

FLOCKED SWAB PRODUCTION LINE – For COVID-19 TESTING



Flocked Swab Production Line

- Applies a consistent coating of adhesive to the swab sticks.
- Electrostatic de-tear station to remove adhesive drips.
- Applies flock fibres electrostatically to the swab sticks.
- Linear oven to achieve initial drying of adhesive coating.
- Cleaning station fitted with static removal air jets & cleaning bars.
- Cleaning chambers connected to dust extractor for clean removal of excess fibres.
- Offload section to that accommodates 5 jigs

APPLICATION STATION

- The adhesive tank is fitted with weirs to ensure a constant level of adhesive.
- The adhesive tank is replenished from the reservoir by a peristaltic pump, which recirculates the adhesive to reduce skinning and settlement.
- The tank is easily removal for cleaning.
- The de-tear station is fitted with a removable catch reservoir to collect the extracted drips.
- The flock chamber raises when a jig is in position and seals against the underside of the jig to contain the flock once the station is activated.
- The flock chamber charge mesh, applies the electrostatic charge to the flock fibres which are kept ready by the motorised earth grid in the base. A blown flock applicator is also used to achieve improved coverage and to top up the flock chamber



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Linear Drying Oven

The jigs then continue on the conveyor into and through the drying oven which can be connected to an external extract to remove moisture. The open top is hinged for easy access and cleaning.

CLEANING STATION

The cleaning station is fitted with two double chambers which seal onto the jigs while the cleaning is in progress.

They are both connected to the dust extract which removes any excess fibres that are dislodged by the static removal air jets.



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CLEANING STATION CHAMBER

OFFLOAD JIG STORE

Once the jigs exit the cleaning chamber, they are fed onto the offload rack, which holds 5 jigs before signalling the line control that it is full, which stops the line.

