



DIE SPLITTERS
Designers of Safety

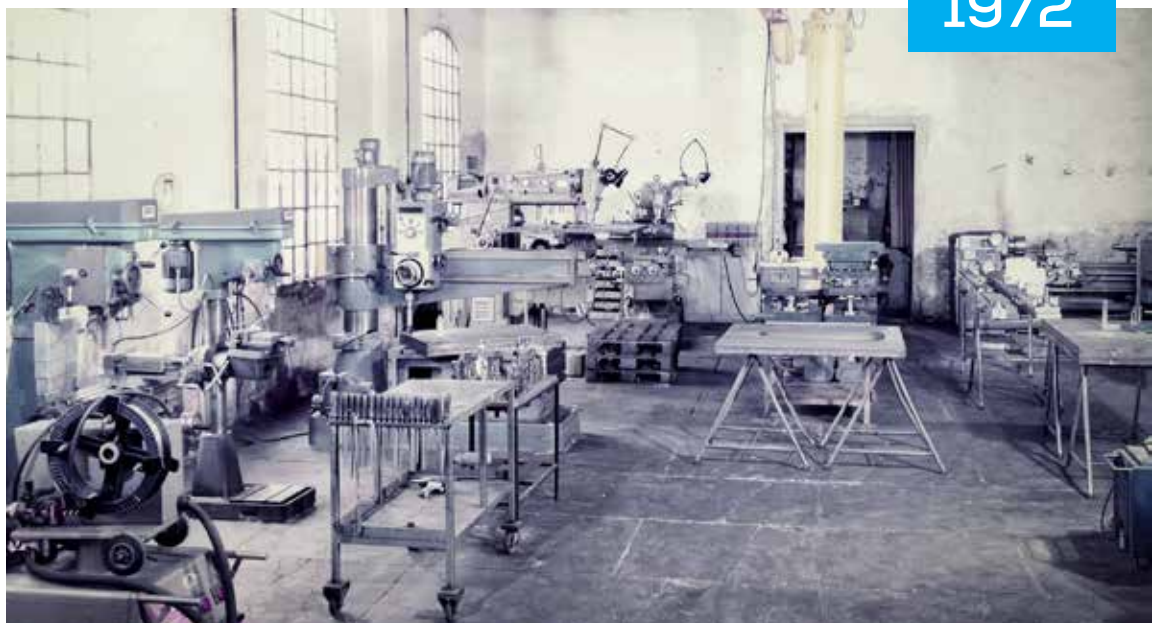


OUR **EXPERIENCE.**

Attrezzeria Universal has been building dies and dedicated equipment since 1972. Founded by Armando Caramaschi, the company developed its experience starting from the design and building of dies for sheet metal processing.

Over the years, the company has acquired cutting-edge machinery which has enabled it to extend its range of products and services.

Today, the crowning glory of the company are **its die splitters, sold around the world to leading companies in the pressing industry and key for cutting processing times and costs by up to 90% while guaranteeing safe handling of the dies.**





+40

MORE THAN 40 YEARS
EXPERIENCE.



34

34 EMPLOYEES



+200

MORE THAN 200 DIE
SPLITTERS AROUND THE
WORLD
WORLDWIDE MARKET



4500 SQM

3 PLANTS WITH A TOTAL
COVERED SURFACE
AREA OF 4500 SQM

In 2006, the company built a **new plant that tripled the work area, adding machines with cutting-edge technology** for the three-dimensional processing and inspection of the formed piece. Meanwhile, the number of employees grew, and the constant search for expert knowledge, has led to the design and construction of dies and die splitters with minimal lead-times and at competitive costs for quality.

TODAY



CONTINUITY: CONTINUOUS SEARCH FOR INNOVATION.

Die splitters evolved from the internal need to maintain the dies and are **improved constantly based on the needs** of our fitters and recommendations from our customers.

We develop machines based on **four decades of experience**, leaving nothing to chance, facilitating the work of the operators during assembly and inspection of the die.



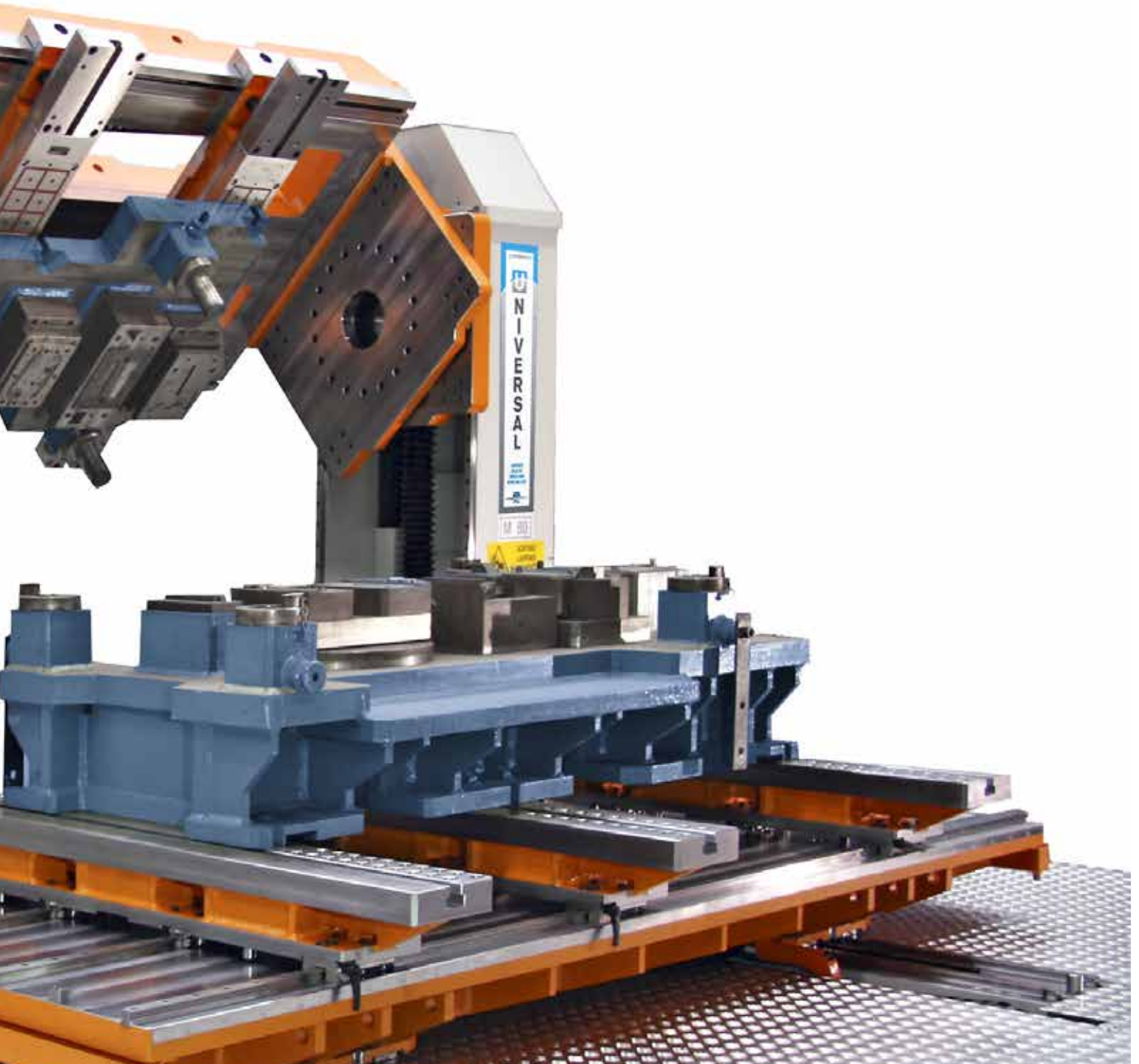
WE MEET THE CHALLENGE.

Each die splitter is custom designed for the dies and needs of the individual customer.



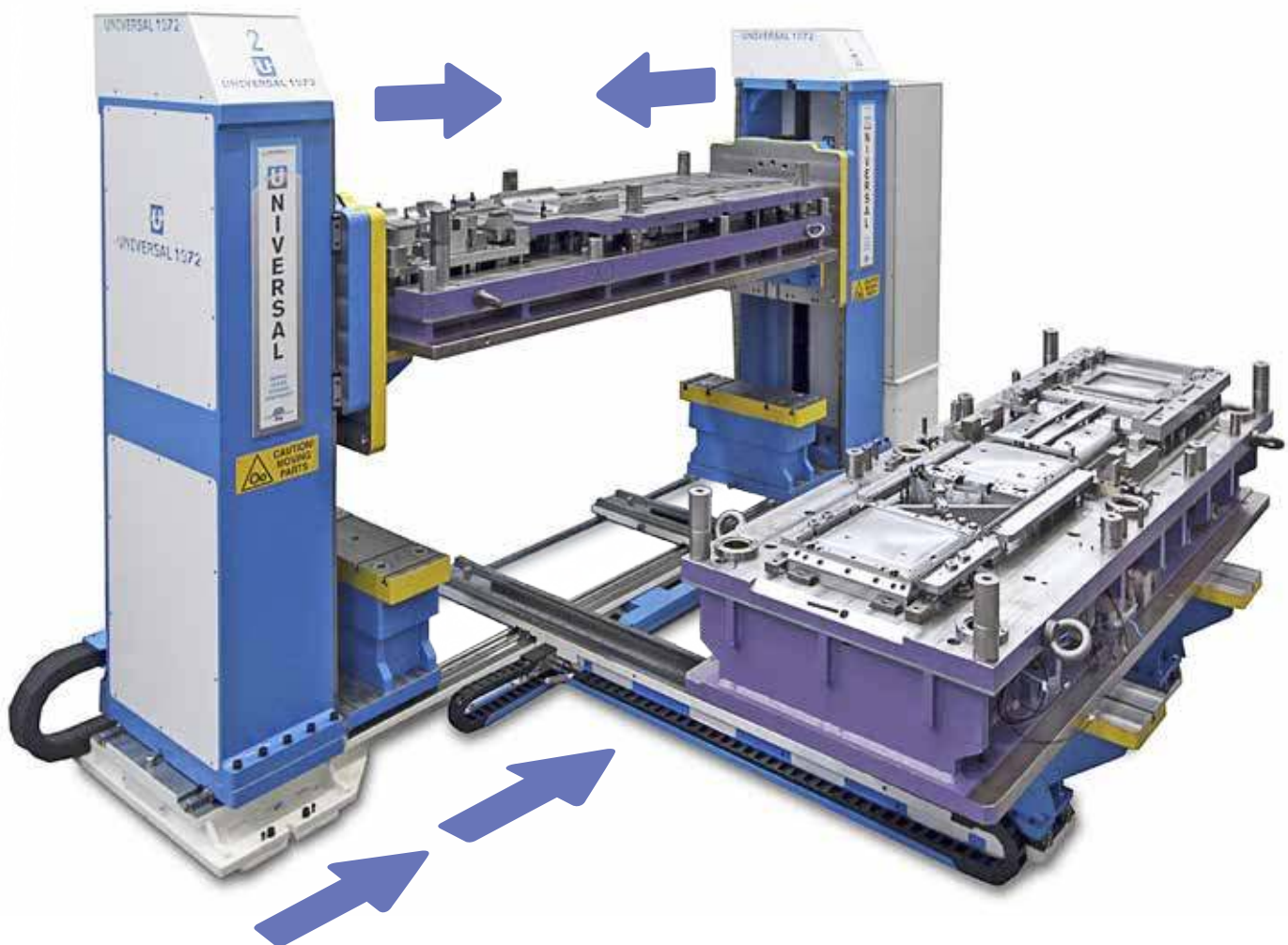
OUR FITTERS ARE
OUR FIRST DESIGNERS.





**CHOOSE THE BEST
DIE SPLITTER FOR YOU.**

WITH **MOBILE**
COLUMNS.



		MIN.	MAX.
Die Dimensions	mm	800	3,500
Total Die Weight	Ton	1	25
Die Upper Part Weight	Ton	1	15
Total Machine Weight	Ton	12	20



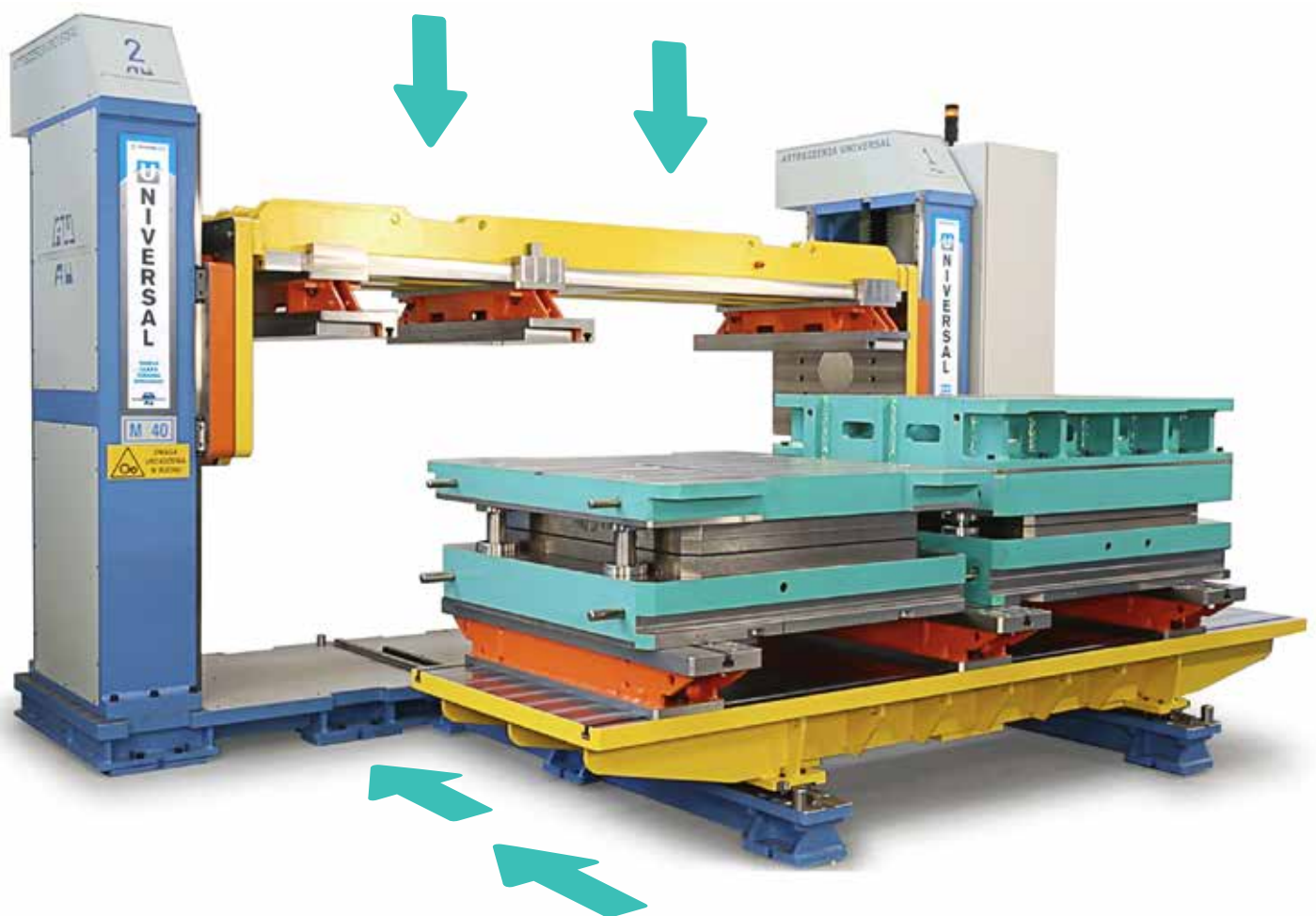
- This model allows the areas above and below the die to be left completely free.

- The operator can disassemble the die components at any place.

- Moving columns allow for handling different sized dies.



WITH FIXED COLUMNS.



		MIN.	MAX.
Die Dimensions	mm	400	4,500
Total Die Weight	Ton	1	60
Die Upper Part Weight	Ton	1	30
Total Machine Weight	Ton	12	60



- Option for opening individual die sectors, as well as the entire die.

- Highly suited for large dies thanks to the stiffness provided by the whole crossbeam.

- Options for different types of clamping.



- Parallel supports with recirculating ball slide guides for handling different sized dies.



SPECIAL FOR **PLASTIC.**

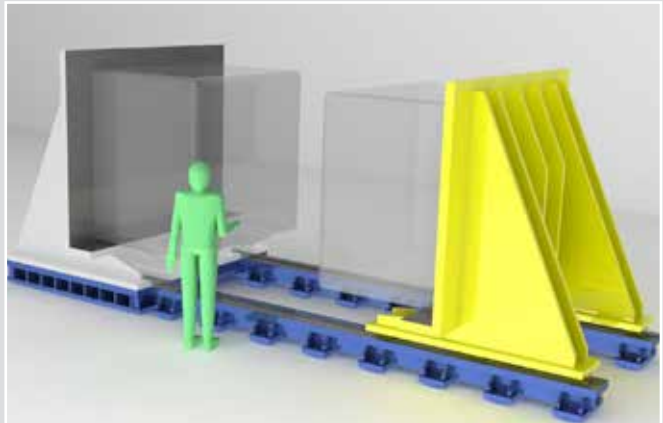
VERTICAL OPENING

- The die arrives upright, in one piece, and is clamped using permanent magnets.
- The die is rotated horizontally.
- The die enters the machine and the upper part is opened.
- The lower part exits, the upper part turns 180° and then it descends.



HORIZONTAL OPENING

- The die arrives upright and is clamped using magnets or other types of clamps, as required by the customer. Once open, one or both sides can be rotated to facilitate maintenance on the die and to remove the interior components.



HYBRID MODELS.

- Die splitters with top crossbeam typical of fixed column machines and lower separate carriages, for which rotation is an available option.

1



3



4



2

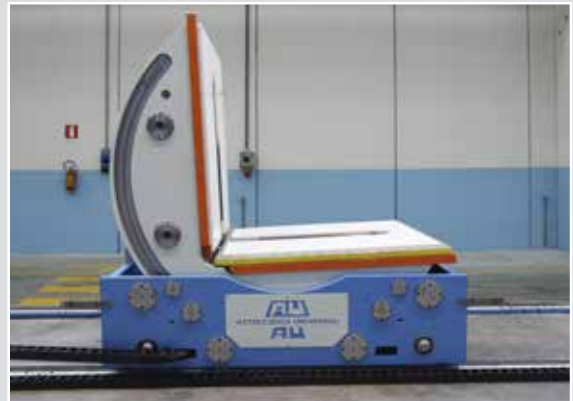


5



OTHER MODELS.

- System for overturning die-casting dies or any other die that requires the entire die to be overturned safely.



COMPLETE SAFETY.

Die splitters allow you to work in **complete safety, avoiding overhead loads** and especially when turning over the upper part of the die.



ALL RISKS ARE ELIMINATED THAT WERE RELATED TO HANDLING THE DIES WITH UNSUITABLE EQUIPMENT THAT POSED HAZARDS FOR THE OPERATOR AND THE DIE.

Dies handled using our die splitters show better performance and have longer lives.



MAGNETIC PLATES WITH SAFETY RATINGS 10 TIMES THE WEIGHT THEY MUST TURN.

What happens to the upper part in the event of a blackout?
The die stays fixed to the machine because the magnets are permanent.



DOUBLE SAFETY

In addition to the braking system on the brushless motors, we use a second air system with normally closed brakes for both the up/down and the rotation movement.
The brakes open only when the machine is in motion.



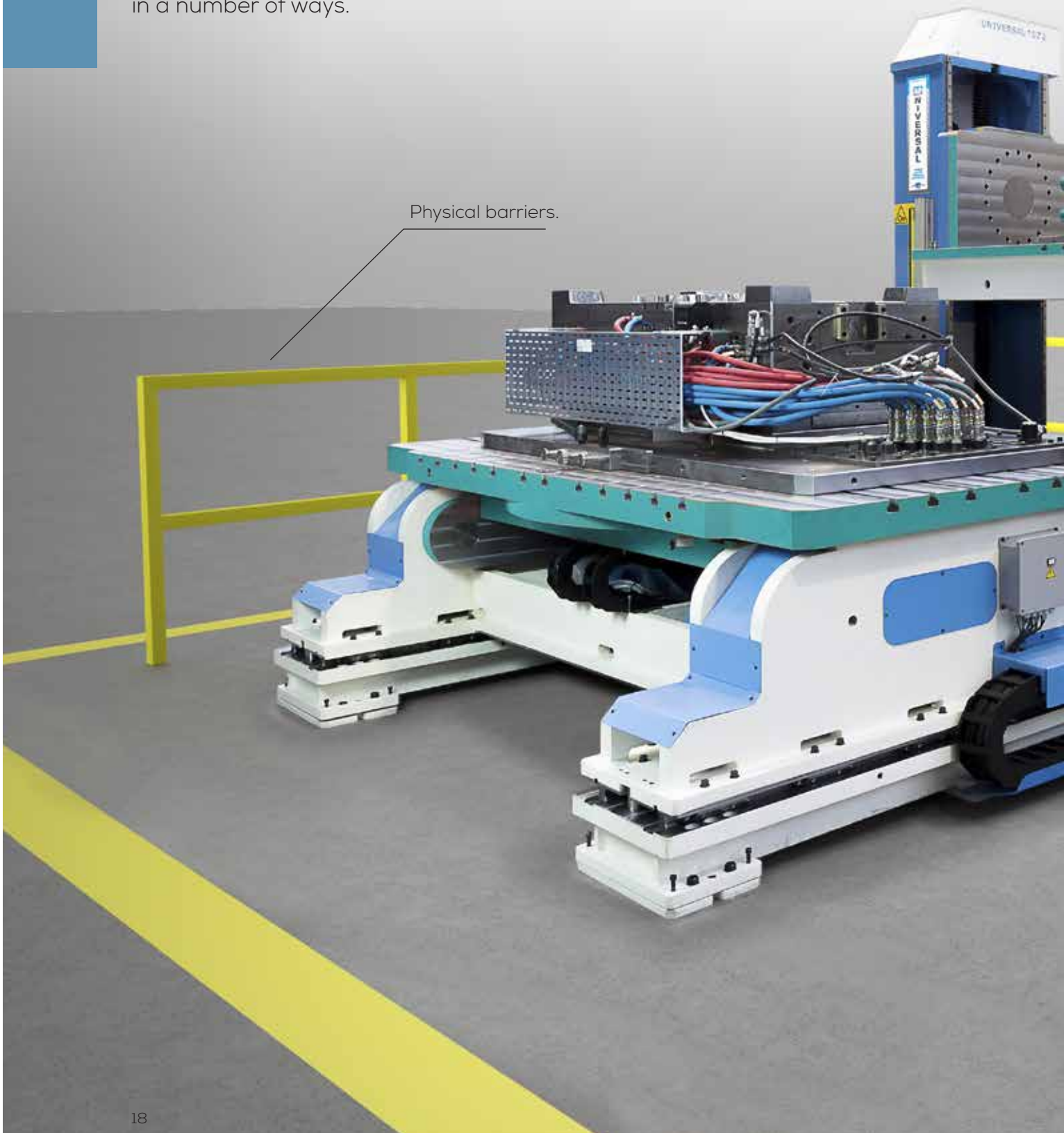
All machine movements are manned, that means that if a button is released, the machine stops immediately, and when it is pressed again, the machine starts up from the same point. This guarantees the worker's safety.



**INVESTING IN SAFETY IS
WORTH IT, OPTIMIZES WORK
AND IS A GUARANTEE FOR
EMPLOYERS AND EMPLOYEES.**

The work area can be delimited in a number of ways.

Physical barriers.



Areas delimited by
infrared sensors.



Areas marked with ground
signals.

DIE SPLITTERS **SAVE MONEY.**

Time reduction means being able to offer **more competitive pricing** to the market.



OUR MACHINE IS DESIGNED TO OPEN A DIE AND OVERTURN THE UPPER PART IN ONLY TWO MINUTES.

In the time that you can open a die using traditional systems, our machine has already opened and closed it at least a dozen times.



THE MACHINE SURFACES CAN BE EQUIPPED WITH PERMANENT MAGNETS THAT ALLOW INSTANT CLAMPING OF THE DIE.



VERSION CHANGES CAN BE PERFORMED QUICKLY, ALLOWING RETURN OF THE DIE TO PRODUCTION.

N°1 FINGER N°2 MINUTES

to safely open and
rotate your tooling



Up To 90%

Cost Savings!!



ABSOLUTE PRECISION.



The **cutting edges** can be checked right on the machine using card stock.



PRECISION TO THE HUNDREDTHS WHEN COUPLING THE DIE.

The raise/lower speed is set using a potentiometer that allows it to be varied.

When closing the die, if a punch is not perfectly aligned with its relative hole, the machine stops avoiding damaging the components.



ABSOLUTE PARALLELISM BETWEEN THE DIE HALVES.

Raising and lowering of the upper part is mechanical, performed by a recirculating ball screw controlled by brushless motors and PLC that guarantee perfect synchronism of the two axes, allowing for parallelism to a precision of hundredths between the upper and lower parts of the die.

THE **STRENGTH** OF A SINGLE WORKER.



The die splitter **reduces the number of workers** required for handling the dies: a single worker can handle dies of any size and weight.

- Siemens control panel.
- User-friendly display, with few, easy to use commands.



MAXIMUM ACCESSIBILITY.



The lower part is designed to a height that allows the worker easy access to the die (a higher part, to which the height of the die is added, would be uncomfortable).

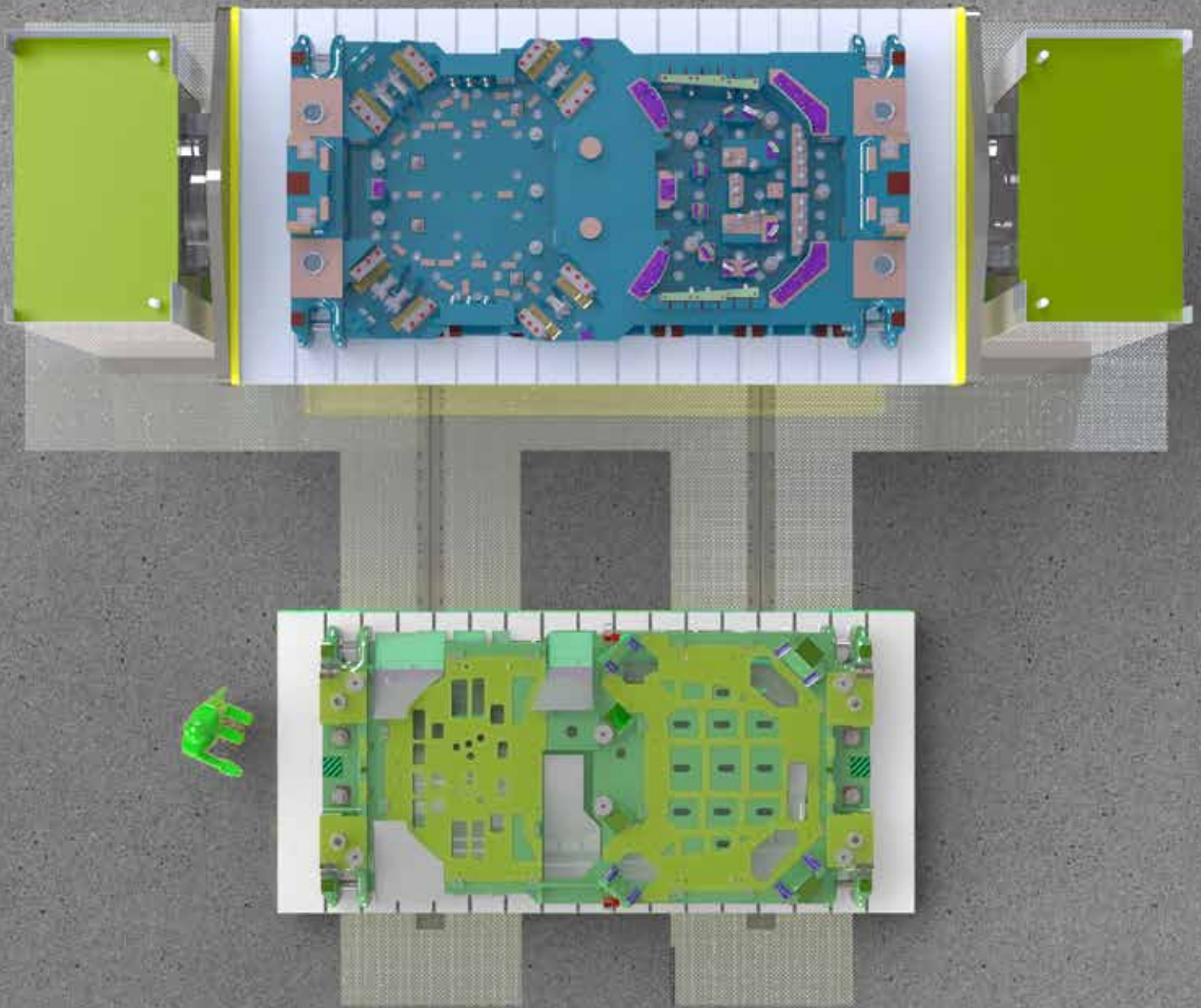


ERGONOMICS

Rotation and height of the upper table can be adjusted and stopped in any position, making the die fully accessible, even the back.



The lower part exits the machine, leaving the worker lots of space between the open die halves.



REACH **ANY**
PLACE ON THE DIE.

MOVE **EVERYTHING** **WITH JUST ONE** **FINGER.**



The parallel supports move easily with one finger to the right and one to the left, to receive various sized dies or to open die sections. They slide on ball bearings and have a height that leaves access space between the die and the machine.



MAXIMUM **QUALITY.**

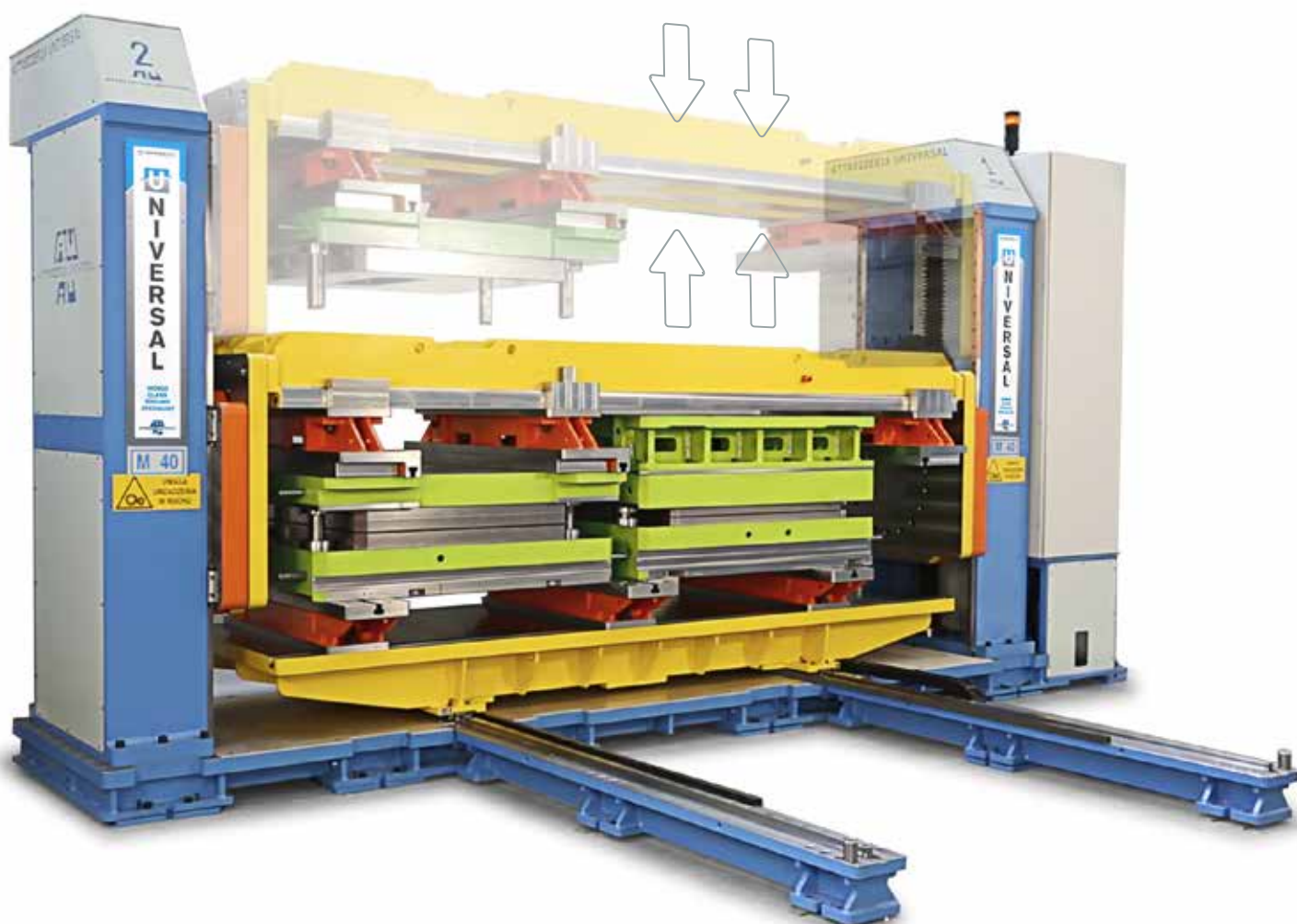


All machine components are sourced from qualified European companies.

MAXIMUM CONTROL.



Ability to assemble die components and couple the halves an infinite number of times to check the work.



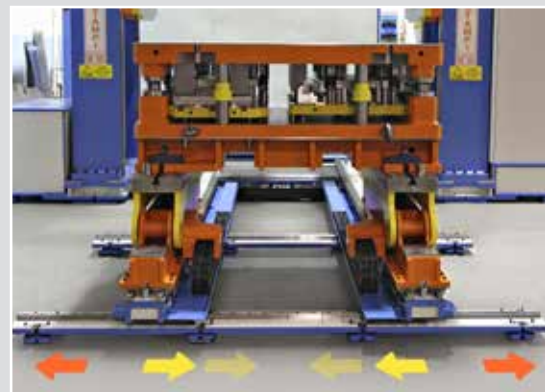
CENTERING DIES.



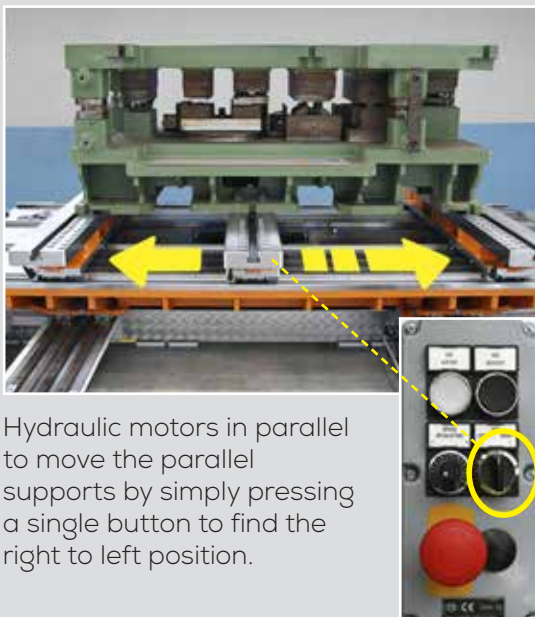
To couple die halves, even separately, always returning to the perfect coupling position, we offer a number of solutions:



Mechanical references.



Lower carriages that slide right and left.



Hydraulic motors in parallel to move the parallel supports by simply pressing a single button to find the right to left position.



Dedicated centering based on customers' dies.

**OTHER SOLUTIONS ARE DESIGNED BY
OUR INTERNAL ENGINEERING OFFICE.**



WE MANUFACTURE DIES
AND WE KNOW THE RELATED
PROBLEMS.

UPPER PART.



Our internal Engineering Office can design any type of clamping based on the customer's dies.

Some of the possible solutions include:



"T" slots on the parallel supports.



"T" slots on the whole surface.



With permanent magnet parts (highly practical for clamping in just a few seconds with just the push of a button).



With screws.

LOWER PART.



In addition to all fixing types offered for the upper part, the lower part of the die splitter can be equipped with a 90° rotating system.

Main advantages:



The operator can work on the back of the die.



For plastic dies, the die can arrive at the machine whole and be fixed standing.



OUR SERVICES.

REMOTE ASSISTANCE



We offer remote assistance for our die splitters through connection to our technicians.

We can read the software, make changes, or perform updates instantly.

DATA READING

All data can be transferred to a PC for an analysis of the maintenance trends.

You will know:



1 WHAT DIES HAVE REQUIRED GREATEST SERVICE AND WHY



2 HOW MUCH TIME WAS DEDICATED TO GENERAL AND/OR WORKER MAINTENANCE.



24 MONTH WARRANTY

We are the only machinery manufacturers to offer a 24 month warranty instead of a 12 month one.



ADVANCED SOFTWARE

- Able to record more than 1000 dies based on the customer's needs.
- Dies can be saved with both a sequential number and the name of the die.
- Once you enter the die page, you can enter a series of data fields based on the customer's specifications, such as, the name of the die supplier, the maintenance dates, the type of maintenance, and the worker's name.

INFINITE **POSSIBILITIES**
THANKS TO **INNOVATIVE**
SOFTWARE.

OUR CLIENTS.



WHAT THEY SAY ABOUT US.

ELECTROLUX ITALIA S.P.A.

" Our team decided to purchase this machine to ensure the absolute safety of the people who handle the dies and only after using it did we realize that the system, besides ensuring safety, also considerably cuts time which can then be used to increase productivity. Our staff are enthusiastic and very satisfied with it. It has also aroused positive interest from other production facilities. "

RAMAL S.r.l

" We have been users of the M30 and M70 single dies since 1996 to our utmost satisfaction. During this period we have been able to appreciate their versatility, ease of use and safety. They give added value to the workshops where they are used. We believe these tools are by now indispensable inside a tool shop both during assembly and fine tuning and for die repair/ maintenance. "

PRAMAC

" I have an excellent impression about the M30 Die Splitter. It is very versatile and ensures very safe die maintenance. Thanks to its movements, the correct operation of the die can be displayed. After 9 years since we purchased it, it has never had any operating problems. "

MIELE

" The Miele company is very satisfied with the die splitter. It makes work easier in the tool shop and permits saving about 50% on handling costs. The die splitter operates in a precise and parallel way and enables us to control the play of the cutting dies and arrange them more easily. "

OUR CLIENT'S TESTIMONIALS ARE **OUR SUCCESS.**

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