



## ***NEW RUBBER GRINDING AND BLENDING SYSTEMS FOR COMPOUNDING LINES***

In 2022, Previero is celebrating 100 years anniversary in the size reduction industry and 60 years in rubber technology, confirming to be among the leading companies in the manufacturing and installation of grinding and blending lines for natural and synthetic rubber including, within the others, SIS, SBR, BR, NR, NBR and EPDM.

PREVIERO size reduction lines are used in the majority of rubber processes including polymerization, tire production, glue production, rubber compounding and mixing lines, extrusion, devulcanization and recycling.

During the last years, the new technologies in the rubber grinding are without any doubt leading towards the field of the automotive compound. Previero is continuously working on the improvement of the quality and the productivity of its grinders. Within the integrations serving the grinding systems, the new combination guillotine-grinder gained much relevance by increasing by 25% the production of the grinders, for the same machine size, and by reducing by 30% the specific consumption for every kilo of processed rubber.

The most evident advantage of our solution is the possibility to align automatically the grinding capacity to the extruder request.

The rubber compounding feeding system is composed of:

- *FEEDING AREA*: feeding conveyors belts allow the dosing of the rubber bales before entering into the grinder.
- *SEPARATED GUILLOTINE*: differently from the previous lines, a new pre-cutting improved section is implemented to the whole process, which allows an even more precise dosing of the rubber loading into the grinding section, by making a single grinding sufficient.
- *GRINDING AREA*: a low speed-running machine that allows reducing the energy consumption by 30%. It is designed to guarantee the use of a smaller amount of anti-sticking while minimising the thermal stress of the whole module. In most cases, a cold and dosed material allows avoiding the installation of expensive storage areas.
- *STORAGE AREA*: the plant is completed with a dynamic storage unit that can bear from 250 to 2000 kg of grinded material, leading the rubber directly into the extruder.

The advantages of such a process are:

- *AUTOMATION*: The line can automatically feed the bales into the grinder, dose the antisticking agent, and convey the material to the storage area.
- *EFFICIENCY*: it is possible to grind small size pieces that are aligned to the extruder request.
- *SELF-CLEANING* buffer storage to load compounding line.
- *ADAPTABILITY*: With the same line, it is possible to process both sticky and soft rubbers, making two different lines unnecessary.

Come to meet us at booth 9D29!