BRÜCKNER at ITMA 2023 - sustainable, digital and on the way to climate-neutral finishing

BRÜCKNER, leading supplier of customized machinery and lines, presents innovative and trend-setting highlights for textile finishing and coating at ITMA in Milan.

BRÜCKNER will show the next stenter generation POWER-FRAME SFP-4 with many new features: new electric / hydrogen-powered heating systems, intelligent software solutions for optimizing formulas, systems for heat-recovery and exhaust air purification, innovative application systems for chemicals, and newly developed machine concepts.

CO2 -free heating systems

The most important innovation of the BRÜCKNER dryer are without doubt the innovative heating sys-tems. Driven by the energy crisis and the constant focus on energy-efficient solutions, new possibilities to combine different heating media like gas, steam, oil or electricity have been developed. In addition, BRÜCKNER also offers burners which can be operated with hydrogen in the future. These combination possibilities allow the textile finisher maximum flexibility in the choice of the energy carrier. Another exciting development are solutions for the purely electric heating of industrial ovens by means of heat pumps, which BRÜCKNER offers together with a partner. In the present situation and with a view to the future, these new types of heating offer decisive advantages: Green hydrogen and/or electricity reduce the dependence on fossil raw materials and contribute considerably to minimize the CO2 foot-print.

Smart Production Systems

Digital products and services are another highlight. On request, new lines are equipped with various intelligent assistance systems that support the machine operator in finding the optimum machine set-ting for each process. A special innovation is the new simulation tool ExperTex: with the help of artifi-cial intelligence, the desired production process of drying or heat-setting is simulated on the comput-er. Different scenarios can then be compared with each other: Throughput times, energy consump-tion, CO2 footprint and production costs. This innovative system offers customers considerable added value, as it allows accurate pre-calculation of orders, opens up productivity gains and/or energy sav-ings, and permits "right-first-time production" by means of pre-optimized formulas. Expert knowledge and years of experience in textile finishing are thus available at the push of a button. This tool and much more will be available to customers in the new myBrückner customer portal in the future. All important machine information, access to digital services, and a service system will be bundled there and can be accessed at any time.



: Electrically heated DUO-THERM oven for nonwoven finishing



: New POWER-FRAME SFP-4 stenter generation

Heat-recovery and exhaust air purification systems

The new generation of ECO-HEAT heat-recovery and ECO-AIR exhaust air purification systems features a new type of intelligent control. Both types of lines can also be retrofitted at any time to older lines from various manufacturers in order to realize the best possible energy savings and solve existing ex-haust air problems. All exhaust air treatment systems can be tested in advance at customers' sites by means of laboratory systems in order to better assess utilization rate and efficiency.

Innovative systems for the application of chemicals

Of course, customers can inform themselves on the BRÜCKNER booth also about numerous further possibilities to save primary resources such as energy, water, chemicals and waste water. Here, for example, the minimum application unit ECO-COAT should be mentioned, a new type of padder with minimum preparation quantity or residual liquor, and a further developed coating unit OPTI-COAT 2in1, which combines the use of floating knife and knife-over-cylinder application in one system. With a high-precision coating cylinder and a perfectly ground coating knife, excellent results can be achieved for paste and foam coatings. In addition, the special design of the unit ensures optimum ac-cessibility for cleaning and maintenance purposes.

New finishing machines

Another highlight is a completely new designed high-performance relaxation dryer POWER-DRY which can be heated CO2-free by means of a high-temperature heat pump. In order to show the variety of BRÜCKNER's product portfolio and to illustrate technologies in a realistic and "tangible" way, many machine models will also be exhibited.

The total cost of ownership (TCO) is lower for BRÜCKNER's lines than for other suppliers. This applies to all presented machines in the field of finishing of carpets, nonwovens and denim, migration- and crease-free continuous dyeing as well as in the versatile field of technical textiles and is supported by the technological advice of experienced experts.

Modernization / upgrading of existing lines

With regard to sustainability and resource conservation, BRÜCKNER's After Sales team and the tech-nology team offer numerous possibilities for modernization and technological e on site. It is not al-ways necessary to invest in a new line, often the potential of older machines can be exploited quickly and efficiently by modifications and also by technological consulting. Noticeable improvements in productivity and energy efficiency can be achieved without longer downtimes.

Let yourself be inspired by these highlights! The BRÜCKNER team is looking forward to meet you per-sonally and to talk about further innovations in hall 18, booth no. A101 - the way is worthwhile!