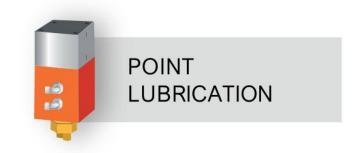
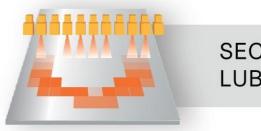


#### YOUR PARTNER IN LUBRICATION

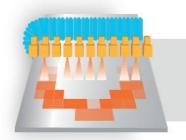








SECTORIAL LUBRICATION



CLEANING AND SECTORIAL LUBRICATION

- 2000 m<sup>2</sup> plant
- +18 years experience
- >700 machines produced

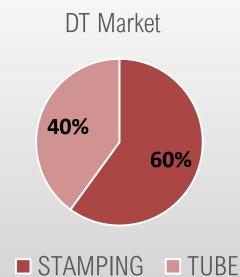




• Founded in 2003

 Specialized in automatic spray lubrication systems for stamping industry

 Developed the Antirust spray machines for tube manufacturing industry

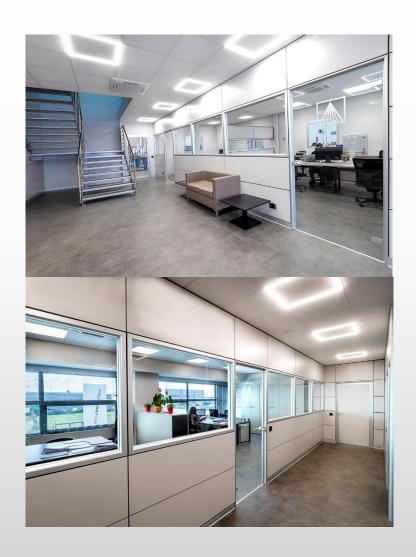


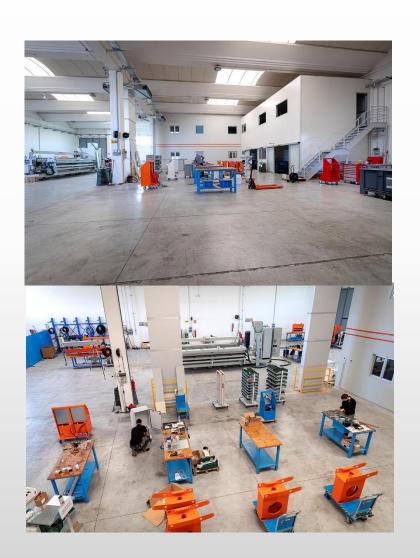


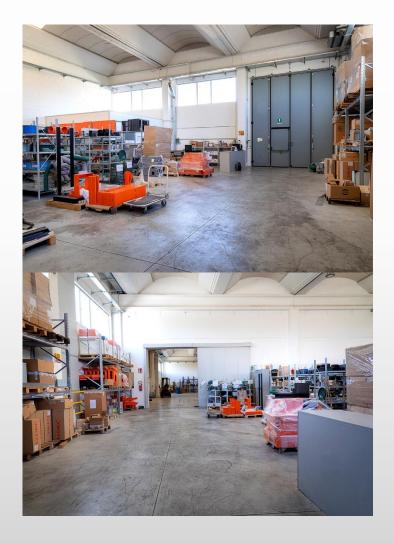
### **OFFICES**

### **PRODUCTION**

### **WAREHOUSE**







DieTronic Offices, Production Department and Warehouse





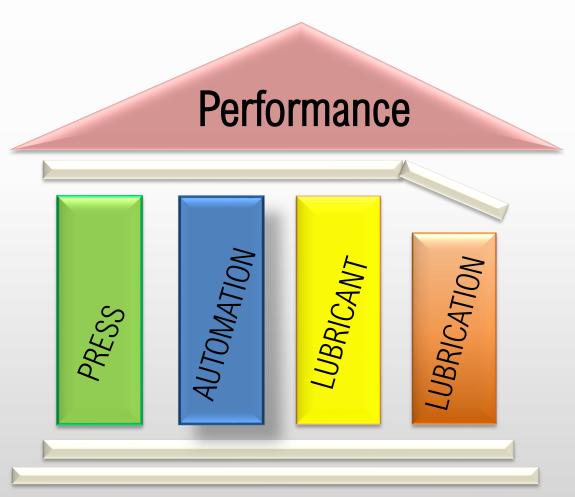
DieTronic agents and distributors network

### **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



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

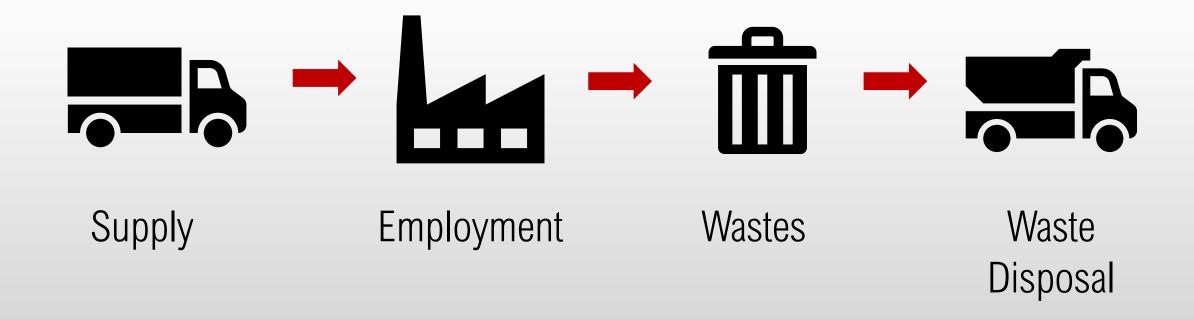


 Actually, the application and type of lubricant used are important factors in metal sheet processing, as it has a direct impact on the status of the dies, on the quality of the end product, on the working environment,...

• The use of **drip methods**, **spray bottles**, **cans** might appear the easiest and cheapest solution but...

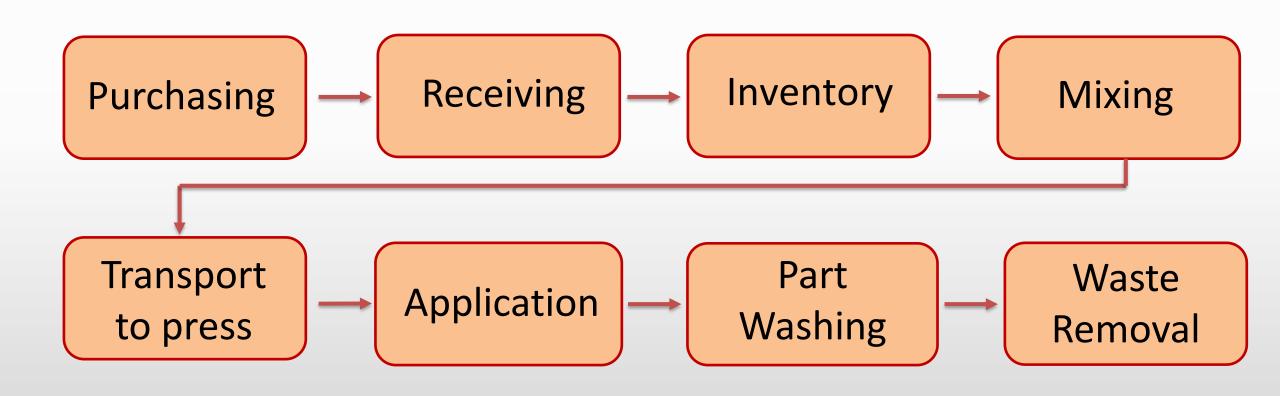


# HOW IS THE TYPICAL FLOW OF STAMPING FLUIDS IN A FACTORY?





# WHICH ARE THE PASSAGES OF A FLUID'S LIFECYCLE?







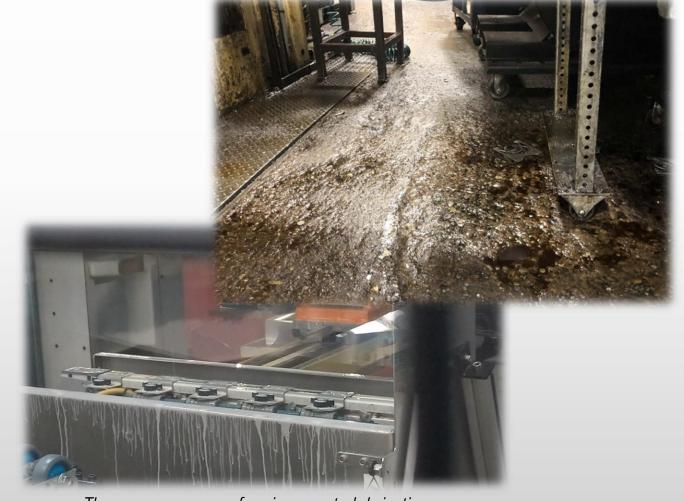
it is dirty and messy



it is dangerous

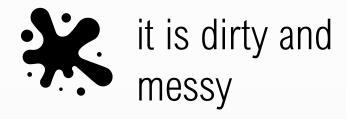


it is expensive



The consequences of an inaccurate lubrication





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







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







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,...





### 1. SAVING OF LUBRICANT AND ELECTRICAL ENERGY

# \*Considering an annual production of 1.500.000 pieces (on 2 working shifts per day) ANNUAL CONSUMPTION ANNUAL COST IMPROVEMENT ANNUAL SAVING OIL CONSUMPTION 12.000 It 3,00 €/It 36.000,00 €/year 80% less 28.800,00 €



2. CLEANER AND SAFER WORKING ENVIRONMENT



#### A FEW DATA...

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





### 3. REDUCTION OF DOWNTIMES FOR MAINTENANCE

#### A FEW DATA...

	ANNUAL NUMBER	AVARAGE 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 €



4. SCRAPS REDUCTION



#### A FEW DATA...

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



#### TO SUMMARIZE...

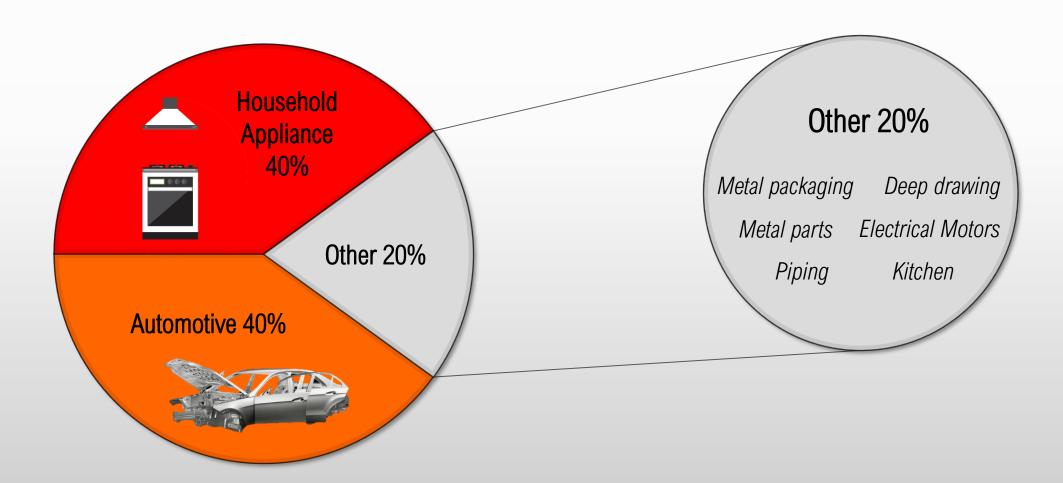
	ANNUAL NUMBER	AVARAGE COST	ANNUAL COST	IMPROVEMENT	ANNUAL SAVING
OIL CONSUMPTION	12.000 lt	3,00 €/It	36.000,00 €/year	80% less	28.800,00 €
ENVIRONMENTAL CLEANING COSTS	600 h	25 €/min	15.000,00 €/year	50% less	7.500,00 €
DOWNTIMES	6.072 min 101,20 h	5 €/min 300 €/h	30.360,00 €/year	30% less	9.108,00 €
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 €

<sup>\*</sup>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.

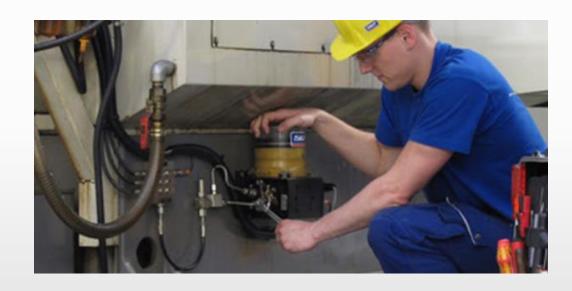




# OPERATOR / MANUAL ORIENTED APPROACH

VS

# MACHINE / AUTOMATIC ORIENTED APPROACH









Automatic parameter setting and tracking



# DIETRONIC ESSENTIALS a solution for every application

PROGRESSIVE STAMPING

RULLI & PROMAX 100-800 mm



HOUSEHOLD APPLIANCE

AUTOMOTIVE (TIER 1, 2)

EPC & SAGOMA 1000-2000 mm





AUTOMOTIVE (OEM)

**COMBI** 2000-5000 mm





### FELT ROLLS LUBRICATION

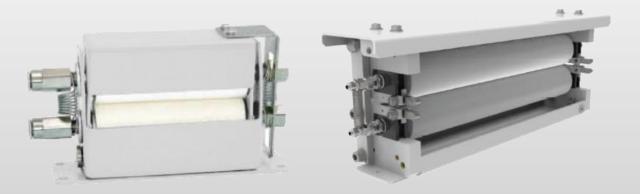
- Available in different diameters (32-60-110) and dimensions
- For thicknesses from 0,5 to 10 mm
- Spring or pneumatic tension adjustment
- Pressurised oil dispenser systems also available (18-40-60 lt)

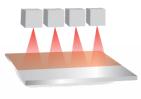


#### **APPLICATIONS**

- Progressive Stamping
- Small Metal Parts
- Motor Lamination







# 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



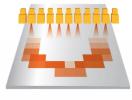
#### **APPLICATIONS**

- 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



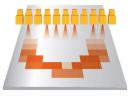


Patented Manifold Technology





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**

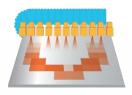


Sink Manufacturing

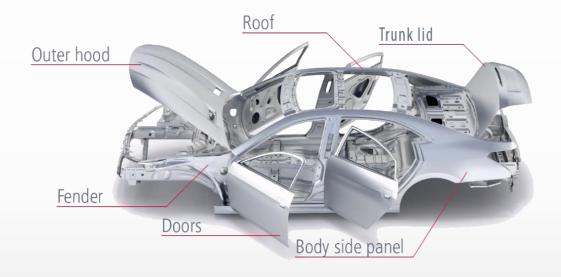








# CLEANING AND LUBRICATION



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





Our Team is available worldwide for:

- Technical Support
- Periodical Maintenance Programs
- Possibility of remote assistance (h24)
- Spare Parts Stock, completely available in
- ✓ Italy
- ✓ US
- ✓ China
- ✓ Brazil



#### References Automotive OEM

















#### References Automotive T1 and T2























































### References Integrators



















































### References Appliance

























**AGA** RANGEMaster

**gorenje** GAIO, d.o.o.





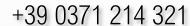




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#### THANK YOU FOR YOUR ATTENTION