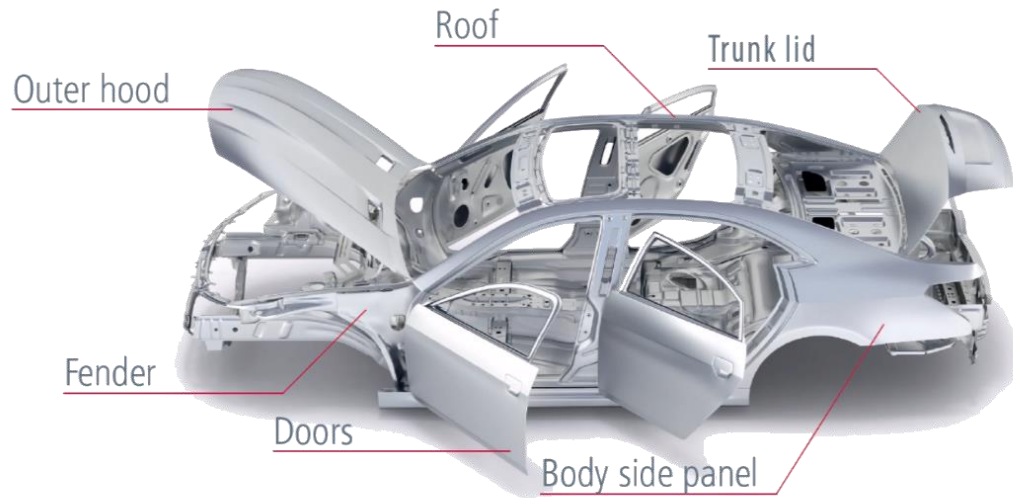


*SAGOMA System with
conveyors and destacker*





CLEANING AND LUBRICATION



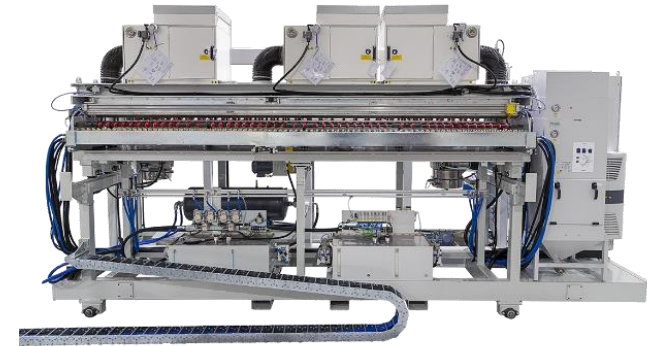
Combined system in one single frame (Combi) or in two separate frames:

- **Brush Cleaning Unit**
- **Sectorial Lubrication in squares 100x100 mm**

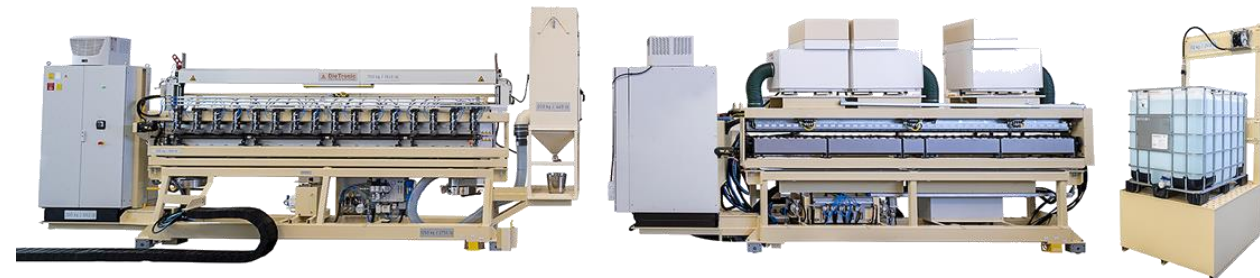
APPLICATIONS



- **Automotive Stamping**



One frame solution – Combined Cleaning and Lubrication system (for existing lines)



Two frames solution – Cleaning and Lubrication system (for new lines)

LOCAL TECHNICAL SUPPORT WORLDWIDE



DieTronic



DieTronic



DieTronic



DieTronic



Our Team is available worldwide for:

- **Technical Support**
- **Periodical Maintenance Programs (PMP)**
- **Remote assistance (h24)**
- **Spare Parts Stock, complete** available in

- ✓ Italy
- ✓ US
- ✓ China
- ✓ Brazil

REFERENCES AUTOMOTIVE OEM



General Motors



RIVIAN



REFERENCES AUTOMOTIVE T1 AND T2



REFERENCES INTEGRATORS



REFERENCES APPLIANCE



B/S/H/



AGA RANGEmaster

gorenjegroup
Gorenje GALO, d.o.o.

Amica



VESTEL



📍 Via Madre Teresa di Calcutta 9-13,
Z.I. Malpensata, 26866
Sant'Angelo Lodigiano (LO) – IT

☎ +39 0371 210 129

☎ +39 0371 214 321

✉ sales@dietronic.eu

💻 www.dietronic.eu &
www.tubesurface.com



THANK YOU FOR YOUR ATTENTION