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The chicken wire transport system assures the total absence of dust contamination and it is recommended for the finishing of automotive and patent leather.



Scrubber showing the removeable droplet filters (top) and solvent resistant spheres filter (bottom).

The eco-friendly future of the spraying machine

For any transformation of leather there is always energy use and consumption. It is the responsibility of the manufacturing companies, those who produce and design the machinery, to make the process not only economically advantageous but also virtuous and highly compatible with the needs of our planet. Most pollution problems for tanneries are caused by the production of wastewater, sludge, tanned and non-tanned waste but also volatile and particulate emissions into the atmosphere. Following the introduction of the Spraystar EVO, as reported in World Leather June/July 2019, Gemata believes it has now improved on the original design.'

The spray booth, equipped with either 8, 12, 16 or 24 guns can be used to finish sides or whole hides with working widths varying from 1800mm to 3800mm. With an innovative octagonal shape it can be used as either a dry exhaust or water-curtain system. The effective design, easy maintenance, elimination of internal contamination and time/cost optimisations as published back in 2019 are still the heavy design features.

To improve on the issue of emissions to air and atmospheric pollution, particular attention has been paid to the scrubber, which is essential to separate the paints from the water and expel clean air into the atmosphere. The air depuration system currently in use is a quadruple filtration system using four scrubbing chambers, with nozzle clogging control.

The structure of the scrubber is configured with a recycling water tank, an initial scrubbing chamber using nebulising self-cleaning nozzles, a secondary chamber using multiple self-cleaning nozzles with the third and fourth chambers comprising self-cleaning solvent resistant spheres followed by

a double arrangement of filters for the separation of the water droplets formed. In using this configuration, the strengths of this scrubber are the effective reduction of microparticles present in the overspray nebulisation, due to nozzles specifically designed for this purpose, and the recycling of water through a pump in the water tank, which in itself minimises water waste.

As with the original Spraystar EVO, ease of maintainance, absence of contamination due to the chicken wire mesh conveyor and the time optimisation afforded by the colour washing and automatic colour change systems, newer 'green' aspects have been considered and added. The fully automated, energy saving system progressively deactivates the line until it automatically turns off, in the absence of leather being processed, optimising energy costs. For steam and gas, the heat recovery system uses the moist and hot air extracted from the tunnel to preheat the dry air from the outside, ensuring a further reduction in operating costs. ☺