

products
catalogue



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Agents worldwide 15



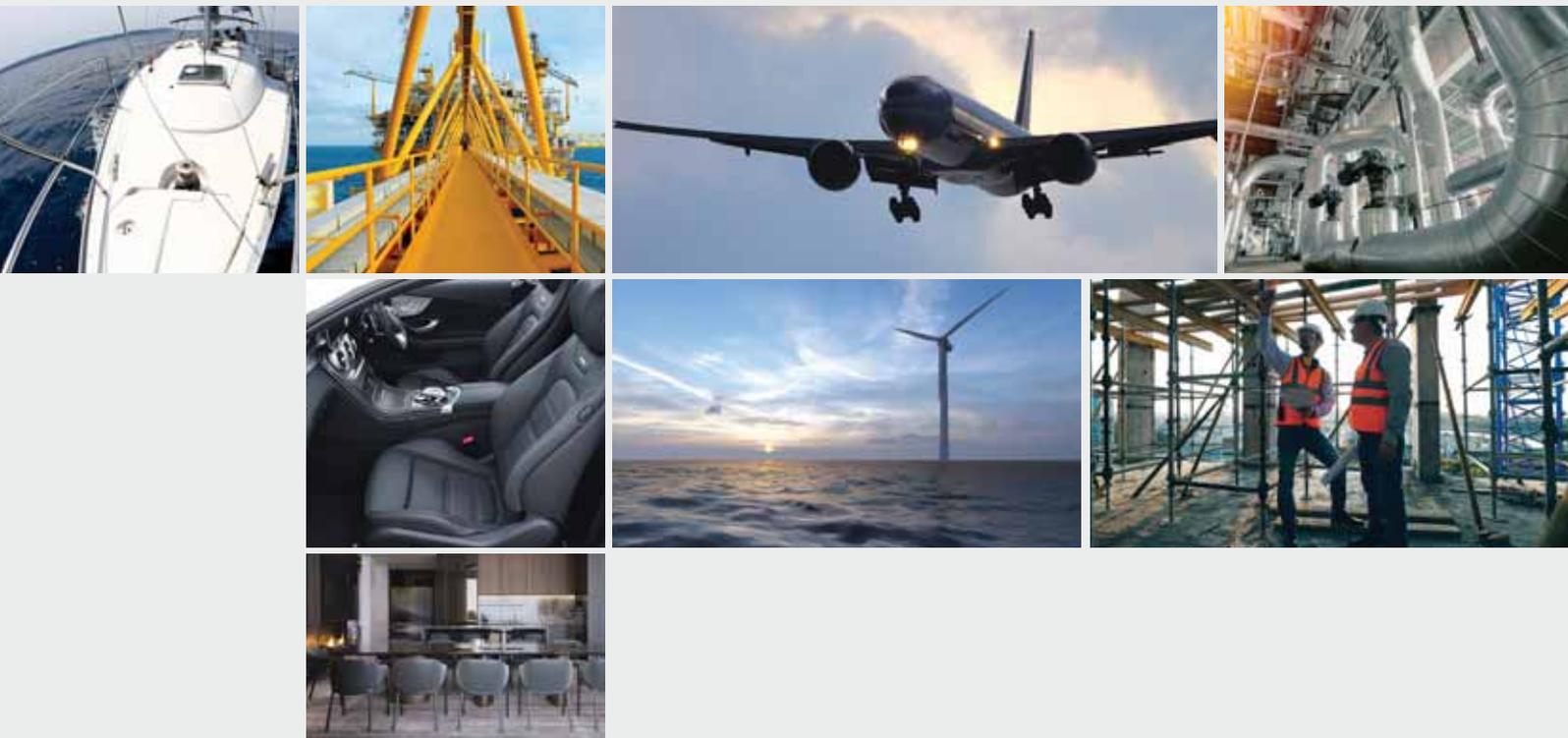
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We are makers of industrial machines

Our deep-rooted experience gives us the confidence and perseverance to be considered a pioneer of our sector, pushing Industrial Manufacturing Machines towards an innovative perspective with a vision on the future. Our new idea of doing business relies on the reinvestment of passion and energy with the aim of determining a change both on a technological and decisional level. For this reason we expand and diversify constantly our target application fields where high-technology is in demand. We are a reliable and dynamic organization employing human resources ready to offer their whole know-how with passion and competence within every department. A close-knit team with a high level of professionalism.





Shipbuilding
 Petrochemical
 Wind power
 Building
 Railway
 Chimney
 Furniture
 Structures
 Road signs
 Aeronautical
 Food industry
 Exhaust systems
 Parts for seat structures
 Special systems

Fields of application



Green & 4.0 Industry

Lean & Green Manufacturing, Hybrid Manufacturing, Energy Saving, Circular Economy: this is what Industry 4.0 means to us.

Our *focus* is on the efficiency of the entire production system: we design with the aim of maximising the potential for savings, offering solutions that work through increased sensitivity and innovation.



Lean & Green Manufacturing

We have rethought the way of being a company thanks to our constant drive for change and the application of the concept of **Lean & Green Manufacturing**.

The intense level of competitiveness reached in our globalized world urges us to design and offer ever better performing products. The implemented Lean & Green Manufacturing process help us to improve operational performance and minimize waste and pollution.

Hybrid Manufacturing

With the use of **Hybrid Manufacturing** technology we are able to optimize a whole range of production processes:

Additive Manufacturing, with its enormous application potential, opens up a brand new level of design and production.

Compared to traditional techniques, this allows us to use less material and have more creativity in parts design, indefinitely extending the range of shapes and complexities that can be produced.

We benefit from the advantages of both production methods, by combining them to find the right solution for any application.

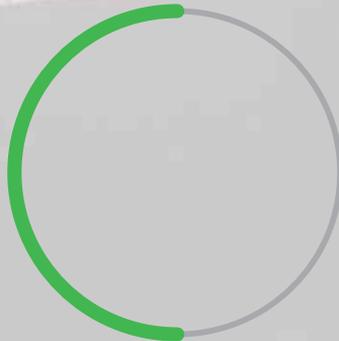
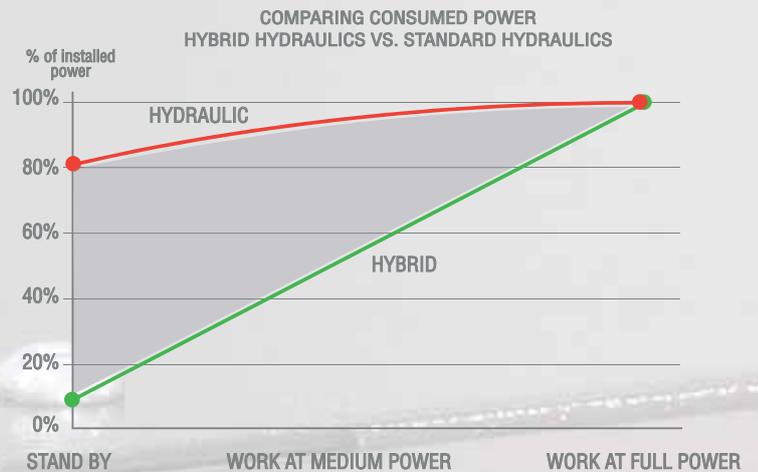
Circular economy

We love the concept of **circular economy** and offer such a solution on the machines and equipment we manufacture, extending the life cycle of products and contributing to minimize waste. With this production model we limit the use of non-renewable resources as much as possible, moderate consumption, maximize the efficiency of exploitation, reuse and recycle.



Energy Saving

We design and build machines with **Energy Saving** systems for different application sectors. We adopt machining processes consuming far less energy though remaining as efficient as ever. We pay the utmost attention from the design phase to the functional testing phase in order to ensure that the proper level of energy efficiency is applied. The operator can even act directly on the parameter settings to adjust the energy demand of the machine during production cycles.



Energy Saving



Know-how

R&D

Our **R&D department** is dedicated to the study of ever more advanced solutions throughout the many families of products in order to respond widely to the most diverse needs.

We believe that in a lean perspective perfection is never static, but rather a path studded with continuous improvement. That is why we have perfected our Design and Development department with a systematic, gradual and continuous approach.

We never lose sight of the ultimate goals of solving concrete problems and improving our production, with effective and measurable results.

Our R&D department works closely with the production area and has a strong influence in determining the overall company strategies.

It is precisely from the analysis of production processes that the greatest number of questions and critical issues often arise: the R&D Department searches for solutions to problems in order to adapt to the constantly evolving demands of customers and the market.

Statistical monitoring of the life cycle of the machines, constant customer interaction to learn a lesson to improve or simplify the design and production of our machines, a propensity for constant mechanical and structural improvement are keys to allow us to be competitive on the market and to grow.

Ideas and Projects

Are well balanced between design constraints and Customers needs and allow us to address ever increasing competitive challenges. Industrial Manufacturing Machines offers both compact machines for single applications and complete working cells for multiple and more complicated productions.





From planning to implementation

Industrial Manufacturing Machines has been producing machines and fixtures for complete exhaust systems and high-performance silencers for many years, working with automotive Tier 1 suppliers and motorbike manufacturers. It is the importance of these components in the vehicle's mechanics that prompted us to make different choices so that our Customers can always benefit from our experience and skills. Industrial Manufacturing Machines is a reliable supplier of increasingly complete and specific solutions and products that meet the modern requirements of the various sectors we address.

The combination of ideas, intuition, in-depth projects feasibility studies and the supply of state-of-the-art machines make Industrial Manufacturing Machines a globally recognized leader.

Software Development



Innovative programs are regularly studied by a motivated and competent team; the combination of reliability and automation is a decisive element of all modern machines and it is of vital importance for a forward-looking company.

100% made in Italy



Systems & Solutions

The machines studied and designed by Industrial Manufacturing Machines are able to accomplish and accompany any production phase, from a single component to the bigger assemblies and complex work cells.

some examples



Complex work cells



Special machines and installations

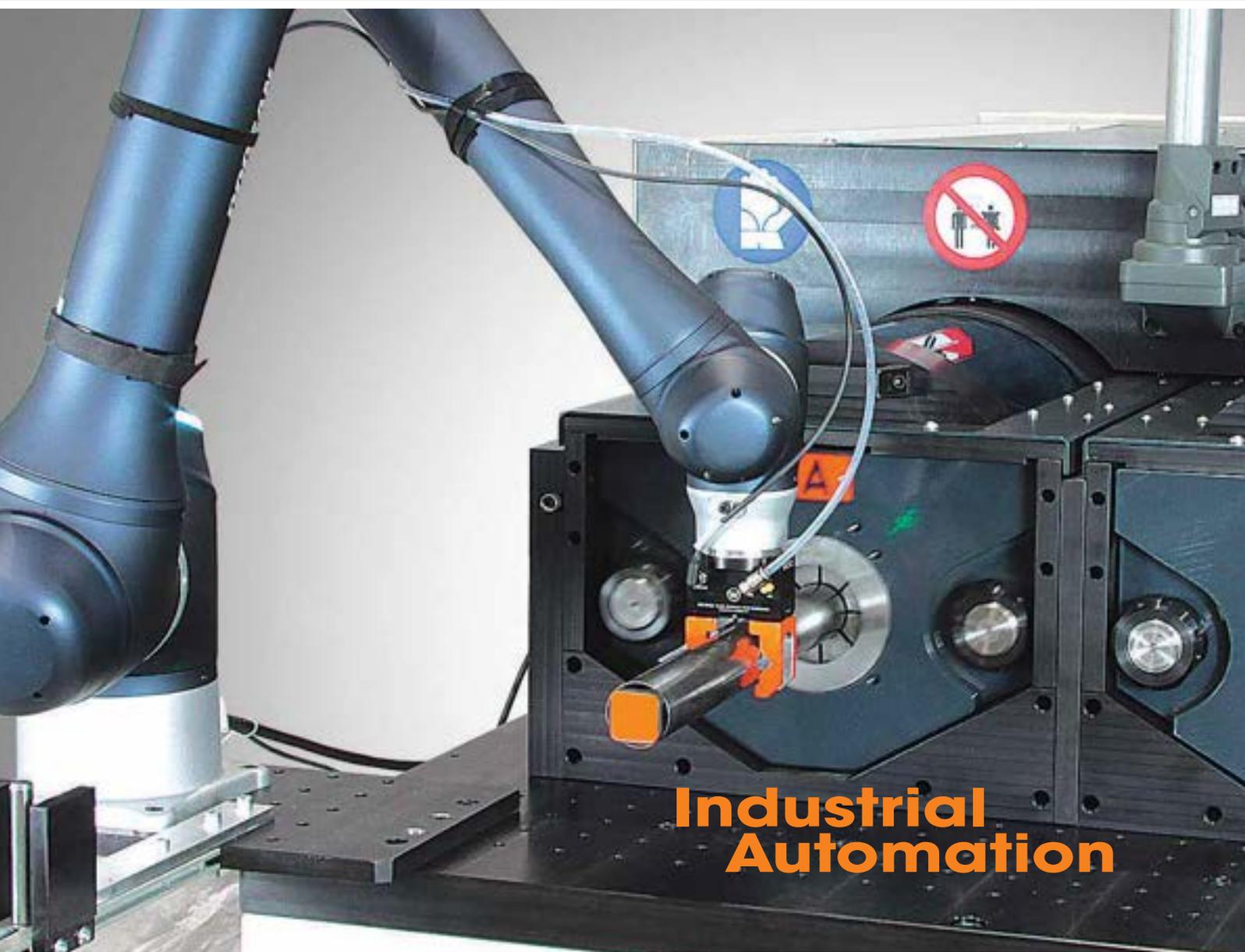


Complete exhaust system processing machines

Efficiency of the production process

With a view to improving the competitiveness, to expand the commercial offer and to strengthen its presence in the world market, Industrial Manufacturing Machines finalised the project of a partnership with **HOMBERGER** Robotica, which specialises in collaborative robotics, with whom it shares the same innovative spirit.

Thanks to this new synergy Industrial Manufacturing Machines will guarantee its customers with machines and robot cells with highly technological automation systems.



Industrial Automation





Keeping close to customers forever



Consultancy

Industrial Manufacturing Machines offers consultancy and feasibility studies for the use of standard and special machines and the implementation of processes that can guarantee efficiency and scalability according to each specific business. We draw on the experience of our engineers every day to help our Customers work better.



Installation

The strikingly sophisticated technology of the machines manufactured by Industrial Manufacturing Machines is shown during the installation and commissioning phase at Customer's. For this important service only highly specialized personnel is involved so that final operators are duly trained.



Testing

Rigorous checks are carried out to ensure that mechanisms and automatisms comply with the required performances. Upon request also product sampling and start-up and proper setup of machines and tooling are available.



After-sales service

Be it a "turnkey" single machine or complex working cells, Industrial Manufacturing Machines ensures continuous assistance, thus demonstrating the added value of the company mission on which many human resources efforts are focused.



Sales network

Industrial Manufacturing Machines corporate philosophy focuses on three priorities: design, management and control of the sales network and customer support. Industrial Manufacturing Machines exports all over the world creating synergies with foreign partners and increasing its own punctual and widespread presence.





The whole production flow at Industrial Manufacturing Machines complies with the requirements of the Quality System set out in the European Standard UNI EN ISO 9001:2015.

Each quality target is pursued by a regular planning definition and updating. Rigorous quality methodologies including certified raw material supplies and stringent controls on components are applied to the whole process, thus reinforcing the product reliability.

Highly qualified engineers take care of each productive steps from the feasibility study, to the conceptual and detailed drawings and the final delivery to the Customer.

CERTIFIED QUALITY
MANAGEMENT SYSTEM



UNI EN ISO 9001:2015

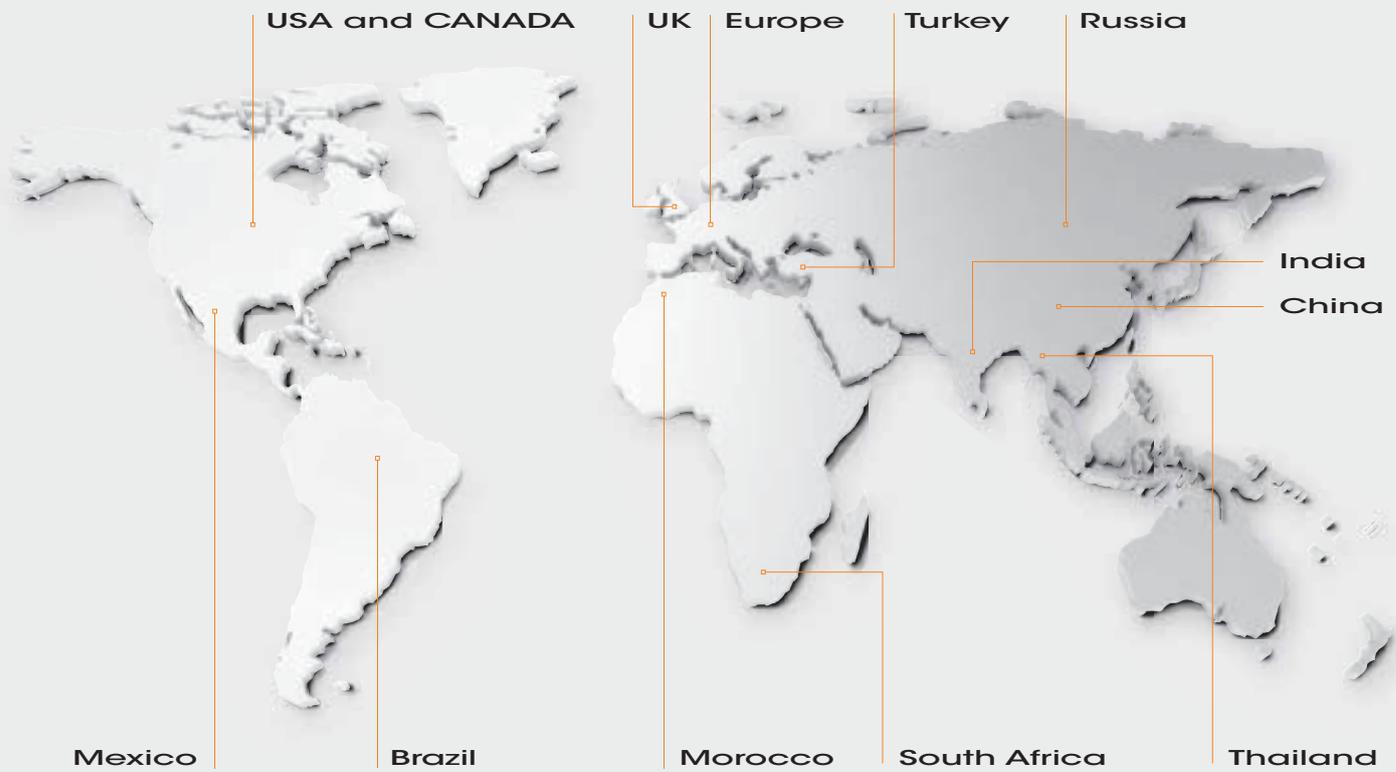
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ecovadis

Certifications



our machines worldwide



agents worldwide

ITALY

FRANCE

SPAIN & PORTUGAL

POLAND

CZECH REP.

UK

USA & CANADA

BRAZIL

MEXICO

contact us
for information
on our agents,
sellers and dealers



Innovative solutions in compact dimensions

The hydraulic and full electric "Evo Series" machines are the result of constant research and development focused on innovating the production processes of expanding, reducing or notching on straight or bent tube ends in the mechanical industry. This brand new series is designed and manufactured to respond concretely to tight budgets. It shows peculiar features, such as a minimal design and structural compactness, easy adaptability to any work area and equally simple integration into complex work cells, for small and large production batches.

The machines of the Evo series offer an innovative concept that enhances efficiency and speed, thus guaranteeing high productivity. They are another proof of Industrial Manufacturing Machines continuous reliability in this industry during twenty years.

The Evo series machines ensure ease of use and reduction of indirect costs as they do not require specialised personnel for installation, maintenance and adjustment. The excellent versatility allows a wide customisation of functions, features and equipment to suit the customer's needs, at a remarkably competitive cost.

versatility of work
in various
application fields



SWITCH ON
THE EVOLUTION



S E R I E S

Expanding Reducing Notches

Dedicated machines for single operation, with one or more heads.



Expansion Reduction and Notching non simultaneous Machines

Machines with one, two or three independent heads that allow the expanding, reducing and notching of straight or bent tubes, utilizing rapid set-up tooling.



EVO LITE

Simpler set-up with the same functionality

EVO

HYDRAULIC or FULL ELECTRIC machine with one head for expanding, reducing and notching of straight or bent tubes, utilizing rapid set-up tooling.

EVO

Working unit with two independent heads





EVO R 300 V
The new vertical solution



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Compact machine for reducing medium and big diameters.



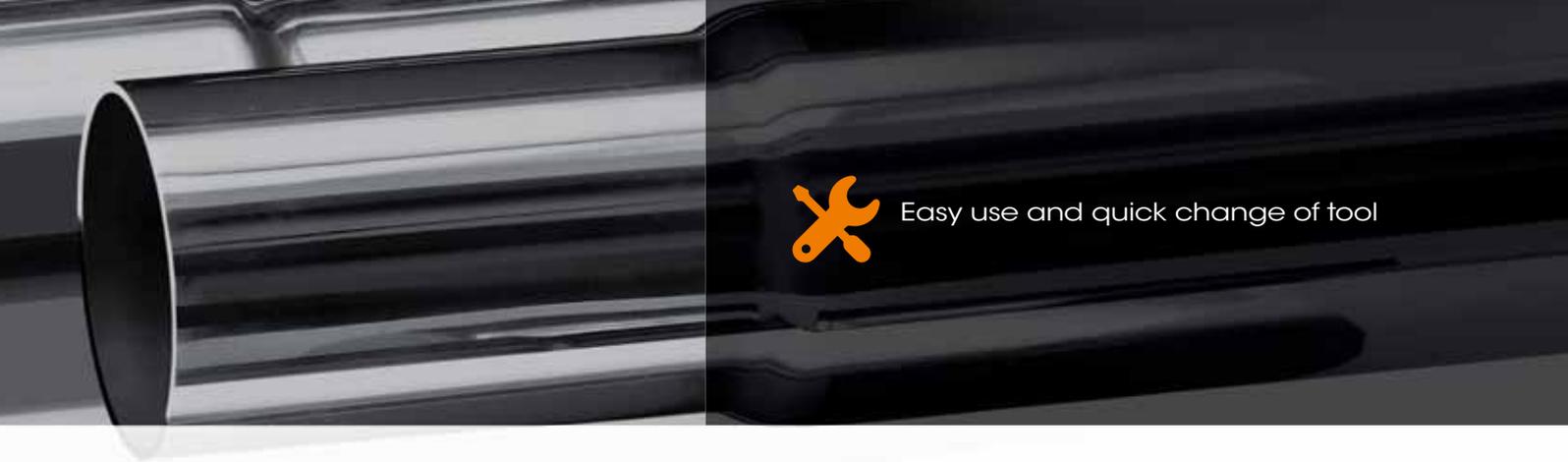
Expanding Reducing Notches

Technical data & Examples



				
SINGLE AND MULTI HEAD MODELS	EVO	EVO IE (Full-electric)	EVO LITE	
Supply voltage	400V ± 10% 3 phases	400V ± 10% 3 phases	220V ± 10% 1 phase	
Net frequency	50/60 Hz	50/60 Hz	50/60 Hz	
Maximum installed power	< 6 kW	< 3 kW	< 2 kW	
Auxiliary circuit voltage	24V	24V	24V	
Minimum/maximum pipe diameter	Ø 10 to Ø 100 mm	Ø 10 to Ø 100 mm	Ø 10 to Ø 100 mm	
Stainless steel tube thickness	Max. 2.5 mm	Max. 2.5 mm	Max. 2.5 mm	
Cylinder stroke 100mm	16 ton axial force	16 ton axial force	16 ton axial force	
Attachment tools	Evo Std.	Evo Std.	Evo Std.	
HMI	10" touch	10" touch	4.3" touch	
Cylinder position check	Digital full control	Digital full control	By limit switch (end stroke configured by manual position switch)	





Easy use and quick change of tool

	
	EVO R 300 V
	400V ± 10% 3 phases
	50/60 Hz
	< 2 kW
	24V
	Ø 10 to Ø 300 mm
	Max. 2.5 mm
	16 ton axial force
	Evo Std.
	4.3" touch
	Digital full control

Reducing Kit



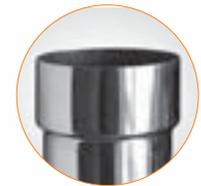
134



135



101



102

Notching Kit



167



168



169



171



172



174



Production range

The ever evolving production draws its strength from the need to meet the requirements of various markets.

We produce high efficiency electrical and hydraulic machines equipped with energy efficiency classes as laid down in the customer's technical specifications and compliant with the most stringent European directives.

versatility of work
in various
application fields





ERN Basic

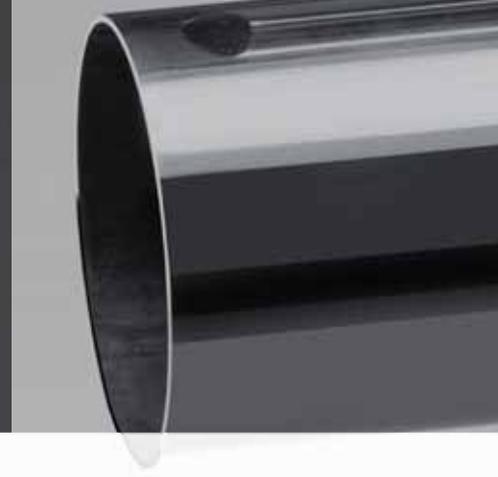
Expanding
Reducing
Notches

Dedicated machines for single operation, with one or more heads.



Expanding Reducing Notches

Tooling&Examples



Expanding tool. It allows the expansion of a tube diameter with a precision of $\pm 0,2$ mm. The finished product can be used for coupling or other suitable applications.

Reducing tool. It allows the reduction of a tube diameter with a precision of $\pm 0,2$ mm. The finished product can be used for coupling or other suitable applications.



101



102



134



135



Tube	Stainless steel tube thickness
\emptyset mm	mm
min. 25 max. 200	max. 2

Tube	Stainless steel tube thickness
\emptyset mm	mm
min. 25 max. 200	max. 2





Easy use and quick change of tool

Notching tool. Notching tool designed to be used on endsizing machines Mod. ERN.



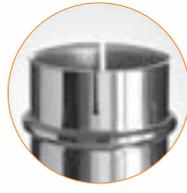
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171



172



Tube	Stainless steel tube thickness
Ø mm	mm
min. 25 max. 200	max. 2



Expanding Reducing Notches Machines

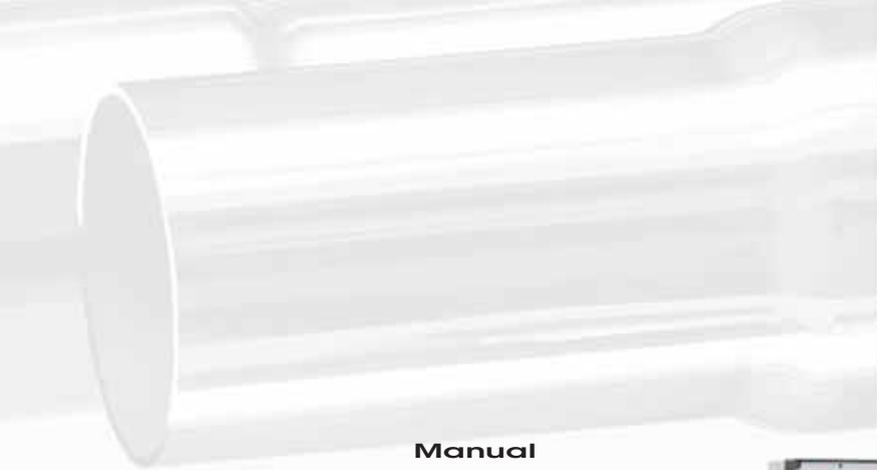


R 80
R 150
R 200



E 80
E 150
E 200





Manual



4.0 Industry

**ER 80
ER 150
ER 200**



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

**Expansion,
Reduction and
Notching non
simultaneous.**

Machines with one, two or three independent heads that allow the expanding, reducing and notching of straight or bent tubes, utilizing rapid set-up tooling.



Expanding Reducing Notches

Technical data



* Length varying according to diameter

Description	Model		Tube	Length*	Stainless steel tube thickness
			Ø mm	mm	mm
Expanding machines. Tubes expansion by means of segmented fingers, configurable with one, two or three heads.		E 80	min. 10 max. 80	max. 80	2
		E 150	min. 10 max. 150	max. 150	
		E 200	min. 10 max. 200	max. 200	

* Length varying according to diameter

Description	Model		Tube	Length*	Stainless steel tube thickness
			Ø mm	mm	mm
Reducing machines. Tubes reduction by means of external saws, configurable with one, two or three heads.		R 80	min. 80 max. 10	max. 80	2
		R 150	min. 150 max. 10	max. 150	
		R 200	min. 200 max. 10	max. 200	

* Length varying according to diameter

Description	Model		Tube	Notches Length*	Notch	Stainless steel tube thickness
			Ø mm	mm	°	mm
Notches machines. Notches or/and slots on tube extremities.		N 80	min. 38 max. 80	max. 3x36	3 notches 120°	2
		N 150	min. 70 max. 150	max. 3x45	3 notches 120° 4 notches 90° 6 notches 60°	2





* Length varying according to diameter

Description	Model		Tube	Length*	Stainless steel tube thickness
			Ø mm	mm	mm
Combined machines Tubes expansion and reduction on two heads by means of segmented fingers.		ER 80	min. 10 max. 80	max. 80	2
		ER 150	min. 10 max. 150	max. 150	
Combined machines Tubes expansion and reduction on two heads.		ER 200	min. 10 max. 200	min. 10 max. 200	

* Length varying according to diameter

Description	Model	Tube	Length*	Stainless steel tube thickness
		Ø mm	mm	mm
Combined machines Tubes expansion and notches on two heads.	EN 80	min. 10 max. 80	Expansion length min. 10 - max.80 Notches max. 3x36 (3/4 at 120°/90°)	2
	EN 150	min. 10 max. 150	Expansion length min. 10 - max.10 Notches max. 3x45 (3/4/6 at 120°/90°/60°)	

* Length varying according to diameter

Description	Model	Tube	Length*	Stainless steel tube thickness
		Ø mm	mm	mm
Combined machines Tubes expansion, reduction and notches on three heads.	ERN 80	min. 10 max. 80	Expansion and reduction length min. 10 - max.80 Notches max. 3x36 (3/4 at 120°/90°)	2
	ERN 150	min. 10 max. 150	Expansion and reduction length min. 10 - max.10 Notches max. 3x45 (3/4/6 at 120°/90°/60°)	



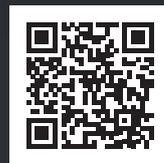


versatility of work
in various
application fields



Endsizing type "C"

Machines for expanding, reducing, notching and reference slotting with one or more working heads.



Endsizing type "C"

Tooling & Examples

Expanding tool. It allows the expansion of a tube diameter with a precision of $\pm 0,2$ mm. The finished product can be used for coupling or other suitable applications.



101

102



Tube	Stainless steel tube thickness
Ø mm	mm
min. 25 max. 230	max. 2

Reducing tool. It allows the reduction of a tube diameter with a precision of $\pm 0,2$ mm. The finished product can be used for coupling or other suitable applications.



134

135



Tube	Stainless steel tube thickness
Ø mm	mm
min. 25 max. 230	max. 2



Easy use and quick change of tool

Slotting and torca notching tool.
 Notching tool designed and patented to be used on endsizing machines Mod. DC or machines compatible with tooling type "C".



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168



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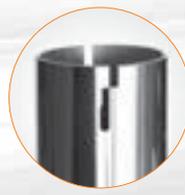
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Tube	Stainless steel tube thickness
Ø mm	mm
min. 25 max. 230	max. 2



Endsizing type "C" Machines



DC 80/1
DC 150/1
DC 230/1



DC 80/2
DC 150/2
DC 230/2





DC 80/3
DC 150/3
DC 230/3



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Expansion and Reduction non simultaneous. Notch and reference slot.

Machines with one, two or three independent heads that allow the expanding and reducing of straight or bent tubes, utilizing rapid set-up tooling. Equipment compatible with "C" type tooling and extremely suitable to make simple notches, torca notches and reference slots.



Endsizing type "C" Machines

Working unit with
combined heads (I/O + C)



DIEC 70/2 ROT





Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Endforming on three heads
(two heads type C and one head type I/O)



Expansion and reduction using C type or I/O type of tooling on combined machines

DIEC 70/3 ROT



Endsizing type "C"

Technical data

Description	Model		Tube	Endsizing length*
			Ø mm	mm
Working units with one head.		DC 80/1	min. 25 max. 80	max. 80
		DC 150/1	min. 25 max 150	max. 120
		DC 230/1	min. 25 max 230	max. 150
Working units with two independent heads.		DC 80/2	min. 25 max. 80	max. 80
		DC 150/2	min. 25 max 150	max. 120
		DC 230/2	min. 25 max 230	max. 150
Working units with three independent heads.		DC 80/3	min. 25 max. 80	max. 80
		DC 150/3	min. 25 max 150	max. 120
		DC 230/3	min. 25 max 230	max. 150
Working unit with combined heads (I/O + C)		DIEC 70/2 ROT	For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80
Endforming on three heads (two heads type C and one head type I/O)		DIEC 70/3 ROT	For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80



* Length varying according to diameter.

Expansion range	Reduction range	Stainless steel tube thickness
mm	mm	mm
10	8	2
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2





versatility of work
in various
application fields





Endsizing type "I/O"

Machines for simultaneous expanding and reducing
with one or more working heads.



Endsizing type "I/O"

Tooling&Examples

Simultaneous expanding and reducing tool. A single tool that allows the expansion and reduction of tube diameters with a precision of $\pm 0,2$ mm. Suitable to make bicones, single and double beads, dimples and other appropriate applications.





Easy use and quick change of tool



201



202



203



204



205



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216



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222



223

Special bending
with I/O tools.



Endsizing type "I/O" Machines



Energy Saving
Technology

Simultaneous expanding and reducing.
Expanding, Reducing, Endsizing, Dimples,
single and double Beading, Lining and
Grooves on tubes by means of segmented
I/O fingers and segmented outer jaws.

IO - 150 ROT 360°



HH-IO-70



Simultaneous
expanding and
reducing
tool





HH-IO-300
HH-IO-230



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Simultaneous expanding and reducing.

This machine is capable of precision sizing of tubes by simultaneous expanding and reducing. The machine is equipped with segmented tooling consisting of expanding fingers and reducing jaws, rotating 360° to allow the tube to stay still during forming. This gives the advantage of working with bent and long tubes, without posing risks to the operator. The machine is also designed for beads and bulges on tubes.



Endsizing type "IO" Machines

Electro-pneumatic unit.
DIE 80/1 ROT E



Hydraulic unit
simultaneous expanding
and reducing
in rotary version

DIE 40/2
DIE 70/2 ROT
DIE 150/2 ROT




Energy Saving
Technology

HH-IO-70/2
Rotary version



Working unit with
combined heads (I/O + C)

DIEC 70/2 ROT



Endforming on three heads
(two heads type C and
one head type I/O)

DIEC 70/3 ROT



Possibility of customization



Easy use and quick change
of tool



Minimum space in your
working area



Rent Solutions
(Service available only for Italy)

Expansion and
reduction using
C type or I/O
type of tooling on
combined machines



Endsizing type "IO" Machines

Tube endsizing machine
with 360° rotating inner
fingers + tube trimming
with rotating blade.

Tooling
Endsizing fingerset
and trimming rotary
blade.



This machine is equipped with two heads and a slide that moves lengthwise and crosswise to allow sizing and trimming on tubes. The sizing head carries out precision sizing through numerically controlled 360° rotating fingers. The end trimming head is used for chipless cutting of straight or bent tubes by means of a satellite rotating blade.

DIE TR 70/2





HES 250 ROT V
HES 450 ROT V



HES 530 ROT V
HES 610 ROT V



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Vertical simultaneous expanding and reducing.

Vertical operation mode to manage bigger diameters
Expanding, Reducing, Endsizing, Bicone and Flare on tubes by means of segmented I/O fingers and rotary increasing programs.



Endsizing type "I/O"

Technical data



Energy Saving expanding and reducing on one head.

Description	Model		Tube	Endsizing length*	Expansion range	Reduction range	Stainless steel tube thickness	Note
			Ø mm	mm	mm	mm	mm	
Working units with one head.		HH-IO-70	min. 25 max. 70	max. 50	9	5	2	-
		HH-IO-230	min. 25 max. 230	max. 170	9	5	2	-
		HH-IO-300	min. 25 max. 300	max. 200	9	5	2	-
		HES 250 ROT V	min. 50 max. 250	max. 170	30	30	2	Vertical mode
		HES 450 ROT V	min. 80 max. 450	max. 200				
		HES 530 ROT V	min. 90 max. 530	max. 250				
		HES 610 ROT V	min. 90 max. 610	max. 250 (400)				
Tube endsizing machine with 360° rotating inner fingers + tube trimming with rotating blade.		IO-150 ROT 360°	min. 35 max. 150	max. 120	9	5	2	-



Electro-pneumatic expanding and reducing on one head.

* Length varying according to diameter.

Description	Model	Tube	Endsizing length*	Expansion range	Reduction range	Stainless steel tube thickness	Note
		Ø mm	mm	mm	mm	mm	
Working units with one head.	 DIE 80/1 ROT E	min. 25 max. 80	max. 80	9	5	2	-

Hydraulic expanding and reducing on two heads.

Working units with two heads.		DIE 40/2 ROT	min. 18 max. 50	max. 50	9	5	2	-
		DIE 70/2 ROT	min. 25 max. 70	max. 80				
		DIE 150/2 ROT	min. 35 max. 150	max. 120				

Energy Saving expanding and reducing on two heads.

Working units with two heads.	 HH-10-70/2	min. 25 max. 70	max. 80	9	5	2	-
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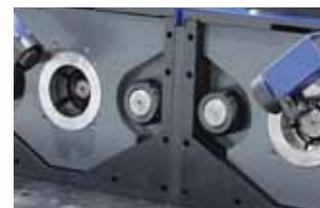
Endsizing type "I/O"

Technical data



Model			
Tube endsizing machine with 360° rotating inner fingers + tube trimming with rotating blade.		DIE TR 70/2	One head with two heads internally

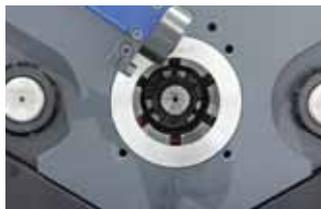
Description	Model	Tube	Endsizing length*
		Ø mm	mm
Working unit with combined heads (I/O + C)		For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80
Endforming on three heads (two heads type C and one head type I/O)		For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80



Sizing range	Cut-off length up to	Specific closing jaws
mm	mm	
9	90	

* Length varying according to diameter.

Expansion range	Reduction range	Stainless steel tube thickness
mm	mm	mm
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2



automotive
application



Ramforming

Flaring, Expanding and Reducing on any kind of straight or bent tubes are best done using ram dies and punches and automatic slide/s.



Ramforming

Tooling&Examples

Flaring, Expanding and Reducing tool.

Ram dies and punches and automatic slide/s.





Easy use and quick change of tool



301



302



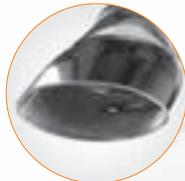
303



304



305



306



307



308



309



310



311



312



313



314



315



316



317



Ramforming

Machines



DA 100/1 SL2/3/4
DA 160/1 SL2/3/4



DA 100/2 SL2/3/4
DA 160/2 SL2/3/4



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)



Machines suitable for any production phase

Flare - Expansion - Reduction - Couple Cut.



Ramforming

Technical data

Model		Vertical closing power	Horizontal thrust power	Max. tool closing stroke	Max. punch stroke
		Ton	Ton	mm	mm
DA 100/1 SL2/3/4		1 x 50	1 x 30	240	200/300
DA 160/1 SL2/3/4			1 x 50		240/300
DA 100/2 SL2/3/4		2 x 50	2 x 30	240	200/300
DA 160/2 SL2/3/4			2 x 50		240/300





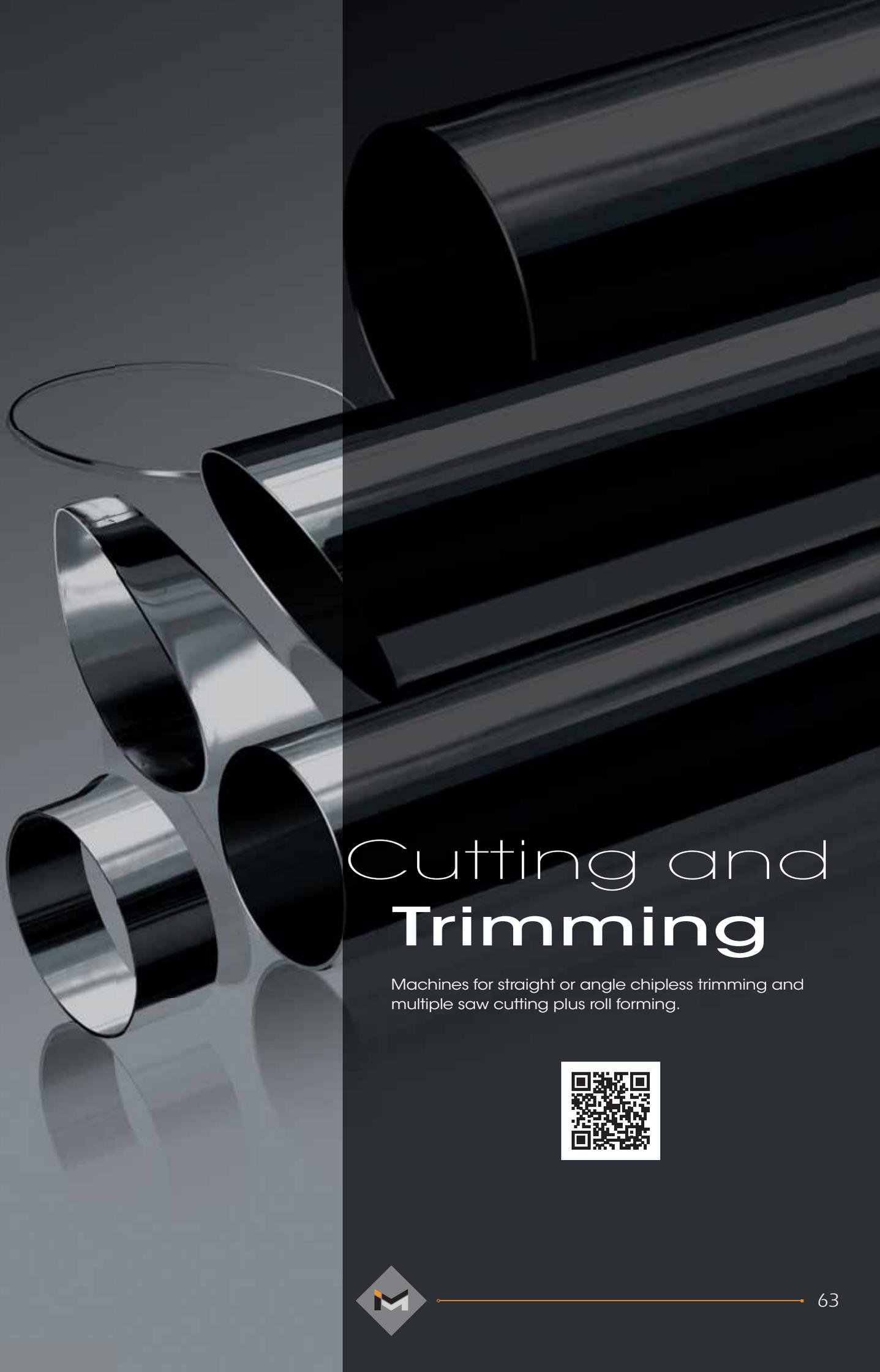
Adjustable Heat Exchanger





versatility of work
in various
application fields





Cutting and Trimming

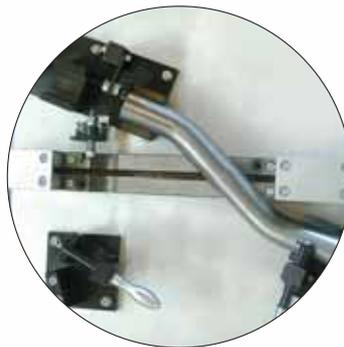
Machines for straight or angle chipless trimming and multiple saw cutting plus roll forming.



Cutting and Trimming

Tooling & Examples

Cutting fixtures for disk
sawing machine





Easy use and quick change of tool



501



502



503



504



505



506



507



508



202



203



204



205



Cutting and Trimming Machines



DTV 80

Disk sawing
Cutting and trimming of
straight or pre-bent tubes by
means of an ascending disk



Electro-pneumatic unit

TR 80
TR 170

**Elliptical cutting and
trimming.**
Trimming and cutting of
straight or pre-bent tubes.



Automation solution



TR 80 E
TR 170 E



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Cutting and division of straight and/or bent tubes

Cutting on austenitic or standard steel tubes by utilizing a cut-off disk. Electro-pneumatic machines able to cut straight or pre-bent tubes extremities by using an elliptically rotating blade moving from the inside toward the outside of the tube. The cutting process allows a minimum burr on the outside and definitely no burr on the inside. User-friendly and quick-to-setup tooling ensuring the utmost safety level for the operator.



Cutting and Trimming Machines

Tube endsizing machine
with 360° rotating inner
fingers + tube trimming
with rotating blade.

Tooling
Endsizing fingerset
and trimming rotary
blade.



This machine is equipped with two heads and a slide that moves lengthwise and crosswise to allow sizing and trimming on tubes. The sizing head carries out precision sizing through numerically controlled 360° rotating fingers. The end trimming head is used for chipless cutting of straight or bent tubes by means of a satellite rotating blade.

DIE TR 70/2





Electro-pneumatic unit

TR 80 E S
TR 170 E S



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Elliptical angle cutting and trimming.

Angle cutting of straight or pre-bent tubes extremities.



Cutting and Trimming

Technical data

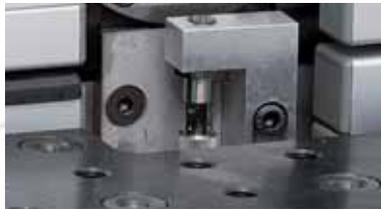
* Length varying according to diameter.

Description	Model		Notes	Tube	Cut off length*	Stainless steel tube thickness
				Ø mm	mm	mm
Hydraulic machines.		DTV 80	Up to 4 pipes	min. 10 max. 110	-	2
Electro-pneumatic machines.		TR 80	Straight cut	min. 30 max. 80	min. 10 max. 90 ~	
		TR 170	Straight cut	min. 30 max. 170	min. 10 max. 230 ~	
		TR 80 E S	Straight cut	min. 30 max. 80	min. 10 max. 90 ~	
			Angle cut	min. 40 max. 70	max. 10 ~	
		TR 170 E S	Straight cut	min. 30 max. 150	min. 10 max. 90 ~	
			Angle cut	min. 40 max. 150	max. 10 ~	

Description	Model		Notes	Sizing range	Cut-off length up to	Stainless steel tube thickness
				mm	mm	mm
Electro-pneumatic machine suitable for full automation.		TR 80 E	Straight cut	min. 30 max. 80	min. 10 max. 90	2
		TR 170 E		min. 30 max. 170	min. 10 max. 230	



Description	Model		Notes	Sizing range	Cut-off length up to	Stainless steel tube thickness
				mm	mm	mm
Tube endsizing machine with 360° rotating inner fingers + tube trimming with rotating blade.		DIE TR 70/2	One head with two heads internally	9	90	Specific closing jaws





automotive
application





Perforation

Machines for perforating pipes suitable for exhaust systems and gas transitions modules.



Perforation

Tooling & Examples





Easy use and quick change of tool



408



409



410



411



412



413



414



415



Perforation

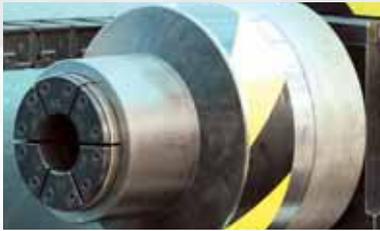
Machines

Perforation of exhaust tubes for cars, trucks and motorbikes. This machine has a perforation power of 80 Tons and can guarantee any angular division of piercing thanks to the specific tooling (die) and a CNC device for tube introduction and rotation. Perforating two rows of holes simultaneously.



DFO 100 E
DFO 150 E





Tooling



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Horizontal CN tube perforation machine.

Designed with energy saving, environmental protection and reliability in mind without compromising performance and cycle time, we have succeeded in creating a fully electric machine for tube perforation which optimises safety, solidity and output.



Perforation

Technical data

Description	Model		Tube	Perforation length	Tube length	Stainless steel tube thickness	Cycle time
			Ø mm	mm	mm	mm	
All-electric version..		DFO 100 E	min. 35 max. 100	max. 400	max. 700	max. 2	0,5 s each stroke
		DFO 150 E	min. 35 max. 150	max. 800	max. 1200		
Hydraulic version.		DFO 100 I	min. 35 max 100	max. 400	max. 700	max. 2	1 s each stroke
		DFO 150 I	min. 35 max 150	max. 800	max. 1200		1,5 s each stroke





Easy use and quick change of tool



DFO
The new perforation
machine concept





automotive
application





Pressfitting and Ridge-Locking

Pressfitting and Ridge-locking are quite specific operations needed in the manufacturing of muffler internal assemblies for the purpose of eliminating the welding between tubes and baffles.



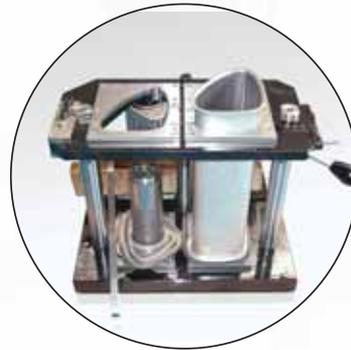
Pressfitting and Ridge-Locking

Tooling & Examples

Sample vertical ridge-locking tool



Pressfitting tool.



Sample horizontal ridge-locking tool



Simultaneous pressfitting and ridge-locking vertical tool





Easy use and quick change of tool



Pressfitting and Ridge-Locking Machines

Pressfitting.
Single or double station muffler
stuffing machine.



**DP 800
DP 1200**

Ridge-Locking
Single or double station



**DCR 70
DCR 70/2**



**Ridge-Locking
(mechanical blocking).**

Machine with simultaneous Ridge-Locking
vertical mode two stations.



DCRV 70/2



Possibility of customization



Easy use and quick change
of tool



Minimum space in your
working area



Rent Solutions
(Service available only for Italy)

**Pressfitting and
Ridge-Locking**



Pressfitting and Ridge-Locking Machines



DPCR 1000





Quick changeover.



Versatile tool.



Mechanical adjustment of the ridge-locking expansion.



Safety sensors.



Error-proof connector for tooling.



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Simultaneous Pressfitting and Ridge-Locking vertical mode.

As part of the new technological generation, the DPCR 1000 offers the best answer to simultaneous pressfitting and Ridge-Locking needs in the manufacturing of mufflers.

Capacity to produce car and truck mufflers with the guarantee of the highest resistance to any applied torque.



Pressfitting and Ridge-Locking

Technical data

Pressfitting

Description	Model		Work power	Distance table/ mace	Working stroke
			Ton	mm	mm
Muffler pressfitting one station.		DP 800	12	min. 700 max. 1500	max. 800
		DP 1200		min. 700 max. 2000	max. 1200
Muffler pressfitting two stations.		DP 800/2		min. 700 max. 1500	max. 800
		DP 1200/2		min. 700 max. 2000	max. 1200

Ridge-Locking

Description	Model		Tube	Stainless steel tube thickness
			Ø mm	mm
Simultaneous ridge-locking horizontal mode one station.		DCR 70	min. 35 max. 70	max. 2
Simultaneous ridge-locking horizontal mode two stations.		DCR 70/2		
Simultaneous ridge-locking vertical mode two stations.		DCRV 70/2	min. 16 max. 70	

Simultaneous Pressfitting and Ridge-Locking

Description	Model		Pressfitting power	Ridgelocking power	Distance table/mace	Working stroke
			Ton	Ton	mm	mm
Simultaneous pressfitting and Ridge-Locking vertical mode.		DPCR 1000	8	25	min. 520 max. 1620	max. 1000



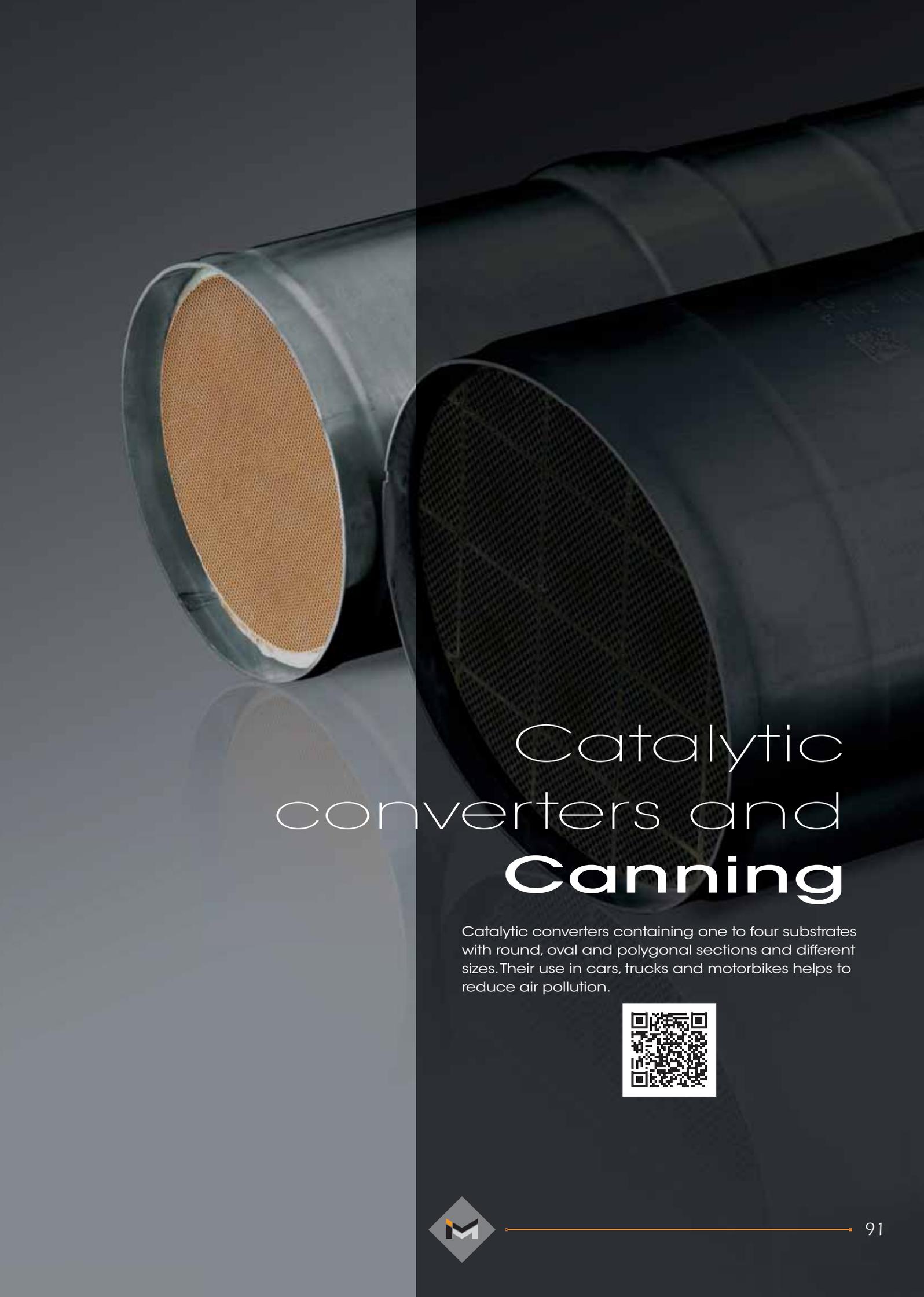
Easy use and quick change of tool





automotive
application





Catalytic converters and **Canning**

Catalytic converters containing one to four substrates with round, oval and polygonal sections and different sizes. Their use in cars, trucks and motorbikes helps to reduce air pollution.

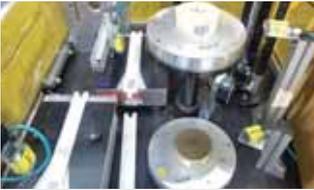


Catalytic converters and **Canning**

Size to fit line

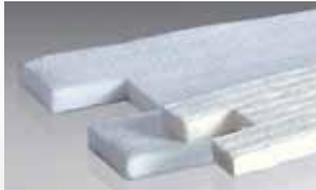
1

Substrate measurement
and identification.
Mat weighing and identification



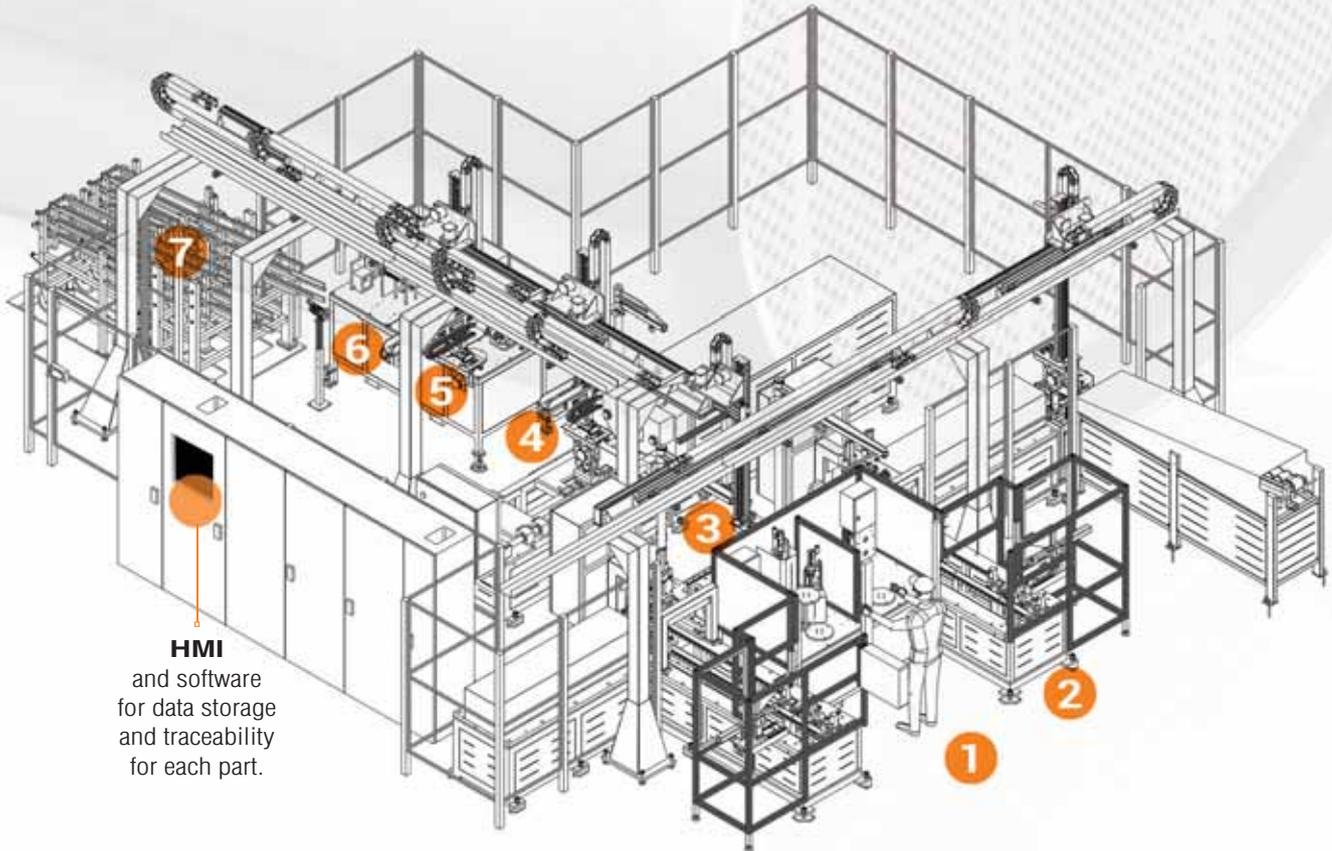
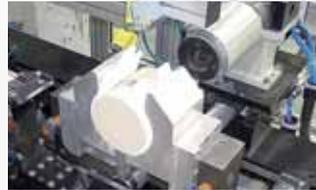
2

Partial mat wrapping
around substrate



3

Complete wrapping and stuffing



4

Canning/GBD/mat reducing plus
endsizing on canning extremities



5

Final laser measurement



6

Data matrix marking



7

Trolley multi levels.

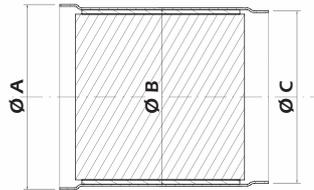


A technological core unifying designing and productive capacities

Industrial Manufacturing Machines designs machines for single applications as well as big robotic lines for more complex processes.

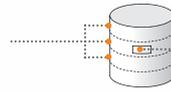
Working cycle with size to fit lines.

Catalytic converter for exhaust systems.



Phase 1

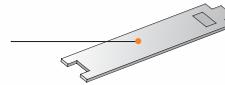
Laser measurement of the ceramic substrate circumference on 1 or more points by laser lens displacement on controlled axis.



Ceramic substrate identification by barcode reader.

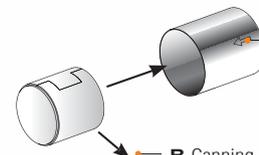
Phase 2

Mat weighing and mat identification by barcode reader.



Phase 3

Mat wrapping around substrate and subsequent stuffing of both parts into the shell (stuffing up to 4 substrates per cycle).

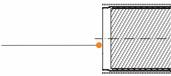


A Canning orientation through camera.

B Canning and mat orientation through camera.

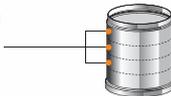
Phase 4

Canning/GBD/mat reducing by utilizing a single toolset on different stations plus endsizing on canning extremities ($\text{ØA} - \text{ØB} - \text{ØC}$).



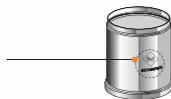
Phase 5

Final laser measurement of 3 circumference points by laser lens displacement on controlled axis.



Phase 6

Logo and datamatrix marking by utilizing dot peen marking technology. Extra datamatrix quality check through camera.



Phase 7

The final canning are stored on trolley multi levels.



Catalytic converters and **Canning** Examples





Easy use and quick change of tool



706



707



708



709



Catalytic converters and **Canning** Machines



E 400 V





Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Vertical expanding machine with segmented tooling for big diameters.



701



702



703



Catalytic converters and **Canning** Machines

Manual working cell for substrate measurement, mat stuffing and canning endsizing.



DMSRP 200-300

Equipment and machines developing an industrial process for:

- complete canning manufacturing for exhaust systems;
- laser measuring of the monolith circumference middle value;
- pressfitting and endsizing of the complete canning.



Working examples

Monolith and Mat Wrapping and Pressfitting into the shell.



DPMM 430

This process occurs by introducing the mat into a conical bush, by means of a NC pressfitting unit.



Tooling



Working examples



Working examples



Tooling



DS 430



HH-IO 300



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Final endsizing of complete canning.

Outer reduction of the complete canning to press the mat between monolith and shell to obtain the desired GBD.



Catalytic converters and **Canning**

Technical data

Description		Model	Tube	
			Ø mm	
Vertical expanding machine.		E 400 V	min. 80 max. 400	
Description		Model	Tube	
			Ø mm	
Monolith measuring unit, Mat pressfitting and Canning endsizing.		DPSRP 200	min. 90 max. 200	
		DPSRP 300	min. 100 max. 300	
Description		Model	Tube	
			Ø mm	
Monolith and mat pressfitting into canning.		DPMM 430	max. 430	
Description		Model	Tube	
			Ø mm	
Final endsizing of complete canning.		DS 430	max. 430	
Description		Model	Tube	
			Ø mm	
Final endsizing of shell or complete canning		HH-IO 300	max. 300	





Easy use and quick change of tool

Length	Stainless steel tube thickness
mm	mm
400	max. 2

Length	Stainless steel tube thickness
mm	mm
max. 200	max. 2
max. 300	

Endsizing length	Stainless steel tube thickness
mm	mm
max. 800	max. 2

Endsizing length	Stainless steel tube thickness
mm	mm
max. 500	max. 2

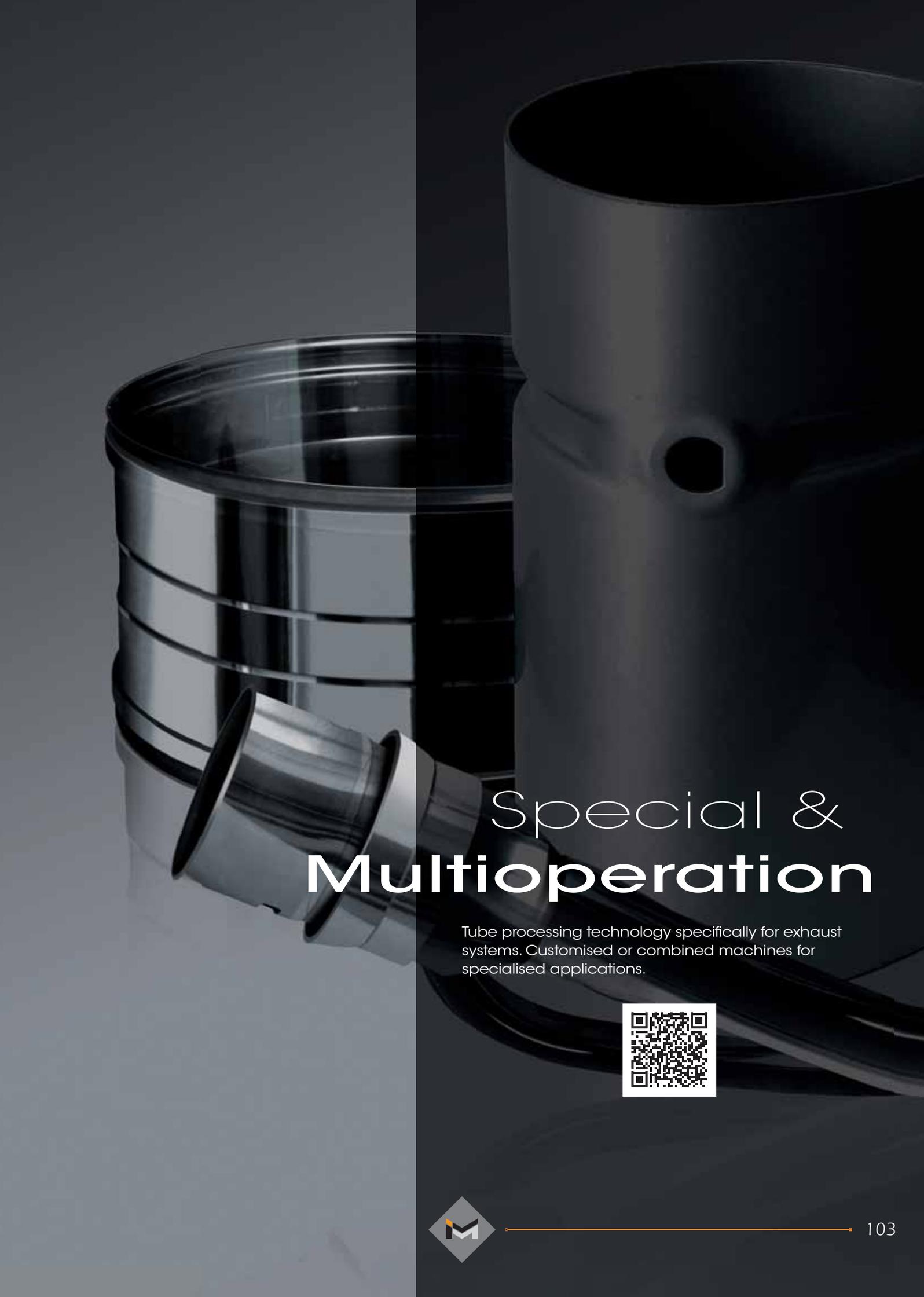
Endsizing length	Stainless steel tube thickness
mm	mm
max. 170	max. 2





special
installations





Special & Multioperation

Tube processing technology specifically for exhaust systems. Customised or combined machines for specialised applications.



Special & Multioperation Machines

Machine designed to expand the tube against the flange hole. Ideal for subsequent oven brazing



I-MV-50
I-MV-70

Working examples



Piercing and Squeezing.

Machine designed to pierce, make holes, squeezing and mark/emboss on straight or pre-bent tubes.



P 70 P.I.

Working examples



Tooling



821



822

Working examples



DCCL 70



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Ridge-Locking of tube with collar.

Machine designed to ridge-lock the slotted tube and the collar.



Working examples



DX 70/8

Machine designed for the partial or total reducing of mufflers inner pipes



Special & Multioperation Machines



Working examples

Deburring machine

Deburring machine with brush
inside/outside of tubes



DSPZ 70

Tooling



Deburring machine

Deburring machine with cutters
on two heads inside/outside of
tubes.



DSBC 80/2

Tooling



DSP 80 SL



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Deburring machine

The machine consists of two pairs of brushes, one in vertical position, and the other one in horizontal position, assembled on sliding guides for a right-to-left movement. It offers the possibility of deburring oval and small pipes or tailpipes on the whole surface constantly.

The pipe is clamped and there is no need to hold it by hand. The slide starts the first two vertical brushes and then the other two horizontal brushes only after the tube is clamped (higher safety for the operator).

The machine has got an inverter for the brush rotation direction (clockwise and anticlockwise) and an in-built swarf aspirator.



Tooling



Special & Multioperation Machines

Working examples



841



DIE 450/1 MV

Machines for chimney
pipes.

Flaring machine vertical mode.

Working examples



851



DBG 450/1 MV



Working examples



822



Testing machine



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Leak testing machine with objectivation for exhaust systems.



Special & Multioperation Machines

Working examples



862



863

Special and Multioperation



Leak testing and marking unit



Leak testing unit



Leak testing and marking unit.





Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)



BPT 1800

Special and Multioperation

Electro-pneumatic machine for digital measurement of the loss on silencers.

Versatile sealing and stamping test bench with pneumatic electrical connector tool recognition.



Tooling



Special & Multioperation Machines



Special and Multioperation.

Vertical Lock Seaming for bodies
with length between 800 and
1200 mm.

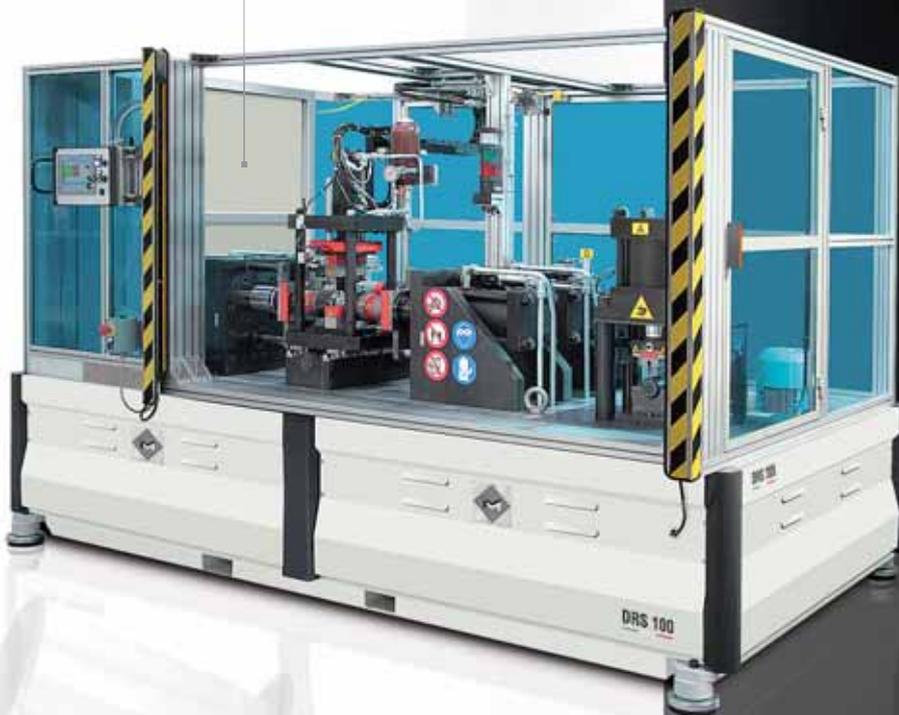


Tooling



Working examples

DRS 100



Tooling



Working examples



Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

Special unit for dampers and silencers objectivation.

This machine is able to reduce and mark parts using a pneumatic slide. Additional rotary head to assemble the perforated pipes in complete damper assemblies.



Special & Multioperation Machines



Simple and quick tool
changeover



I.R.P. 22

Reducing and punching machine

The machine is suitable for reducing and through-punching on tubes, using a special press tool complete with die and punches.



Working examples





Possibility of customization



Easy use and quick change of tool



Minimum space in your working area



Rent Solutions
(Service available only for Italy)

More powerful



Ease of maintenance and monitoring of the hydraulic system



Special & Multioperation Machines

Tube endsizing machine with 360° rotating inner fingers + tube trimming with rotating blade.



Tooling
Endsizing fingerset and trimming rotary blade.



This machine is equipped with two heads and a slide that moves lengthwise and crosswise to allow sizing and trimming on tubes. The sizing head carries out precision sizing through numerically controlled 360° rotating fingers. The end trimming head is used for chipless cutting of straight or bent tubes by means of a satellite rotating blade.

DIE TR 70/2



202



203



204



Working unit with
combined heads (I/O + C)

DIEC 70/2 ROT



Endforming on three heads
(two heads type C and
one head type I/O)

DIEC 70/3 ROT



Possibility of customization



Easy use and quick change
of tool



Minimum space in your
working area



Rent Solutions
(Service available only for Italy)

Expansion and
reduction using
C type or I/O type of
tooling on combined
machines.



Special & Multioperation

Technical data

Model		Tube	Length	Range	Stainless steel tube thickness
		Ø mm	mm	mm	mm
I-MV-50		min. 10 max. 50	max. 20	0-5	max. 2
I-MV-70		min. 20 max. 70			

Model		Tube	Thrust power	Stainless steel tube thickness
		Ø mm	Ton	mm
P 70 P.I.		min. 20 max. 80	50	min. 1 max. 2,5

Model		Tube	Stainless steel tube thickness
		Ø mm	mm
DCCL 70		min. 30 max. 70	max. 2

Model		Tube	Stainless steel tube thickness
		Ø mm	mm
DX 70/8		min. 20 max. 100	max. 2

Model		Tube	Brush	Brush length
		Ø mm	Ø mm	mm
DSPZ 70		min. 30 max. 70	100	80
DSBC 80/2		min. 30 max. 80	-	-





Easy use and quick change of tool

Model		Tube	Brushes with steel strands	Brush length
		Ø mm	Ø mm	mm
DSPZ 70		min. 30 max. 70	250	50 (2 brushes per each block, total length 100 mm)

Model		Tube	Endforming length*	Flare length	Stainless steel tube thickness
		Ø mm	mm	mm	mm
DIE 450/1 MV		min. 70 max. 450	max. 100	-	max. 2
DBG 450/1 MV			-	max. 10	

Model			Sizing range	Cut-off length up to	
			mm	mm	
DIE TR 70/2		One head with two heads internally	9	90	Specific closing jaws



Special & Multioperation

Technical data

Description	Model		Tube	Endsizing length*
			Ø mm	mm
Working unit with combined heads (I/O + C)		DIEC 70/2 ROT	For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80
Endforming on three heads (two heads type C and one head type I/O)		DIEC 70/3 ROT	For type C head min. 25 max 80 For type I/O head min. 25 max 70	For type C head max. 80 For type I/O head max 80

Description	Model		Thrust power
			ton
Hydraulic unit for reducing and punching		I-R-P 22	200





Easy use and quick change of tool

Expansion range	Reduction range	Stainless steel tube thickness
mm	mm	mm
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2
For type C head max. 10 For type I/O head max 9	For type C head max. 8 For type I/O head max 5	For type C head max. 2 For type I/O head max 2

* Length varying according to diameter.

Excursion	Auxiliary drives	Distance between columns
mm		mm
250 position-controlled	4 hydraulic channels	450



Customized tools

The design and construction of tools complement traditional manufacturing, enabling Industrial Manufacturing Machines to offer customised, cutting-edge solutions that meet the specific needs of customers in different industrial sectors.



Bend checking fixtures



Multi-level bending tools





Ramforming tools



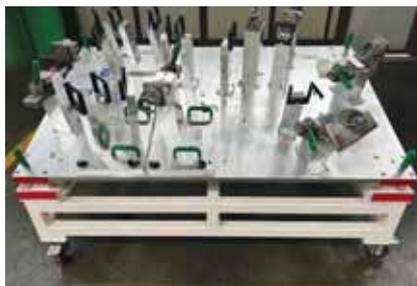
Ramforming dies



Special ball mandrels



Portable checking jigs



Checking fixtures



Oval ball mandrels

100% made in Italy



Rev_01_2024



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