



# WHY TEST WOOL?

We sometimes take the most obvious things for granted. When we walk into a grocery store or to our local butcher we do not purchase anything based on estimated weights or volumes. All our purchases are either accurately weighed before they are wrapped and handed to us or the weights or volumes are printed on the packages or containers. In more recent times pre-packaged items have been required by law to detail the quantities of various materials present in the contents. These details are not obtained by subjective estimates – they are all obtained by objective measurements.



WTAE provides impartial and cost effective testing services for a wide range of characteristics of greasy wool, scoured wool and wool sliver.

We never buy our biscuits on estimated weights. We require the weight to be measured. Why should wool be any different?

Indeed, given the value of the commodity and the size of the parcels involved in each transaction, isn't it important to accurately know the mass of clean wool involved, the amount of contaminants (such as vegetable matter) present, and the average fineness of the wool fibres? These and other characteristics ultimately determine the value of wool. We don't buy or sell biscuits without measurements. Why buy or sell wool without measurements?

Measurements provide certainty, flexibility and reduced risk in processing outcomes. In the case of wool all measurements are conducted according to international standards with known levels of precision. Measurements facilitate the blending of wool from different sources as well as flexibility in preparing consignments. Measurements are always more accurate than subjective estimates, and they provide an objective means for settling any disputes.

## WHAT CAN WE MEASURE?

A range of objective measurements are available for greasy wool, scoured wool and wool sliver, covering almost all of the commercial requirements for all types.

Wool Testing Authority Europe can provide testing services for most of these parameters. Where we cannot we will arrange for them to be provided at competitive prices.

Measurements can be provided on samples submitted to us as Reports or as IWTO Certificates. For the latter,

samples must be obtained according to the IWTO Regulations, independently of the owner or buyer of the wool, to ensure impartiality and integrity. Impartiality and integrity is the hallmark of WTAE's IWTO certification services, and facilitates exchange of ownership on the basis of these documents.

Greasy Wool	Scoured Wool	Sliver
Wool Base	Yield	Hauteur
Vegetable Matter Base	Vegetable Matter	CV of Hauteur
Processing Yields	Mean Fibre Diameter	Barbe
Mean Fibre Diameter	Colour	Mean Fibre Diameter
Colour	Bulk	Fatty Matter
Bulk	Conditioned Weight	Invoice Mass
Staple Length*	Regain	Merchantable Mass
Staple Strength*	Fatty Matter	
Position of Break*	Length After Carding	

\*Generally only available for merino wools

## SAMPLING – THE MOST IMPORTANT STEP

WTAE maintains rigorous quality control systems to ensure the accuracy of its testing services. It participates in round trials with other major Test Houses to ensure that its results are harmonised with the rest of the world. It is the only raw wool testing laboratory in Europe to do so.

However, no matter what care we take, the results we issue are only as good as the sample provided to us.

Objective determination of defined characteristics of materials usually involves measurements based on a small proportion of the total material of interest. In materials that are uniform, obtaining a representative sub-sample of the whole is a relatively simple task. Where there is non-uniformity, obtaining a sub-sample that is representative of the whole is much more difficult.

Wool is clearly a non-uniform material. The sampling procedures for sale lots or consignments of wool have been carefully developed to ensure that the sample represents the bulk with a predictable degree of error.

Generally, modern analytical instruments provide increased speed, more ease and convenience of use, and often less skill is required of the operator. However, particularly in the case of analysis of greasy wool, results provided by such instrumentation are diminished in value unless an appropriate sampling regime is defined and strictly followed. Sampling is the first and most important step in any wool testing system.

WTAE can advise you of appropriate sampling procedures if you want to take your own samples and submit them to us for a Test Report. Where IWTO Certificates are required we ensure that the independent samplers that we provide adhere to the appropriate sampling procedures.

There is no point in testing your wool unless the samples are taken correctly.

## WEIGHING AT THE TIME OF SAMPLING

When IWTO Certificates are required, we always ensure that all the bales are weighed at the time of sampling. The samples are securely packaged so that their weight does not change on the way to our laboratory. Why do we do this?

One of the most important parameters for any sale lot or consignment, and even more so for the coarse wool types produced throughout the UK and Europe, is the amount of clean wool present. If we are provided with the bale weights at the time of sampling we can provide you with an accurate measurement of the weight of clean wool. For greasy wool this is normally expressed as:

- Schlumberger Dry Top and Noil Yield
- IWTO Scoured Yield at 16% Regain
- IWTO Scoured Yield at 17% Regain
- IWTO Clean Wool Content
- ASTM Clean Wool Fibre Present
- Japanese Clean Scoured Yield at 16% Regain
- Australian Carbonising Yield

Similar yields can be provide for scoured wool, or alternatively Conditioning Tests for scoured wool and sliver report the Conditioned Weight or Invoice Mass. If you need advice as to the meaning of these yields then contact our representatives.

Remember, it is the quantity of clean wool in kilograms or pounds that is the base determinant the total value of a lot or consignment.

If you intend to submit a sample to us for a Test Report instead of an IWTO Certificate, providing the weight of the source material will enable us to provide you with more useful information. Wool readily absorbs moisture so the weight of bales can vary over time depending upon the temperature and humidity of the storage location. This is why the bales must be weighed at the time of sampling. If the bale weights do vary over time, the clean yields that WTAE provides will remain constant.

## FURTHER INFORMATION

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