



**NEW
SPINNERETS**



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WAS FOUNDED

New Spinnerets was born in 2019 thanks to the long experience of its founders.

2019

STARTED REFURBISHING

Initially started with an excellent refurbishing service to renew old and worn spinnerets and meltblown dies.

2019

STARTED PRODUCING SPINNERETS

After several requests New Spinnerets starts producing new spinnerets, meltblown dies and spare parts.

2020

EXPANSION

Due to the growth in production, it was necessary to expand the plant.

2021

INVESTED IN PRODUCTION

To meet the growing demand, new custom CNC machining centres were purchased.

2022

GOT CERTIFICATIONS

To ensure an increasingly efficient service, New Spinnerets has obtained ISO 9001 and ISO 14001 certifications.

2023

AVAILABLE SOON

The goal for next year is to start production of spinnerets for other technological processes as well.

2024

MATERIALS

The selected raw material quality is essential, all the processed materials by New Spinnerets are certified and respond to the best compliances.

CAPILLARIES

All capillaries are made with a micro-punching tool. Each capillary is checked several times thanks to specific tools working on diameters and smoothness.

TOOLS

This efficiency is also possible thanks to an excellent and careful analysis of the tools used; any tools that do not respect the pre-established tolerance is discarded in advance.

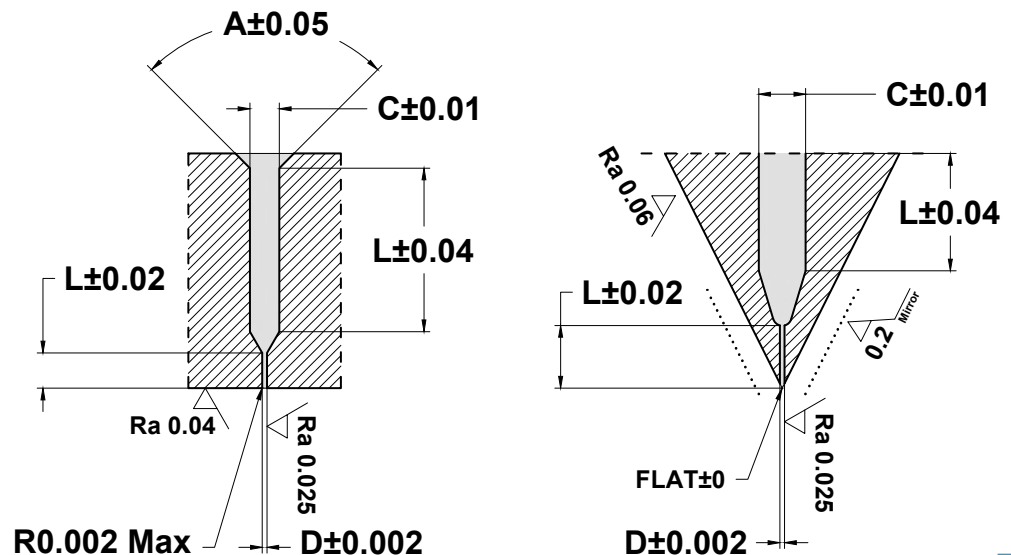
SURFACES

Any surface involved in fluids getting through, is treated with mirror polishing to provide an optimal finishing to have less friction and avoid turbulence.

CONFORMITY

Once the processing is completed, pre-shipment tests are carried out by issuing a conformity certificate, providing to the customer a product in line with his expectations.

TOLERANCES



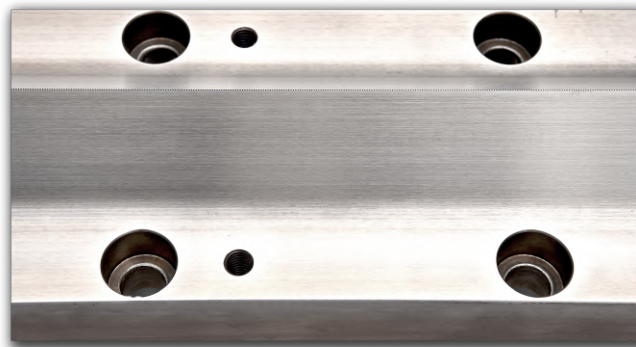
MELTBLOWN

New Spinnerets is specialized in the production of spin packs for Spunbond spinnerets and Meltblown dies for the nonwovens industry. All components are made with extraordinary accuracy to the details.

New drilling-punching processes have been developed in order to obtain capillaries measuring less than $\varnothing 0,20\text{mm}$ while maintaining an L/D ratio of 10 or more.

Each Meltblown die produced by New Spinnerets has a pointed cusp, which facilitates the air-flows exit and prevents the formation of polymer residues.

Thanks to the use of excellent materials and consolidated manufacture techniques it is possible to reach a density higher than 56 holes per Inch.



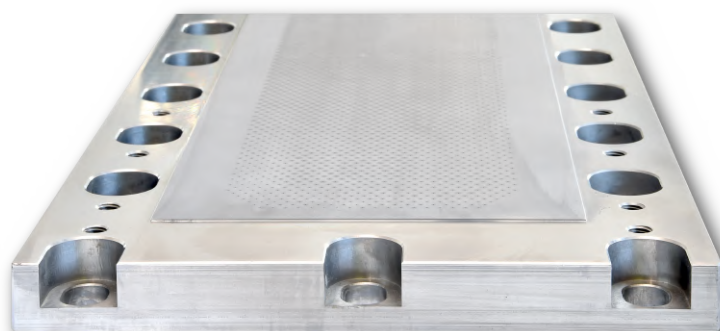
SPUNBOND

The production varies including spinnerets and components tailor made up to 7 meters in length. Moreover the offer includes breaker plates with inclined holes for bicomponents as well.

Any part, flat or curved, that must adhere with another part or that is involved by the fluids passing through is processed finely to obtain a degree of roughness conforming to its use.

Each Spunbond spinneret produced by New Spinnerets can have more than 45.000 holes all equals to each other.

Extreme care is dedicated in respecting the orthogonality of the holes and of the blank in order to avoid deburring that can alter the flatness along the entire length of the plate.



REFRESH

New Spinnerets whenever possible, often recommends refurbishing rather than replacing. This choice is not simply more economical and sustainable, but it also increases the life-time of the spinneret bringing it back to its original performance.

During the refurbishing all main worn technical parameters are restored. First for all, in order to avoid polymer leaks during the production, we verify and achieve precise flatness on the bodies in contact with each others.



Subsequently, all capillaries are checked and calibrated to get a perfect homogeneity along the entire working width of the spinneret.

The refurbishing is recommended both as maintenance and as a concrete solution when a problem occurs such as for example non-homogeneous spinning, polymer leakage, and so on.

REPAIR

In case of damages to the spinneret or to the meltblown die it is often possible to intervene with a repair, by performing dedicated micro-welding and, where necessary, by completely new made capillaries (closed and re-drilled/re-punched).

During the repair service, each hole is carefully checked again in order to find any imperfection which will be restored.

These procedures are performed quickly and allow New Spinnerets's customers to promptly resolve issues without having to wait for the production of a new part.

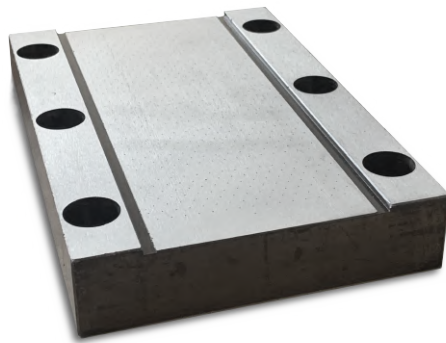


Moreover, each intervention can be performed on every type of spinneret or meltblown die of any size, restoring both round and shaped holes, always ensuring flatness, parallelism and excellent calibration.

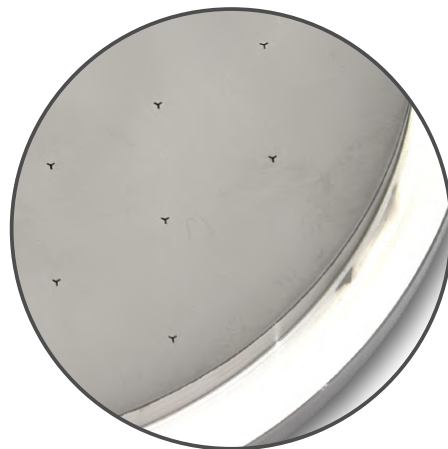
ALL SPINNERETS



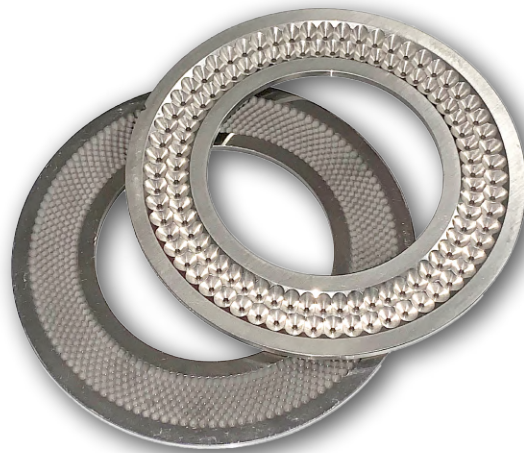
New Spinnerets produces a wide range of spinnerets and spin packs for the production of synthetic fibers. The production range includes spinnerets for continuous filaments, staple fibers, bicomponents, for the recovery of waste fibers and more.



For the most demanding technologies, capillaries can be manufactured with L/D ratio upto 25 for round holes.



The production range includes any dimension and any type of spinneret, with any hole layout: inclined, concentric, staggered, and so on, as well as any shape of hole such trilobal, triangular, slots, hollow holes and more.



Furthermore, New Spinnerets offers the possibility to create different types of countersinks for the fluids inlet into the capillaries, transition cone angles, sharp edges and much more.

SHAPE OF HOLES





**OUR
EXPERIENCE
AT YOUR SERVICE**

TABLE OF MATERIALS

AISI	316	430	431	630
Density	7.95	7.7	7.7	7.75
Yield strength Kg/mm	21	27.5	60	80-130
Tensile strength Kg/mm	50-60	50-65	80-140	86-140
Reduction (min%)	60	60	45	52-66
Elongation (min%)	45	20	14	14-22
Impact (min) Kg/m	8.6	-	3.0	2.2-13.8
Hardness HB solution annealed	130-180	130-170	250-275 (26-28 HRC)	270-290 (28-30 HRC)
Hardness (max) HB	130-180	130-170	450 (48 HRC)	450 (48 HRC)
Magnetizable	-	Yes	Yes	Yes
C	0.08max	0.12max	0.20max	0.07max
Cr	16-18	16-18	15-17	15.5-17.5
Mo	2-3	-	-	-
Cu	-	-	-	3-5
Ni	10-14	-	1.25-2.50	3-5
Ti	-	-	-	-
Cb/Ta	-	-	-	5 x Cmin

EXTRUDER

New Spinnerets has developed its own extruder design for the distribution of air and polymer inside the spin pack for Meltblown and Spunbond processes. The design is based on polymer splits that provide uniformity to the melt polymer on the underlying spinneret or meltblown die perforated area.

The possibility to extract and clean the polymer splits without disassembling the whole machine head is of a great advantage.

In order to obtain the least possible friction and the absence of turbulence, a great care is provided into the internal finishing and the radius of all the ducts influencing by the fluids passing through.



DESIGN

The team of New Spinnerets offers dedicated services to each individual customer in order to meet their needs. Thanks to specialized personnel the company is able to intervene on the spin packs and even directly at the plant, in order to possibly solve any technical problem.

Several customers rely on New Spinnerets in order to obtain filaments/fibers/fabrics (web) that reflect specific characteristics of resistance, filtration, permeability and so on. Each individual service starts with a dedicated study and analysis upfront to achieve the desired objective, looking for the best quality while trying to contain costs as well.

New Spinnerets designs and manufactures extruders, polymer plates and air distributors; moreover, to guarantee an optimal operation of its customer's plant, before proceeding to the production of new components, when possible, the company searches ways to improve and optimize the existing ones.

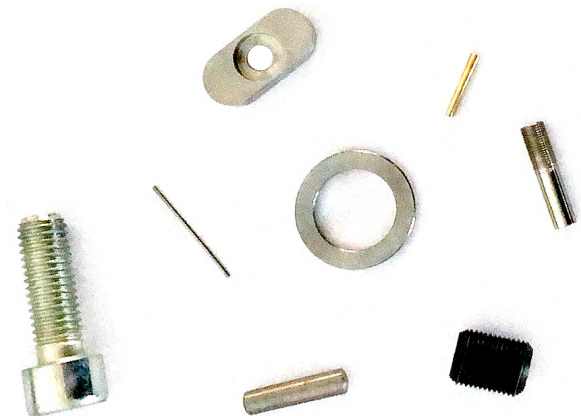
COMPLEMENTARY

New Spinnerets offers a wide range of products for the use of its components, including: silicone spray, ptfе gasket, ultrasonic wash solvents, and more.



SPARE PARTS

It is possible to request any spare part generally used for the spin packs during the customer's production, including: centering keys, threaded grub screws, washers, bolts and more.



CLEANING

New Spinnerets offers dedicated tools for inspection and for the cleaning of capillaries of any size, as for example: cleaning needles, both rigid and flexible broaches.



RESEARCH

New Spinnerets in order to support the growth of its customers focuses a lot on R&D to obtain better performing and mechanically advanced spinnerets and meltblown dies.

NEW TECHNOLOGIES

We are developing new machinery to be able to start making dies for other technologies as well.

NEW TOOLS

We are designing and manufacturing new tools and new complementary to best support the user throughout the production phase.

ANALYSIS

We believe that the study of the air-flow and the rheology analysis of the polymers are essential for the production optimization.

INSPECT

To prevent production stops, we are striving to offer you in the future, more accessible and faster effective capillary inspection system.

SUSTAINABILITY

We cooperate with several partners for the development of extrusion systems that can exploit biopolymers or biodegradable polymers guaranteeing the same performances.

MISSION

The whole team of New Spinnerets is grateful to collaborate with each of its partners to ensure a constant evolution of its sector in order to head towards to better future.

ISO 9001:2015

For New Spinnerets, the quality of its products is among the most important points. In order to be able to offer a high-quality product, it was essential to optimise the management of our production process. Currently, our quality management system is certified according to the international standard.



ISO 14001:2015

We believe that respect for the environment should not be neglected at all, and this has driven us to consistently, effectively and sustainably improve the management of our environmental impact. Through the implementation of guidelines that determine the entire process, it was possible to achieve the certification of an optimal environmental management system.



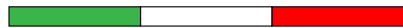


EXPERIENCE, COMPETENCE
RESULTS
MORE THAN A SUPPLIER

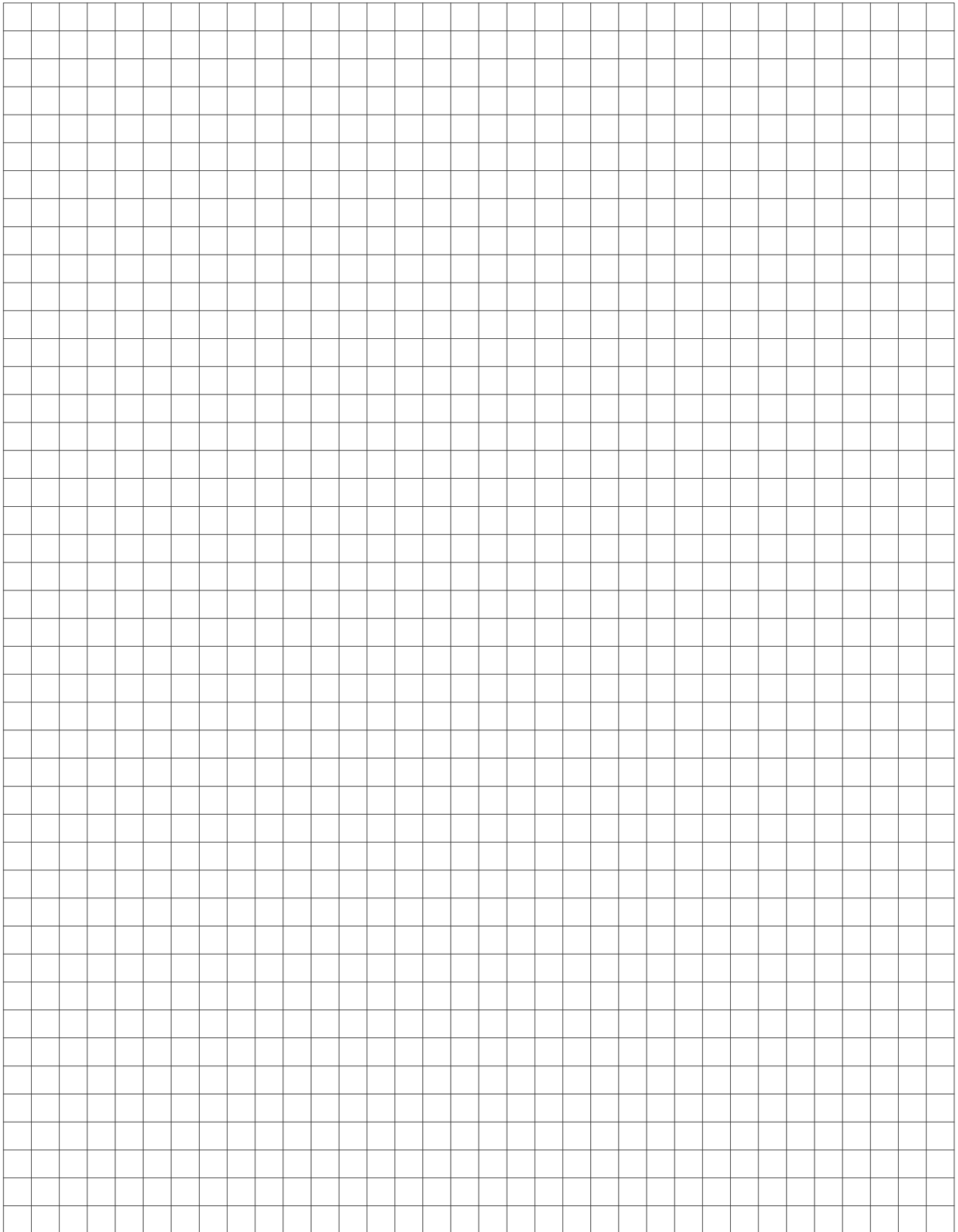
NEW SPINNERETS S.R.L.

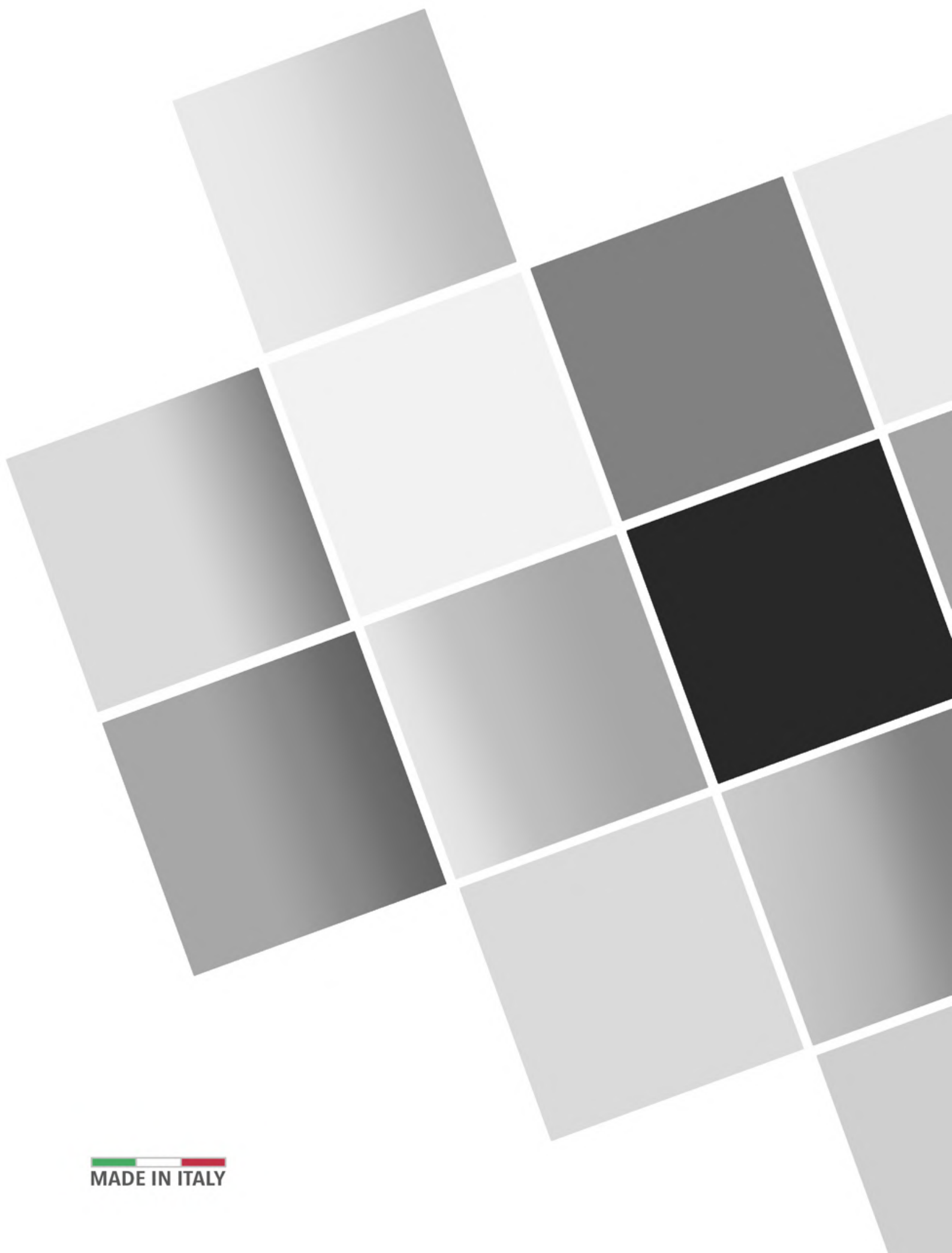
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NOTES






MADE IN ITALY