

# ST300 USERS/CASE STUDIES



## NIKE (world-wide)

NIKE, well known for their athletic sportswear and goods, employs the ST300 in their selection of leather used in the production of footwear. They have adopted the ST300 as a standard part of their routine quality control procedures that are carried out in the physical testing laboratories and quality departments of their production facilities world-wide.

NIKE are able to use the ST300 to test a range of leathers of varying softness. Certain shoe models have strict requirements for the softness ranges of the leather to be used. They are able to determine where particular tested samples can be applied.

The major advantage to NIKE is that the ST300 has removed the element of subjectivity from the selection of hides. It enables NIKE to guarantee that they are receiving the softness grade of leather that they have specified. This is important, as some special soft grades of leather are often more expensive. The benefit is very clear as the ST300 ensures NIKE are being as cost effective as possible.

## Reebok (Korea)

Reebok Korea handle the shoe material for all Reebok's Far East shoe factories; situated in China, Thailand, Vietnam and Indonesia. They control the quality of the material used in the production of sports/athletic shoes. Before using the ST300, Reebok tested for softness by hand and therefore 'feel'.

They test all shoe leather, which ranges from soft to firm material. They check that softness complies with their internal softness and quality specifications. All tests are carried out in the leather department prior to the leather undergoing final visual and quality checks.

Reebok state that the main advantage of using the ST300 is the very clear and definite figure for softness that the tester gives them. Traditionally, they relied on human subjective opinion, which caused them problems as they were getting different results from different people. The ST300 settles all discrepancies and provides a tangible value for every operator.

## Bridge of Weir Leather Co. (Scotland, UK)

Bridge of Weir manufacture upholstery leather for the automotive, aircraft and furniture industries. Prior to using the ST300, final inspectors would check the 'handle' or 'feel' of the leather for softness, a highly subjective method. In addition to this, some destructive tests were carried out.

The ST300 is used primarily in their laboratory and final inspection departments, where batch samples are checked against softness requirements specified by those customers who are also using the ST300.

A major advantage to Bridge of Weir is that operators can carry out a quick simple test using the ST300, without cutting samples from their hides. They are provided with an understandable and quantifiable measurement of softness that can be used to set and test softness requirements for their customers. This, coupled with the fact that the test is portable and can be re-calibrated (therefore ensuring standardisation of all their testers), is of huge benefit to the company.

As well as the establishment of customer/supplier quality links, Bridge of Weir also use the ST300 to carry out internal capability studies. The tester is a quick, easy and non-destructive means of accumulating data that can then be used to analyse their capability to manufacture products to a customer or internal specification.

## Shoe Industry (Taiwan)

Determining leather softness by hand or 'feel' is difficult and subjective. The ST300 allows the operator to make an accurate assessment of softness without special training. Because of this, anyone within a company can handle leather orders and carry out quality checks.

The ST300 is employed in many Taiwanese tanneries to check leather in all stages of production. For example, monitoring dry drumming times and checking softness before and after washing. In shoe factories, the ST300 has helped to improve efficiency during the 'lasting' stage of production, saving downtime by reducing the need for constant adjustment of the last machine.

The last machine is adjusted in order to smooth out the upper materials. Individual softness grades require a different 'force' otherwise the upper material could be damaged. If the material softness is known, then the same grade can be worked simultaneously.

Synthetic materials are also used widely throughout Taiwan. The relative softness of different compounds of PU (polyurethane) and PVC (polyvinylchloride) can also be determined using the ST300.

## SOFTNESS TESTER USERS

The ST300 Softness Tester is employed in the Quality Control, Research & Development, and Purchasing Departments of companies all over the world, including:

NIKE (world-wide)	manufacturers of athletic footwear
Reebok (Korea & USA)	manufacturers of athletic footwear
Diadora (Italy)	manufacturers of athletic footwear
Volvo (Sweden)	motor car upholstery
Jaguar Cars (UK)	motor car upholstery
Ford (UK & USA)	motor car upholstery
Honda (UK)	motor car upholstery
Rolls Royce Cars (UK)	motor car upholstery
Daewoo Corporation (Korea)	motor car upholstery
Bridge of Weir (UK)	manufacturers of upholstery leather
Seton (USA)	manufacturers of upholstery leather
Pittards (UK)	manufacturers of upholstery leather
Ontario Glove (Canada)	glove manufacturer
Longchamp (France)	bag & leathergoods manufacturer
Ekornes (Norway)	furniture manufacturer
Eden Office Furnitre (New Zealand)	furniture manufacturer
Sin Li Chemical (Taiwan)	manufacturers of PU/PVC synthetics
Nan Ya Plastic (Taiwan)	manufacturers of PU/PVC synthetics
CK Shoes (Thailand)	shoe manufacturer
Pentland Shoes (UK)	shoe manufacturer
Clarks International (UK)	shoe manufacturer
Danner Shoe (USA)	shoe manufacturer
SADESA (S.America & Asia)	tannery group
Garden State Tanning (USA)	tannery group
Eagle Ottawa (world-wide)	tannery group
CUINBA (Mexico)	tannery
Tanneries Haas (France)	tannery
CIBA Dyes (Switzerland)	leather processing chemicals
BASF (China & Germany)	leather processing chemicals
BAYER (Argentina)	leather processing chemicals
Hodgson Chemicals (UK)	leather processing chemicals
Clariant (Italy & USA)	leather processing chemicals
Trumpler (Germany)	leather processing chemicals

(the above are a small selection of ST300 users)



MSA ENGINEERING SYSTEMS LIMITED, 3 Assured Drive, Thurmaston, Leicester, LE4 8BB, United Kingdom  
phone +44 (0)116 260 8866 | fax +44 (0)116 260 8861 | sales@msa-engineering.co.uk | www.msa-engineering.co.uk  
Registered Office: 12 Shibden Hall Croft, Shibden Hall Road, Halifax, W. Yorkshire, HX3 9XF, UK | Registered No. 2636196 England

