

# TEST EQUIPMENT SALES - MANNEQUIN SYSTEMS FOR BABY/ADULT HYGIENE

## SCOPE

SGS test equipment is a complete and automated system delivering full control of urination parameters using realistic mannequins, baby or adult. Our anatomically accurate mannequins ensure optimum results from Absorption Before Leakage (ABL) or Skin Hydration (ASH) analyses. The system's realistic conditions, in terms of configuration, pressure and fitness, facilitates the broadest range of parameters and performances.

## APPLICATION RANGE

Baby diapers and pants, adult incontinence products.

## EQUIPMENT VERSIONS

**Standard version:** a standalone panel set on the floor with a table (included) set in front of the panel to receive mannequins.

**Automatic returning version:** this features the same functions as the standard version, including a returning robot system to avoid operator intervention during test progression.

**Extended version:** this is the preferred version if you want to use existing layouts. A control unit contains all the electrical and automation components. The control screen can be set wherever you need, smaller boxes can be set on tables, behind the mannequin path. This version can be easily extended to two or three groups of 4 mannequins.

## FEATURES

The mannequin system uses an accurate dosing pump-system. Test parameters are set using a touch screen which provides an intuitive menu to setup tests. SGS testing parameters are preset.

All parameters can be adjusted to reflect the desired protocol.

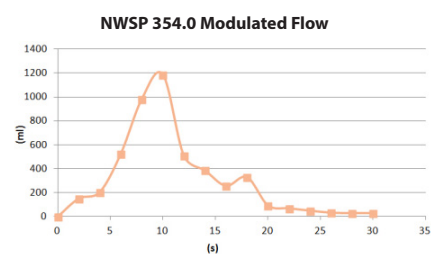
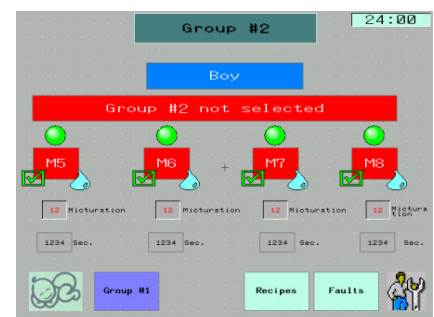
**ABL-R mode (Absorption Before Leakage):** using this mode, the test continues until all mannequins have leaked.

The station features an automatic leakage detection system. As soon as a leakage occurs, a bell rings and a 'drop' appears on the control screen. The mannequin is disabled and the cycle continues until all mannequins have leaked.

**ASH-R mode (skin hydration simulation test):** this mode is used when you need to apply a known quantity to the products. Each mannequin can be enabled individually.

**Linear mode:** maintains the flow rate at a set value, for example 200 ml/min.

**Modulated mode:** for specific testing protocols, a modulated flow is required. This can be reproduced using this mode.



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## EQUIPMENT AVAILABLE

**Baby mannequins – 4 sizes – both genders (2 tubes):** Newborn/mini, Midi, Maxi and Junior/extra large

**Adult mannequins – 2 positions – both genders (2 tubes):** Standing/lying, Sitting and Male adaptors (straight, bent, small)

**Stand for adult mannequins:** when the standing position is required, a dedicated stand holds the mannequin vertical.

**Foam mat (~570x350x45 mm):** these mats are used with baby mannequins to better simulate the lying position.

**Sensor sheet (420x260 mm):** as soon as a drop leaks out of the product, the system alerts for leakages.

**Stand for NWSP354.0, DIN 13222:** a stand specific to the adult mannequins dedicated to these test methods, and that matches the modulated flow requirements they require.



## FOCUS ON ANAREWET EQUIPMENT

Coupled to the Automatic Mannequin System and using test methods specific to assessing skin humidity (ASH-R using collagen material), this device is an essential part of the bench equipment required for performance testing on absorbent products. It has a very specific function; to apply a homogenous and controlled pressure to the absorbent surface of diapers (the top layer).

Diapers are removed from the mannequin following application of a measured dose of liquid, a pad of collagen is placed on the surface and both are gently placed in the Anarewet device. Products are put on a very thin inflatable membrane, which follows the 3-dimensional shape of the external contours of a diaper, while the top layer is 'flat' and in contact with a plexiglas cover.

In addition to the skin humidity assessment model, an upgraded device is available, equipped with three funnels for multiple acquisition time testing under controlled pressure. Speed of acquisition is measured automatically, four doses can be applied (including a pause between dosing) and the volume, pressure and time can all be adjusted. This capability is very helpful, for both quality control and research and development testing (component substitution).



## SGS SERVICES

### WHY SGS PROVIDES EQUIPMENT FOR TESTING?

The majority of our clients use our third party testing services to assess their products' performance. Nevertheless, by making our testing equipment available, we allow clients to test product performance, following the same protocol we do, more frequently and within their own laboratory. As a result, trust in product performance increases and unexpected customer claims can be avoided.

**Customised requirements:** our experts are available to help create custom tests and adjust equipment specifications to meet your needs (space, software, extensions, returning robot).

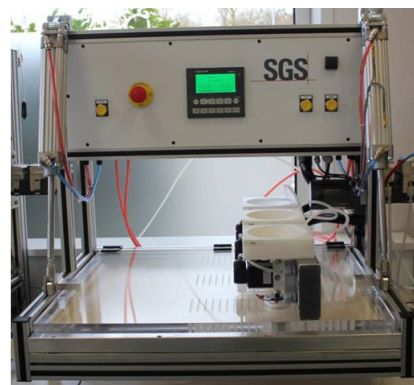
**Installation on site:** our technical expert helps you to find the best configuration according to your layouts, as well as setting up and starting the equipment with you.

**Training on site:** we offer complete training on SGS protocols to ensure users provide consistent results using our equipment.

**Round-robin analysis:** on request, we can organise and analyse round-robin tests, when you need to ensure test results reproduce consistently.

**Spare parts:** all components (devices, mannequin parts, other parts) can be ordered from SGS.

**Warranty:** all our equipment is supplied with a 12-month guarantee.



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