# NATIONAL
MERINO CHALLENGE

## NMC301A
## IDENTIFY WOOL CHARACTERISTICS

# WOOL

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# NMC301A Identify Wool Characteristics

## Unit Descriptor

This unit covers the functions required to identify wool based on its characteristics and defines the standard required to assess the key characteristics of wool, separate wool that differs in processing performance, remove all stained fibre from clean wool and separate wool with differing levels and types of impurities.

## Application of the Unit

This unit covers skills and knowledge required to prepare lines of wool that are suitable for processing and meet the requirements of the industry Code of Practice.

# Elements and Performance Criteria

1. Separate wools with characteristics outside the uniformity requirements of the Code of Practice.

    1.1. Assessment of sheep breed and wool type is made
    1.2. Wools are separated into different lines based on:

        1.2.1. fibre diameter
        1.2.2. length and strength
        1.2.3. colour and character
        1.2.4. handle and style

    1.3. Staple formation and tip is checked
    1.4. Wool is examined for medullation and/pigmentation

2. Separate wool showing faults that impact on processing or fabric quality

    2.1. Wool containing stain is kept separate
    2.2. Skin pieces are identified and removed
    2.3. Wool is checked for cotts that will require extra processing
    2.4. Wool is checked for dermatitis and kept separate
    2.5. Wool with a level and type of vegetable matter contamination that requires different processing is kept separate
    2.6. Wool is examined for dogginess that will impact on fabric quality

3. Recognise impurities of greasy wool and their effect on processing and yield

    3.1. Wool is examined for natural impurities (VM, dusty backs, moity necks, etc.)
    3.2. Applied impurities are identified and their effect on processing is assessed (brands, chemicals)

4. Value greasy wool using industry standards

    4.1. AWEX type codes are applied to greasy wool samples
    4.2. Yield of wool samples is estimated
    4.3. Valuation of wools using market information

# Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

## Required skills

- assess key wool characteristics

- identify wool faults

- recognise impurities

- separate wool that does not meet Code of Practice requirements for uniform, predictable, low risk lines of wool

- read, interpret and follow written instructions, record results accurately and legible information collected from a range of current and reliable resources

- estimate, calculate and record wool pricing schedules

# Required knowledge

- breeds of sheep
- fleece measurement criteria - techniques used to measure wool characteristics
- Code of Practice for the Preparation of Australian Wool Clips
- processing methods - woollen and worsted, and stages of processing
- raw wool characteristics and their effect on processing and final product
- measurement of wool characteristics - diameter, length and strength, colour, yield, VM type, curvature and comfort factor
- wool faults and their impact on processing and fabric quality
- impurities of wool and their impact on processing and yield of clean fibre after processing
- wool growth, skin and fibre biology, and effect of genetics and environment on fibre characteristics.

# Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

## Overview of assessment

**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:

- assess the key characteristics of wool
- identify wool that differs in processing performance
- separate wool with differing levels and types of impurities. e.g colour, cotted, tender, brands, seed, shive, burr.
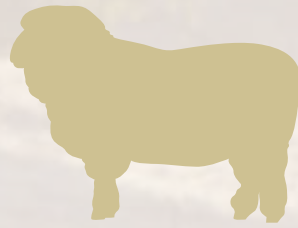
# Range Statement

**The range statement relates to the unit as a whole.**

The study of this module can relate to all wool types that can be sold through the Australian wool auction system.

All references to wool types should be in the context of the AWEX type system and AWTA test results.

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# RESOURCES

AWEX-ID Industry description system
Wool valuing
Wool quality

Digital Resources:
AWEX Typing
AWEX Premium & Discount Report

Resources provided by Australian Wool Innovation &
Australian Wool Exchange Limited

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# AWEX-ID
# Industry description system

# Using this resource

Your training program includes this learner's resource book and a CD-ROM that contains additional information, videos, images, glossaries and web links. All graphics in this resource can also be viewed in more detail on your CD-ROM.

You should work through this book and complete the activities. As you work through the material you will find the following icons:

## Activity

Complete a learning activity. The activities are a key part of your learning. They will reinforce your understanding and help to test your knowledge as you progress.

Note: An editable version of the activities is available on your CD-ROM as an Activity Book. You should save this to your computer. You can either print it out and complete it by hand or complete it on screen and email your answers to your teacher.

## Safety note

This icon draws your attention to an important safety issue.

## CD-ROM

Further information is provided on your CD-ROM.

## AWEX Code of Practice

Refer to the *Code of Practice, Preparation of Australian Wool Clips, The Woolclasser 2010-2012.*

# Introduction

The Australian Wool Exchange Industry Description (AWEX-ID) system was introduced in 1995 as a method of recording subjective appraisal and non-measured characteristics of greasy wool. The objectives of AWEX-ID are to:

- describe the non-measured characteristics of a line of greasy wool in simple terms, without pre-empting the likely processing capabilities or outcomes. Industry description does not report fibre diameter, vegetable matter content or yield.

- provide for pricing functions such as market reports, daily quotations, auction premiums and discounts, pre and post sale statistics.

- contribute to the maintenance of historical databases used for annual statistical reporting and research.

The number of non-measured characteristics (subjectively assessed) applied to any sale lot or line is dependent on:

- the category of wool (for example, fleece, pieces, bellies, crutchings)

- the available objective measurement results.

AWEX-ID has been accepted by industry and is used by buyers and sellers to assist in determining presale valuations on sale lots.

This learning resource looks at:

- the features of AWEX-ID

- non-measured characteristics

- prime characteristics

- qualifier characteristics.

# Features of AWEX-ID

- AWEX-ID is a simple, intuitive and logical reporting system describing non-measured characteristics of greasy wool without reference to processing capabilities. It offers all users a system based on universal descriptive principles. Customers and other users, particularly wool producers and woolclassers, do not require extensive training to understand the AWEX-ID codes.

- The electronic wool sale catalogue usually includes AWEX-ID on all lots offered for sale by sample. Market reports are based on price movements by wool characteristics, and premium and discount price analysis can be reported by objective and subjective characteristics.

- For market reporting, AWEX-ID is only applied by industry appraisers accredited by AWEX.

- AWEX-ID appraisal does not require test results to be available prior to appraisal, as only non-measured wool characteristics are appraised. This creates flexibility for selling agents in the management of show floors and sale catalogues.

- AWEX-ID is a descriptive method employed to describe each non-measured characteristic individually. The complete description or specification of the sale lot is the combination of the objective measurements and non-measured AWEX-ID.

- Appraisals are made only on the grab sample.

- AWEX-ID allows woolclassers to gain valuable feedback on clips classed.

## Market reporting

AWEX Market Reports use AWEX-ID to determine market prices. AWEX reports are designed to report the wool type quotations in terms of the non-measured characteristics appraised in AWEX-ID. The wool type is coupled with measured characteristics.

Where an AWEX-ID is supplied to AWEX as part of the sale information, the appraisal will be audited by AWEX staff.

# Non-measured characteristics

Australian wool being sold is defined by measured and non-measured characteristics.

| Characteristic | Reports |
|---|---|
| Breed | Generic sheep breed group. |
| Wool sub-category | Additional information about each wool category, relating to sheep husbandry and preparation issues (for example, lambs, overgrown, fellmongered). |
| Wool category | General wool (classing) preparation categories or portions (fleece, pieces, bellies, crutchings, locks). |
| Style | Ranking the appearance of wool, within a wool category, from choice (1) to inferior (7). |
| Vegetable matter type | Description of VM type in sample (for example, burr, seed, shive). |
| Length | Subjective estimate of staple length on non-staple measured wool. |
| Strength | Subjective estimate of staple strength on non-staple measured combing length wool. |
| Greasy colour | Presence of scourable colour and the presence and degree of unscourable colour. |
| Water stain | Presence and degree of bacterial based stain. |
| Stain | Presence and degree of dark stain. |
| Dags | Presence and degree of dags. |
| Cotted | Presence and degree of cottedness. |
| Jowls | Presence and degree of jowls. |
| Necks | Presence of neck wool. |
| Shanks | Presence and degree of shanks. |
| Doggy | Wool exhibiting predominantly doggy character. |
| Dermatitis | Presence and degree of dermatitis. |

| Characteristic | Reports |
|---|---|
| Skin pieces | Presence and degree of skin pieces. |
| Brands | Presence and degree of branding fluid likely to be unscourable. |
| Mud | Presence and degree of mud. |
| Black and grey | Presence and degree of pigmented fibre. |
| Kemp | Presence and degree of kemp fibres. |

# Prime and qualifier characteristics

To enable each of the non-measured characteristics to be reported in an orderly fashion, the AWEX-ID has been split into two components**:**

- prime characteristics (see Table 1)

- qualifier characteristics (see Table 7).

Prime characters form the base of the description and must be applied on all lots. The exception is Wool Sub-category, which is only applied where the category is applicable.

Qualifier reporting requires other characteristics to be reported conditionally, that is, each Qualifier characteristic is reported, provided certain conditions are met; for example, staple length is subjectively appraised where the wool is not staple measured. Other characteristics are only reported where they are evident, such as stain or dermatitis. It is possible for a line of wool to have no Qualifiers.

Note: It is not possible to report a Prime characteristic as a Qualifier or vice versa; for example, a Shanks qualifier cannot be reported in the Prime section.

To separate the two reporting components (Prime and Qualifier), a full stop is used as a separator. The full stop is recorded and published at all times, even if no qualifiers are recorded.

Characters must be in capitals. The AWEX-ID should be written with no spaces occurring between characters.

### Examples of AWEX-ID using only prime characteristics (refer to Table 1)

XLF4E•          Crossbred Lambs Fleece, Style 4, Seed

MP5N•          Merino Pieces, Style 5, Noogoora burr

# Prime characteristics

| PRIME | | | | | |
|---|---|---|---|---|---|
| **MANDATORY** | **WHERE APPLICABLE** | **MANDATORY** | **MANDATORY** | **MANDATORY** | **MANDATORY** |
| **BREED GROUP** | **WOOL SUB-CATEGORY** | **WOOL CATEGORY** | **STYLE** <br> **F**LC | **VM TYPE** | **FULL STOP** |
| **AS** (Australian Superfine) | **W** (Combing Weaners and Lambs) | **F** (Fleece) | **1** (Choice) | **B** (Burr) | • |
| **M** (Merino) | **L** (Carding Lambs) | **P** (Pieces) | **2** (Best Spinners) | **E** (Seed) | |
| **X** (Crossbred) | **U** (Plucked and Dead) | **B** (Bellies) | **3** (Spinners) | **S** (Shive) | |
| **D** (Downs) | **K** (Shorn from Skins) | **C** (Crutchings) | **4** (Best) | **N** (Noogoora/Ring) | |
| **T** (Carpet) | **M** (Fellmongered) | **Z** (Locks) | **5** (Good) | **T** (Bathurst) | |
| **R** (Sheds Fibre) | **O** (Overgrown) | | **6** (Average) | **M** (Moit) | |
| | **N** (Non-conforming Lot) | | **7** (Inferior) | **F** (Bogan Flea) | |
| **WHERE APPLICABLE** | | | **PCS/BLS** | **WHERE APPLICABLE** | |
| **BREED PREFIX** | | | **3** (Spinners) | **VM SUFFIX** | |
| **R** Run with Sheds Fibre | | | **4** (Best) | **L** (Clumpy) | |
| | | | **5** (Good) | | |
| | | | **6** (Average) | | |
| | | | **7** (Inferior/Stain) | | |
| | | | **CRS/LKS** | | |
| | | | **4** (Best/Good bulk) | | |
| | | | **5** (Average bulk) | | |
| | | | **6** (Inferior bulk) | | |

*Table 1: Prime characteristics (reproduced from AWEX Code of Practice).*

# Breed Group

The reporting of all breed prime characteristics is mandatory. The reporting of sheep breed origin is achieved by appraising wool into six, broad classifications, as follows:

### AS (Australian Superfine)

Superfine style Merino wool of visually 74s (18.5 micron and finer), which is eligible for styles 1, 2, 3 and 4 only. Lots not visually Superfine are to be appraised as Merino breed (M). Also check valid combinations chart.

### M (Merino)

Includes all wool produced off Merino sheep (excluding crosses), regardless of mean micron.

### X (Crossbred)

Includes wool produced by non-Merino sheep such as Polwarth, Comeback, Corriedale, Border Leicester, Perendale and Romney Marsh breeds. Includes all Merino crosses; for example, First Cross and Comeback, particularly if they display typical crossbred length.

### D (Downs)

Downs wool includes all wool produced off Dorset, Suffolk Southdown and similar Downs breeds. Any Crossbred displaying strong Downs characteristics should be appraised as Downs.

### T (Carpet)

Applies only to wool produced from carpet wool sheep, such as Tukidale, Drysdale, Carpetmaster and Cheviot. This wool is typically of chalky white appearance and contains predominant medullated fibres.

### R (Sheds Fibre)

In recent years a number of new sheep (meat) breeds have been introduced into Australia. These breeds are notable because the sheep shed their fibre. Examples include Dorper, Damara, Awassi and Karakul. These breeds are significant from a classing perspective as their fibre is usually pigmented and/or medullated. These fibres are problematic when they exist in Merino wool.

# Breed Prefix

### R (Run with Sheds Fibre)

The R Breed Code can also be used as a Breed Group Prefix designating a Breed that has Run with a Sheds Fibre Breed (e.g. Dorper, Damara, etc.) RX indicates a line Crossbred Wool Run with a Sheds Fibre Breed. Where the R Breed Group Prefix is used the appraiser will declare Y and K Qualifier Codes only when visible in the sample.

# Wool sub-category

A wool sub-category is assessed only where applicable and is a Prime characteristic.

### W (Combing weaners and lambs)

Combing length weaners (spiral staple tip) and lambs wool 50 mm and longer.

### L (Carding lambs)

Carding length lambs wool 50 mm or shorter.

### U (Plucked and dead wool)

Applies to plucked, dead and flyblown wool. Odd skin pieces may be present.

### K (Shorn from skins)

### M (Fellmongered wool)

Removed from sheep pelts.

### O (Overgrown wool)

Overgrown wool (distinctly more than 12 months' growth) and double wool (two years or more).

### N (Non-conforming lot)

Where standard of clip preparation does not meet the *Code of Practice for the AWEX Quality System, Preparation of Australian Wool Clips, The Woolclasser* 2007-2009.

# Wool category

Each AWEX-ID must have only one wool category.

### F (Fleece)

The fleece wool category is to be used for the appraisal of all fleece wool from all breed types of all ages. Fleece refers to the bulk of the product removed from the sheep during shearing.

Lines of backs may be assessed as a fleece category.

Lines of necks may be assessed as fleece, provided certain conditions are met (see Necks).

If fleece wool contains stain, the N wool sub-category must appear in the AWEX-ID. Clip preparation standards do not allow for dark stain in fleece.

### P (Pieces)

The Pieces wool category can be applied on all breeds provided the wool is one of the following:

- normal skirting pieces from adult or weaner fleece wool

- broken fleeces (skirtings)

- skirty necks

- second lambs which are irregular in length and are the lamb equivalent of skirting wool (applied with an associated lamb code)

- combing stain lines that are not bellies or crutchings.

### B (Bellies)

The belly wool category is applied on any lot that contains belly wool of any breed of sheep.

Prepared lines of mixed combing length pieces and bellies should be appraised as bellies. Lines which are predominantly pieces, but contain odd belly edgings can be appraised as a piece category.

### C (Crutchings)

Crutchings from sheep should be assigned to the crutching category, regardless of quantity of stain or colour and bulk.

Short carding length pieces should not be described as crutchings. These should be described as pieces with an associated greasy length indicator (if not staple measured).

Dags will typically be appraised by using a crutchings wool category.

### Z (Locks)

The Locks category is designed for the appraisal of all lock wool, regardless of the breed, level of colour or stain that may exist. The Locks category is applicable to both table locks and stain locks. Degrees of bulk and colour are identified under other AWEX-ID characteristics.

# Style

Style is a ranking sequence relating to the greasy appearance or conformation of the sale lot within a wool category and breed. Style is a cumulative measure incorporating characteristics such as the following:

### Fleece, pieces, bellies

- staple density

- regularity of length between staples (coefficient of variation)

- regularity and consistency of sample (clip preparation)

- crimp character regularity and definition

- tip dust penetration

- degree of weathering of staples

- staple tip structure (eg. weaners)

- frib content (eg., pieces)

- visual appearance.

## Crutchings and locks

- bulk

- regularity and consistency of sample

The ranking sequence of style used by AWEX-ID is from highest (1) to lowest (7). Every breed and wool category is assigned a set range of eligible style number codes.

The ranking sequence is:

- fleece – from Best (1) to least (7)

- pieces and bellies – from 3 to 7

- crutching and locks – from 4 to 6.

## Allowable fleece styles

| AWEX-ID style code | Description | Australian Superfine | Merino | Cross-bred | Downs | Carpet |
|---|---|---|---|---|---|---|
| 1 | Choice | Yes | Yes | Yes | | |
| 2 | Best Spinners | Yes | Yes | Yes | | |
| 3 | Spinners | Yes | Yes | Yes | | |
| 4 | Best | Yes | Yes | Yes | Yes | Yes |
| 5 | Good | | Yes | Yes | Yes | Yes |
| 6 | Average | | Yes | Yes | Yes | Yes |
| 7 | Inferior | | Yes | Yes | Yes | Yes |

*Table 2: Fleece style categories*

Wool appraised as fleece styles 1 or 2 must not contain any tender wool (<35 N/ktex) or scourable colour.

Table 3 describes the visual characteristic of each style. (Note: In practice, most weaners and lambs fleeces will be appraised as Style 4, 5 or 6).

| Style | Density | Character (crimp definition) | Length regularity | Tip type | Visual colour | Faults/ qualifiers allowed | Visual dust penetration of staple |
|---|---|---|---|---|---|---|---|
| 1. Choice | Dense | Excellent | Excellent | Square | Extra white | No | Nil |
| 2. Best Spinners | Dense | Good | Excellent | Square | Very white | No | Minimal |
| 3. Spinners | Dense | Good | Good | Square | White | Some | Light |
| 4. Best | Good | Good | Good | Square some tippiness | White, some cream, scourable | Yes | Light (5–10%) |
| 5. Good | Good, some thinness | Good, fair | Some variation | All | Good, creamy, scourable | Yes | Light, medium (8–25%) |
| 6. Average | Increasing thinness | Good, fair, poor | Some variation | All | Good, creamy, scourable | Yes | Medium, heavy (25–60%) |
| 7. Inferior | Thin, wasty, open | Good, fair, poor | Some variation | All | Good, creamy, uscourable | Yes | Heavy (60%+) |

*Table 3: Visual characteristic of each fleece style.*

# Pieces and bellies styles

## Allowable pieces and bellies styles

| AWEX-ID style code | Description | Australian Superfine (ASP/ASB) | Merino (MP.MB) | Crossbred (XP/XB) | Downs (DP/DB) | Carpet (TP/TB) |
|---|---|---|---|---|---|---|
| 3 | Spinners | Yes | Yes | Yes | | |
| 4 | Best | Yes | Yes | Yes | Yes | Yes |
| 5 | Good | | Yes | Yes | Yes | Yes |
| 6 | Average | | Yes | Yes | Yes | Yes |
| 7 | Inferior/ Stain | | Yes | Yes | Yes | Yes |

*Table 4: Pieces and bellies styles categories.*

**Style 3** – Spinners is used for very good colour, regular length pieces (or bellies) that may be produced off fleece Styles 1 to 3. There should be no evidence of frib, sweat, colour, stain or tender wool.

**Style 4** – Best pieces and bellies are good colour and regular length, with small amounts of frib or sweat.

**Style 5** – Good pieces and bellies containing sweat and frib points. Variation in length and colour is acceptable. This is the most common style for pieces and bellies.

**Style 6** – Average pieces and bellies contain excessive frib and briskets, heavy sweat or dust and are variable in length and colour.

**Style 7** – Inferior pieces and bellies are all skirtings prepared as stain lines containing medium to heavy stain. A line of stain is automatically Style 7.

Note: Scourable colour (M) is not reported on pieces and bellies.

# Crutchings and locks styles

There are three locks and crutchings style allocations. These styles imply bulk. Bulk refers to the length and density of fibre in carding wool. Colour is described using the appropriate qualifiers.

**Allowable crutchings and locks styles**

| AWEX-ID style code | Description | Australian Superfine (ASC/ASZ) | Merino (MC.MZ) | Crossbred (XC/XZ) | Downs (DC/DZ) | Carpet (TC/TZ) |
|---|---|---|---|---|---|---|
| 4 | Best/Good Bulk | N/A | Yes | Yes | Yes | Yes |
| 5 | Average Bulk | N/A | Yes | Yes | Yes | Yes |
| 6 | Inferior Bulk | N/A | Yes | Yes | Yes | Yes |

*Table 5: Crutchings and locks style categories.*

**Style 4** – (Best/Good Bulk) Crutchings and locks have Best and/or Good Bulk (length and density), and may contain qualifiers including stain. Best Bulk Crutchings may often include a length Qualifier (if 50 mm or longer).

**Style 5** – (Average Bulk) Crutchings and locks have average bulk (length and density) and may contain Qualifiers including stain.

**Style 6** – (Inferior Bulk) Crutchings and locks have inferior bulk (length and density) and may contain Qualifiers including stain.

Note: No scourable colour is reported. No greasy length or strength indicators are used on carding length wool (less than 46 mm).

# Vegetable matter

When using the AWEX-ID, you must appraise one vegetable matter type only per appraisal with an optional clumpy code. The vegetable matter type appraisal is a Prime characteristic and is reported for all AWEX-ID appraisals, regardless of the measured content.

| AWEX-ID code | Description |
|---|---|
| B | Burr |
| E | Seed types |
| S | Shive |
| N | Noogoora/Ring burr |
| T | Bathurst burr |
| M | Moit |
| F | Bogan flea |
| L | Clumpy VM (optional) |

*Table 6: Vegetable matter.*

Example: ASF3E.75          ASF3S.80

          MF4B..            MF4BL.

          MF5S.80           MF5SL.80

## Appraisal guidelines

You must appraise the VM type visually according to the following allocations. The AWTA, BSH (burr, seed, hardhead) breakdown may be used as a guide, but not as the prime determinant of VM type in a sample.

> The AWEX-ID VM type is to be the predominant visual VM type - unless sufficient quantities (approximately 25% of the total VM) of a more difficult to process VM type is present in the sample.

**B**    **Burr types** (burr that can 'unroll' during processing): burr medic, small burr medic, barrel medic, cutleaf medic.

**E**    **Seed types:** corkscrew, caltrop, horehound, spiny burr grass, carrot seed, dock, saffron thistle, subterranean clover, cobblers peg, galvanized burr, scotch thistle.

**S**    **Shive:** Barley grass, shive, spear grass, wild oat, wire grass, any fibullated grass, burr.

**N**    **Noogoora/Ring burr**:, spiny emex.

**T**    **Bathurst burr: hard head burr**

**M**    **Moit:** Twigs, leaves and sticks.

**B**    **Bogan flea**

**L**    **Clumpy:** relates to the existence of tight clusters or concentrations of VM.

The Clumpy code should only be applied where there is evidence of clumpy VM in the wool, which is inconsistent with or abnormal to the rest of the sample.
Clumpy should not be applied where the sample is consistently clumpy as a result of a high VM content; for example, a line of pieces or bellies with, say, 15% VM content would not generally warrant a Clumpy comment if the VM is typical through the sample.

# Qualifier characteristics

Qualifier reporting is only required when certain conditions are not met; for example when additional measurement is not carried out, in this case, Staple Length would be reported. Other characteristics are only reported where they are evident, such as Cott or Unscourable Colour. Remember, Qualifiers are placed **after** the full stop.

| | QUALIFIERS | | | | |
|---|---|---|---|---|---|
| | CONDITIONAL Non-AM | CONDITIONAL Non-AM | WHERE APPLICABLE | | WHERE APPLICABLE |
| **FULL STOP** | **GREASY LENGTH INDICATOR (F/P/B/C)** | **STRENGTH INDICATOR (Combing)** | **QUALIFIERS (Not scaled)** | **QUALIFIERS (Scaled)** | **STANDARD COMMENTS** |
| • | **10** (6–15) | **W1** (Part Tender) | **E** (Necks) | **H** (Unscourable Colour) | **GFS** Good for Style **PFS** Poor for Style **BOLD** Bold Crimp **PEN** Pen Stain **BIO** Bio-Harvested **LICE** Lice Affected |
| | **20** (16–25) | **W2** (Tender) | **B** (Backs) | **N** (Water Stain) | |
| | **30** (26–35) | **W3** (Very Tender) | **G** (Doggy) | **S** (Dark Stain) | |
| | **40** (36–45) | | **M** (Scourable Colour) | **Q** (Dags) | |
| | **50\*** (46–55) | | | **F** Soft Cott | |
| | **60\*** (56–65) | | | **C** (Med/Hard Cotts) | |
| | **70\*** (66–75) | | | **J** (Jowls) | **AWAS** Awassi **DAMA** Damara **DORP** Dorper **KARA** Karakul **VANR** Van Rooy |
| | **80\*** (76–85) | | | **K** (Shanks) | |
| | **90\*** (86–95) | | | **A** (Dermatitis) | |
| | **100** (96–105) | | | **V** (Skin Pieces) | |
| | **110** (106-115) | | | **R** (Brands) | |
| | **120** (116–125) | | | **D** (Mud) | |
| | **130** (126–135) | | | **Y** (Black/Pigmented) | |
| | **Etc.** | | | **P** (Kemp/Medullated) | |
| | | | | **U** (Sweat/Frib) | **SAMM** SAF Meat Mer. **AUMM** Aust meat Mer. **DOHN** Dohne |
| | | | | **SCALE** | |
| | | | | **1** (Light/Odd) | |
| | | | | **2** (Medium line of ….)) | |
| | **\*5 mm increments on ASF Styles 1 and 2 only** | | | **3** (Heavy/line of…) | |

*Table 7: Qualifier characteristics (reproduced from AWEX Code of Practice).*

### Greasy length indicator

AWEX-ID relies on both subjective and objective measurement. Where a line of wool is unmeasured, a subjective length is recorded on all fleece, pieces and belly and combing crutchings categories. Where a measurement exists, a subjective length is not appraised.

Subjective length is appraised on non-staple measured fleece, pieces, belly wool and combing length lamb categories. This includes wool assessed as weaner or lamb sub-categories. Carding length crutching and lock categories do not have greasy length indicators.

Greasy length can be difficult to subjectively appraise on wool with significant natural variation in length, such as weaners and skirtings. The greasy length indicator should best represent the bulk of the sample.

For the purposes of market reporting, the subjective length indicator is reported in 10 unit increments. Fleece, pieces and bellies can be appraised with a length indicator from 10 to 250.

| Greasy length indicator | Process |
|---|---|
| **10**<br>(6–15) | Carding |
| **20**<br>(16–25) | |
| **30**<br>(26–35) | |
| **40**<br>(36–45) | |
| **50**<br>(46–55) | Combing |
| **60**<br>(56–65) | |
| **70**<br>(66–75) | |
| **80**<br>(76–85) | |
| **90**<br>(86–95) | |
| **100**<br>(96–105) | |
| **110**<br>(106–115) | |
| **120**<br>(116–125) | |
| etc. | |

*Table 8: Greasy length indicator.*

Note: ASF Styles 1 and 2 may use 5 mm increments.

### Staple strength indicator (combing)

Subjective strength should be appraised on all fleece, piece and belly categories that are not staple measured and have a greasy length indicator of 50 or longer. Australian Superfine (AS) Styles 1 and 2 must be sound.

| Strength code | Description | Range (NKT) |
|---|---|---|
| W1 | Part tender | 25–33 |
| W2 | Tender | 18–24 |
| W3 | Very tender | 1–17 |

*Table 9: Staple strength indicator (combing).*

### Qualifiers (not scaled)

**E** **Necks:** For a line specifically made for necks, or a significant quantity (at least 30%) of necks. Can be appraised as either fleece or pieces category.

**B** **Backs:** For a line made specifically for backs, or a significant quantity (at least 30% of backs). The backs Qualifier should not be used to describe lines of wool that are merely low yielding and dusty.

**M** **Scourable colour:** Scourable colour appears as a general cream colour that will wash out during scouring. It is only reported on fleece style categories.

**G** **Doggy:** Doggy refers to fleece wool that displays a distinct lack of character. Crimp definition should be poor to non-existent. At least 30 per cent of the sample should be significantly doggy prior to reporting this characteristic. Applicable only to Merino and crossbred fleece and pieces.

### Qualifiers (scaled)

The qualifiers described in this section are all eligible to be scaled depending on the presence and degree of the characteristic visible in the sample. The following guide should be used to establish the appropriate qualifier scale to be applied with the qualifier code.

| Scale | Description |
|---|---|
| 1 | Light/odd |
| 2 | Medium/line of |
| 3 | Heavy/line of |

*Table 10: Qualifier scales.*

**H** **Unscourable Colour:** Refers to colour that is assessed as unscourable

| Colour code | Description |
|---|---|

| H1 | Light/odd concentration |
|----|-------------------------|
| H2 | Medium concentration |
| H3 | Heavy concentration |

*Table 11: Colour indicator.*

Canary colour should be appraised as H2 or H3. Lots measured for average yellowness (Y–Z) must be subjectively appraised for colour.

Brisket stain should be appraised using the appropriate colour codes, depending on the severity and quantity.

Fleece wool of Styles 1, 2 or 3 should not contain Unscourable Colour. Wool of this style should be appraised as Style 4.

**N** **Water stain:** Water stain relates specifically to the existence of bacterial-based stain, typically seen as green, orange or blue in colour. This is also known as fleece rot.

**S** **Dark stain:** Dark stain refers to urine and dung stain. Stain codes can be applied to pieces, bellies, locks and crutching categories. Lines of pieces and bellies prepared as stain lines must be assigned Style 7. Fleece wool must not contain stain; if it does, a non-conforming lot (N) must be applied.

**Q** **Dags:** The presence or degree of heavy manure (dag). The appraised style of crutchings does not alter if dags are present. Where Q3 is applied, unscourable colour (H1-3) or stain (S1-3) is not required.

**F** **Soft cotted:** Wool that contains small, medium or large quantities of soft cott wool. Soft cott wool is relatively easy to separate.

**C** **Medium/hard cotted wool:** Significantly cotted or matted wool in fleece, pieces and bellies over 50 mm in length.

**J** **Jowls:** Cotted wool removed from the lower jaw and upper front neck region. J2 and J3 should show significant amounts of jowls exist in the line.

   Note: Wool with a jowls qualifier should not have a cott qualifier.

**K** **Shanks:** Shanks should be described where they appear in a line of wool. Limited to categories only. K3 applies to lines of shanks.

**A** **Dermatitis:** Dermatitis is an occasional condition seen in greasy wool. Where dermatitis exists it should be appraised according to its concentration.

   A1: Light dermo, odd sticks of pencil dermatitis.

**V** **Skin pieces:** Skin pieces resulting from shearing where odd pieces of skin are attached to wool staples.

   V1: Where small amounts of skin pieces are evident in the line of wool.

   V3: Applied to a line of skin pieces.

**R**  **Brands:** Sheep brands applied on the fleece to identify a producer's flock, often still present when shearing is carried out. R3 is applied to lines of wool prepared as brands.

**D**  **Mud:** Mud should be described where it is clearly evident in the sample. Mud can be applied to pieces, bellies, crutchings and locks.

D3: Applied to lines prepared as muddy wool.

**Y**  **Black and pigmented:** Where there is evidence of pigmented fibre as a result of genetic growth, and it can be applied to all breed categories.

Y1: Represents small amounts of pigmented fibres.

Y3: Applies to lines prepared as black wool.

Where a sale lot is at risk of Pigmented Fibre due to Shedding Breed, this is identified by the R Breed (Prefix). Y shall be applied only where visible.

**P**  **Kemp:** Kemp fibres are coarse, short, white fibres found on the head and legs of sheep.

P1: Represents odd floating kemp.

P3: Indicates heavy, harsh kemp.

Where a sale lot is at risk of Medullated Fibre due to Shedding this breed is identified by the R Breed (Prefix). P shall be applied only where visible.

**U**  **Sweat/Frib/Skirt:** The Sweat and Frib code has been added to identify wool under two situations:

- fleece wool displaying evidence of Sweat/Frib/Skirt as a result of incomplete, poor or no skirting

- lock lines where the sample shows (significant) quantity of Sweat/Frib.

Note: The following two pages contain the complete AWEX-ID codes and valid combinations. When applying the AWEX-ID code, remember to check the second page to ensure it is a valid combination.

| PRIME TYPE | | | | | | QUALIFIERS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MANDATORY** | **WHERE APPLICABLE** | **MANDATORY** | **MANDATORY** | **MANDATORY** | | **CONDITIONAL Non – AM** | **CONDITIONAL Non- AM** | **WHERE APPLICABLE** | | **WHERE APPLICABLE** |
| BREED GROUP | WOOL SUB CATEGORY | WOOL CATEGORY | STYLE / **FLC** | VM TYPE | | GREASY LENGTH INDICATOR | STRENGTH INDICATOR | QUALIFIERS (Not scaled) | QUALIFIERS (Scaled) | STANDARD COMMENTS |
| **AS** Australian Superfine | **W** Combing Weaners/Lambs | **F** Fleece | **1** Choice | **B** Burr | ● | **10** 6-15 mm | **W1** Part Tender | **E** Necks | **H** Unscourable Colour | **GFS** Good for Style |
| **M** Merino | **L** Lambs | **P** Pieces | **2** Best Spinners | **E** Seed | | **20** 16-25 mm | **W2** Tender | **B** Backs | **N** Water Stain | **PFS** Poor for Style |
| **X** Crossbred | **U** Plucked & Dead | **B** Bellies | **3** Spinners | **S** Shive | | **30** 26-35 mm | **W3** Very Tender | **G** Doggy | **S** Dark Stain | **BOLD** Bold crimp |
| **D** Downs | **K** Shorn from Skins | **C** Crutchings | **4** Best | **N** Noogoora/Ring | | **40** 36-45 mm | | **M** ScourableColour | **Q** Dags | **PEN** Pen Stain |
| **T** Carpet | **M** Fellmongered | **Z** Locks | **5** Good | **T** Bathurst | | **50*** 46-55 mm | | | **F** Soft Cott | **BIO** Bio-Harvested |
| **R** Sheds Fibre | **O** Overgrown | | **6** Average | **M** Moit | | **60*** 56-65 mm | | | **C** Med/Hard Cott | **LICE** Lice affected |
| | **N** Non Conforming Lot | | **7** Inferior | **F** Bogan Flea | | **70*** 66-75 mm | | | **J** Jowls | |
| **WHERE APPLICABLE** | | | **PCS/BLS** | | | **80*** 76-85 mm | | | **K** Shanks | **AWAS** Awassi |
| BREED PREFIX | | | **3** Spinners | **WHERE APPLICABLE** | | **90*** 86-95 mm | | | **A** Dematitis | **DAMA** Damara |
| **R** *Run with* Sheds Fibre | | | **4** Best | VM SUFFIX | | **100** 96-105 mm | | | **V** Skin Pieces | **DORP** Dorper |
| | | | **5** Good | **L** Clumpy | | **110** 106-115 mm | | | **R** Brands | **KARA** Karakul |
| | | | **6** Average | | | **120** 116-125 mm | | | **D** Mud | **VANR** Van Rooy |
| | | | **7** Inferior/Stain | | | **130** 126-135 mm | | | **Y** Black/Pigmented | |
| | | | **CRS/LKS** | | | **140** 135-150 mm | | | **P** Kemp/Medullated | |
| | | | **4** Best/Good Bulk | | | **160** 151-170 mm | | | **U** Sweat/Frib | **SAMM** SAF Meat Mer. |
| | | | **5** Average Bulk | | | **180** 171-190 mm | | | | **AUMM** Aust Meat Mer. |
| | | | **6** Inferior Bulk | | | **200** 191-210 mm | | | **SCALE** | **DOHN** Dohne |
| | | | | | | **……. 300** | | | **1** Light | |
| | | | | | | | | | **2** Medium/Line of | |
| | | | | | | F/P/B/C *5mm inc. ASF1-2 | Combing | | **3** Heavy/Line of | |

Mandatory Full Stop

| BREED GROUP | SUB CATEGORY | CATEGORY | STYLE | VM TYPE | . | GREASY LENGTH | STRENGTH | Qualifiers (No scale) | Qualifiers (Scaled) |
|---|---|---|---|---|---|---|---|---|---|
| | AUST SUPERFINE | | | | | | | | |
| AS | - | F | 1,2 | All | . | 10 +* | | | |
| AS | - | F | 3 | All | . | 10 + | W1 | | |
| AS | - | F | 4 | All | . | 10 + | W1-2 | B,E,M | |
| AS | W | F | 1,2 | All | . | 50 + | | | |
| AS | W | F | 3 | All | . | 50 + | W1 | | |
| AS | W | F | 4 | All | . | 50 + | W1-2 | B,E,M | |
| AS | L | F | 1,2 | All | . | 10 - 50 | | | |
| AS | L | F | 3 | All | . | 10 - 50 | W1* | | |
| AS | L | F | 4 | All | . | 10 - 50 | W2* | B,E,M | |
| AS | -,W#,L | P,B | 3 | All | . | 10 + | W1* | | |
| AS | -,W#,L | P,B | 4 | All | . | 10 + | W1-2* | | |
| AS<18.6μm | #W 50+ only | | | | | * = 5 mm | *If length 50+ only | | |
| | MERINO | | | | | | | | |
| M, RM | - | F | 1,2 | All | . | 10 + | | | |
| M, RM | - | F | 3 | All | . | 10 + | W1 | | |
| M, RM | -,U,K,M,N | F | 4,5,6,7 | All | . | 10 + | W1-3 | E,G,B,M | All |
| M, RM | W,O | F | 1,2 | All | . | 50 + | | | |
| M, RM | W,O | F | 3 | All | . | 50 + | W1 | | |
| M, RM | W,O | F | 4,5,6,7 | All | . | 50 + | W1-3 | E,G,B,M | All |
| M, RM | L | F | 1,2 | All | . | 10 – 50 | | | |
| M, RM | L | F | 3 | All | . | 10 – 50 | W1* | | |
| M, RM | L | F | 4,5,6,7 | All | . | 10 – 50 | W1-3* *If length 50 only | E,G,B,M | All |
| M, RM | - | P,B | 3 | All | . | 10 + | W1 | | |
| M, RM | -,U,K,M,N | P,B | 4,5,6 | All | . | 10 + | W1-3 | M,B,E,G· | All, excluding S2-3, U1-3 |
| M, RM | -,U,K,M,N | P,B | 7 | All | . | 10 + | W1-3 | B,E,G† | S2-3, all remaining excl. H1-3 |
| M, RM | W,O | P,B | 3 | All | . | 50 + | W1 | | |
| M, RM | W,O,N | P,B | 4,5,6 | All | . | 50 + | W1-3 | M,B,E,G† | All, excluding S2-3, U1-3 |
| M, RM | W,O,N | P,B | 7 | All | . | 50 + | W1-3 | E,G† | S2-3, all remaining excl. H1-3 |
| M, RM | L | P,B | 3 | All | . | 10 – 50 | W1-1* | M,B,E,G† | All, excluding S2-3, U1-3 |
| M, RM | L | P,B | 4,5,6 | All | . | 10 – 50 | W1-3* | B,E,G† | S2-3, all remaining excl. H1-3 |
| M, RM | L | P,B | 7 | All | . | 10 – 50 | W1-3* *If length 50 only | †E,G on Pieces only | |
| M, RM | -,N | Z,C | 4 | All | . | -,50,60,70 | W1-3# | M | All, excluding C1-3, F1-3 |
| M, RM | -,U,N | Z,C | 5,6 | All | . | | M | All, excluding C1-3, F1-3 *No Qualifiers on Style 4 |
| | | | | | | | #If length 50+ only | | |
| | CROSSBRED | | | | | | | | |
| X, RX | - | F | 1,2 | All | . | 10 + | | | |
| X, RX | - | F | 3 | All | . | 10 + | W1 | | |
| X, RX | -,U,K,M,N | F | 4,5,6,7 | All | . | 10 + | W1-3 | E,G | All |
| X, RX | W,O | F | 1,2 | All | . | 50 + | | | |
| X, RX | W,O | F | 3 | All | . | 50 + | W1 | | |
| X, RX | W,O,N | F | 4,5,6,7 | All | . | 50 + | W1-3 | E,G | All |
| X, RX | L | F | 1,2 | All | . | 10 – 50 | | | |
| X, RX | L | F | 3 | All | . | 10 – 50 | W1* | | |
| X, RX | L | F | 4,5,6,7 | All | . | 10 – 50 | W1-3* *If length 50 only | E,G | All |
| X, RX | - | P,B | 3 | All | . | 10 + | W1 | | |
| X, RX | -,U,K,M,N | P,B | 4,5,6 | All | . | 10 + | W1-3 | E,G† | All, excluding S2-3, U1-3 |
| X, RX | -,U,K,M,N | P,B | 7 | All | . | 10 + | W1-3 | E,G† | S2, S3, all remaining excl. H1-3,U1-3 only |
| X, RX | W,O | P,B | 3 | All | . | 50 + | W1 | | |
| X, RX | W,O,N | P,B | 4,5,6 | All | . | 50 + | W1-3 | E,G† | All, excluding S2-3,U1-3 |
| X, RX | W,O,N | P,B | 7 | All | . | 50 + | W1-3 | E,G† | S2-3, all remaining excl. H1-3 only |
| X, RX | L | P,B | 3 | All | . | 10 – 50 | W1* | | |
| X, RX | L | P,B | 4,5,6 | All | . | 10 – 50 | W1-3* | E,G† | All, excluding S2-3, , U1-3 |
| X, RX | L | P,B | 7 | All | . | 10 – 50 | W1-3* *If length 50 only | E,G† †E,G on Pieces only | S2-3, all remaining excl. H1-3,U1-3 |
| X, RX | -,U,N | Z,C | 4 | All | . | -,50,60,70 | W1-3# | | All, excluding C1-3,F1-3, |
| X, RX | -,U,N | Z,C | 5,6 | All | . | | | | All, excluding C1-3,F1-3, * No Qualifiers on Style 4 |
| | ^Not used on Locks | | | | | | #If length 50+ only | | |
| | DOWNS/CARPET | | | | | | | | |
| D,T, RD,RT | - | F | 4 | All | . | 10 + | W1-2 | E | |
| D,T, RD,RT | -,U,K,M,N | F | 5,6,7 | All | . | 10 + | W1-3 | E,G‡ | All |
| D,T, RD,RT | W,O | F | 4 | All | . | 50 + | W1-2 | E | |
| D,T, RD,RT | W,O,N | F | 5,6,7 | All | . | 50 + | W1-3 | E,G‡ | All |
| D,T, RD,RT | L | F | 4 | All | . | 10 – 50 | W1-2* | E | |
| D,T, RD,RT | L | F | 5,6,7 | All | . | 10 – 50 | W1-3* *If length 50 only | E,G‡ ‡G on Breed T only | All |
| D,T, RD,RT | - | P,B | 4 | All | . | 10 + | W1-2 | E | |
| D,T, RD,RT | -,U,K,M,N | P,B | 5,6 | All | . | 10 + | W1-3 | E | All, excluding S2-3, |
| D,T, RD,RT | -,U,K,M,N | P,B | 7 | All | . | 10 + | W1-3 | E | S2-3, all remaining excl. H1-3, |
| D,T, RD,RT | W,O | P,B | 4 | All | . | 50 + | W1-2 | E | |
| D,T, RD,RT | W,O | P,B | 5,6 | All | . | 50 + | W1-3 | E | All, excluding S2-3, |
| D,T, RD,RT | W,O | P,B | 7 | All | . | 50 + | W1-3 | E | S2-3, all remaining excl. H1-3, |
| D,T, RD,RT | L | P,B | 4 | All | . | 10 – 50 | W1-2* | E | |
| D,T, RD,RT | L | P,B | 5,6 | All | . | 10 – 50 | W1-3* | E | All, excluding S2-3, |
| D,T, RD,RT | L | P,B | 7 | All | . | 10 – 50 | W1-3* *If length 50 only | E | S2-3, all remaining excl. H1-3, |
| D,T, RD,RT | -,U,N | Z,C | 4 | All | . | -,50,60,70 | W1-3# | | All, excluding C1-3, F1-3, |
| D,T, RD,RT | -,U,N | Z,C | 5,6 | All | . | | | | All, excluding C1-3,F1-3, |
| | ^Not used on Locks | | *No Qualifiers | | | | #If length 50+ only | | * No Qualifiers on Style 4 |
| | SHEDS FIBRE | | | | | | | | |
| R | -,U,K,M,W,O,N | F | 4,5,6,7 | All | . | 10+ | W1 W1-3 | | All |
| R | L | F | 4,5,6,7 | All | . | 10-50 | W1-3 | | |
| R | -,U,K,M,W,O,N | P,B | 4,5,6,7 | All | . | 10+ | W1-3 | | All, excluding S2-3, , U1-3 |
| R | -,U,N | C,Z | 4 | All | . | -,50,60,70 | | | All, excluding C1-3,F1-3, |
| R | -,U,N | C,Z | 5,6 | All | . | | | | All, excluding C1-3,F1-3, |
| Mandatory One only | (- = Null) One only | Mandatory One only | Mandatory One Onlt | Mandatory One plus opt.L | Mand. | Conditional | Conditional One only | Optional | Optional |
| | | | | | | | | M not with H1-3 | C1-3 not with J1-3 Colour M,H1-3 not on S2-3,Q2-3,N2-3 |

*Figure 2: AWEX-ID valid combinations chart.*

Below are some examples of how the AWEX-ID has been applied.

| | |
|---|---|
| MP5S• | Merino pieces, good style , shive. |
| MC5E•H1 | Merino crutchings, good style, seed, light unscourable colour. |
| MP7B•S2 | Merino pieces prepared as a stain line containing burr, medium stain. |
| MB5F•60W1 | Merino bellies, good style , bogan flea, 60 mm staple length, partly tender. |
| XF6B•110H2 | Crossbred fleece, average style, containing heavy dust and/or sweat, burr, 110 mm staple length, medium unscourable colour. |

# Activity 1: Using AWEX-ID

Using the AWEX-ID chart, report the characteristics on the following appraised greasy wool samples.

a.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Merino |
| Wool category | Fleece |
| Style: Fleece | Best |
| Vegetable matter | Seed |
| Colour indicator | Light unscourable colour |
| Dermatitis | Medium dermatitis |
| **AWEX-ID** | |

b.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Crossbred |
| Wool sub category | Lambs |
| Wool category | Pieces |
| Style: Lambs | Inferior |
| Vegetable matter | Burr |

| Estimated greasy length | 38 mm |
|---|---|
| Dark stain indicator | Odd stain |
| Mud | Mud (heavy) |
| **AWEX-ID** | |

c.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Crossbred |
| Wool category | Locks |
| Style: Locks | Average bulk, fair colour |
| Vegetable matter | Bathurst burr |
| Dark stain indicator | Odd stain |
| Shanks | Shanks in (medium) |
| **AWEX-ID** | |

d.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Merino |
| Wool category | Fleece |
| Style: Fleece | Average |
| Vegetable matter | Bathurst burr |
| Estimated greasy length | 110 mm |
| Strength indicator | Tender (23 N/ktex) |
| Colour indicator | Medium, unscourable |
| Cott | Soft cott |
| **AWEX-ID** | |

e.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Merino |
| Wool category | Fleece |
| Style: Fleece | Good |
| Vegetable matter | Shive |
| Estimated greasy length | 97 mm |
| Strength indicator | Part tender |
| Colour indicator | Light unscourable colour |
| Doggy | Doggy type |
| **AWEX-ID** | |

f.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Australian Superfine |
| Wool category | Fleece |
| Style: Fleece | Choice |
| Vegetable matter | 0.6% shive |
| Estimated greasy length | 77 mm |
| **AWEX-ID** | |

g.

| Characteristic | Result of appraisal |
|---|---|
| Breed | Australian Superfine |
| Wool category | Fleece |
| Style: Fleece | Spinners |
| Vegetable matter | 1.1% shive |
| Estimated greasy length | 85 mm |
| **AWEX-ID** | |

h.

| Characteristic | Result of appraisal |
| --- | --- |
| Breed | Crossbred |
| Wool category | Pieces |
| Style: Pieces | Good |
| Vegetable matter | Shive |
| Estimated greasy length | 124 mm |
| Colour indicator | Light unscourable colour |
| Jowls | Medium jowl |
| **AWEX-ID** | |

# Activity 2: Interpreting AWEX-ID

Using the AWEX-ID chart, interpret the AWEX-ID in each example below.

| AWEX-ID | Interpretation |
| --- | --- |
| XB6TL• | |
| MF4E•90W1M | |
| MP4E•80 | |

| | |
|---|---|
| | |
| XF5E•110H1 | |
| MZ6•Q | |

**Wool valuing**

# Using this resource

Your training program includes this learner's resource book and a CD-ROM that contains additional information, videos, images, glossaries and web links. All graphics in this resource can also be viewed in more detail on your CD-ROM.

You should work through this book and complete the activities. As you work through the material you will find the following icons:

### Activity

Complete a learning activity. The activities are a key part of your learning. They will reinforce your understanding and help to test your knowledge as you progress.

Note: An editable version of the activities is available on your CD-ROM as an Activity Book. You should save this to your computer. You can either print it out and complete it by hand or complete it on screen and email your answers to your teacher.

### Safety note

This icon draws your attention to an important safety issue.

### CD-ROM

Further information is provided on your CD-ROM.

### AWEX Code of Practice

Refer to the *Code of Practice, Preparation of Australian Wool Clips, The Woolclasser 2010-2012.*

## Essential reference

The Australian Wool Innovation (AWI) DVD, *Wool Handling: Training for your future*, contains video clips which demonstrate many of the procedures referred to in this learning resource. See your teacher for a copy of this DVD.

# Introduction

Determining the value of greasy wool is undertaken by buyers purchasing against topmakers' requirements, brokers valuing on behalf of their clients or classers setting up possible shed lines.

To fully appreciate or calculate the price paid for greasy wool, a good understanding of market reports, microns and yields should be acquired, and an understanding of the various factors that influence wool value.

This learning resource discusses:

- the purpose of valuing wool

- wool valuing characteristics

- methods for calculating greasy wool prices

- examples of greasy wool price calculations.

# The purpose of valuing wool

Buyers, growers, brokers and classers require the ability to value wool for various reasons.

## Wool buyer

Buyers need to have knowledge of all aspects of greasy wool and know the value of premiums and discounts that may be applied to greasy wool when assessing the suitability of wool against client specifications.

Once a lot or line of wool can be allocated against an order, the greasy value or bidding limit can be determined. This limit is a guide as to what the buyers could bid up to when competing at auction.

## Private buyer

Private buyers and growers who negotiate the purchase of a clip or part of a clip must have a comprehensive understanding of the value of the product being negotiated.

## Wool broker

Wool brokers, in their role of marketing wool clips on behalf of clients, determine the approximate market position or valuation prior to the wool being offered for sale through the auction system. This provides a guide for the growers if they wish to place a reserve price (the minimum price at which they are prepared to sell).

## Grower and woolclasser

Growers and woolclassers, when making important clip preparation decisions prior to shearing must be able to interpret market data that may influence the way a clip is prepared. During shearing, fundamental information on the fibre diameter variation between mobs, cuts per head, skirting ratios and number of lines must be shared between the grower and the classer.

Interpreting market intelligence and assessing premiums and discounts for fibre diameter, vegetable matter and colour of wool influences the way in which the clip is prepared compared with previous years. An awareness of these factors can increase the possibility of a good financial return.

# Valuing wool

The greasy wool price is the dollar value paid for wool in its greasy state. This is expressed in cents per kilogram.

## Wool valuing factors

Wool valuing factors can be divided into two groups: measured and unmeasured. To calculate the greasy price, the following factors must be taken into consideration.

### Measured characteristics

- micron
- strength and position of break
- length
- vegetable matter percentage and category

### Unmeasured (visually appraised) characteristics

- vegetable matter (VM) type
- style
- colour
- cott
- stain
- lot size

This information is best obtained from the wool sale catalogue. Sale catalogues are provided by each wool broker during a sale week. The information contained in the catalogue for each sale lot includes both test results and AWEX-ID appraisal codes, along with lot details. Wool buyers use this information in conjunction with their visual appraisal of the display sample to estimate the processing potential and hence the value of wool.

For current AWEX-ID codes please refer to http://www.awex.com.au/

The wool sale catalogue can also be a source of information for the grower and classer to aid in clip preparation.

Further information about the contents and layout of the wool sale catalogue is provided in the learning resource **Wool sale catalogue**.

For growers intending to establish a price in the shed and growers whose test results are unavailable, previous average test results should give a reasonable guide. This information is considered along with local knowledge of seasonal conditions, dust and vegetable matter, management techniques, stocking rates and condition and age of stock.

# Mean fibre diameter

Mean fibre diameter – micron – is the single most important trait that determines the value of clean wool.

Micron contributes between 60 to 80 per cent of the value buyers are prepared to pay for clean wool. This percentage varies depending on market prices, trends and the quantity availability of particular wool types. Micron is directly correlated to the weight of the finished garment and contributes to its softness, handle, comfort and pliability. It affects every facet of the manufacturing chain, right through to the finished garment.

In short, 19-micron wool should produce twice the quantity of fabric as a 27-micron wool and be half the weight. Therefore, market forces should see higher prices paid for 19-micron wool, and lower prices paid as the micron becomes higher.

Such is the importance of micron that emphasis has been placed in testing wool for micron as a fully certified test for buyers and brokers or as a guidance test for shed classers, growers and ram buyers.

# Strength

There are premiums and discounts for degrees of strength. This is reported for fleece, pieces and bellies as one of the following:

- W1, which indicates part tender, 25–31 N/ktex

- W2, which indicates tender, 18–24 N/ktex

- W3, which indicates rotten, 17–less N/ktex.

The current emphasis on producing finer wool has resulted in a change in discounts and premiums for wool of high staple strength.

With technological advances, such as the ability to process wool at four times the speed at which it was processed in the 1970s and the need to reduce labour costs, more emphasis has been placed on the strength of wool in determining wool values.

When wool is being processed through the early stages of combing, finer wool tends to break more readily. Hence, there is a higher discount placed on fine Merino wool that may not pass through the rigors of processing without the topmaker changing the settings and slowing down the processing system.

Market forces have set in place new strength limits for fine wool Sound wool of 18.5 microns and finer are expected to achieve 45 N/ktex, otherwise discounts may apply.

## Position of break

The position of the staple break is of concern to the processor. If the wool is just on the verge of being tender (around 35 newtons per kilotex), there would be concern if all the staples broke in the middle, as this would dramatically reduce the length of the fibre in the top. If the majority of the break occurred at the base or tip, a reasonable amount of good length should still be obtainable. Discounts often apply when a higher proportion of breaks occur at mid point.

# Staple Length

Topmakers must meet the spinners' requirements for delivering a top within the parameters of their specification. Standards for fibre diameter, average fibre length, colour, numbers of dark fibres and other wool processing parameters are specified by the spinner.

The topmaker sets the combing machines to handle the average staple length for the micron top being produced. Staple length that differs from the average for the micron wool being processed will cause an increase in fibre breakage and, therefore, a decrease in the top yield from that lot of wool. The result of this can be seen in the AWEX premium and discount reports. There is an optimum price for each micron category that directly relates to the average staple length for that micron wool.

# Vegetable matter

Discounts are placed on wool for types of vegetable matter faults. Discounts relate to the difficulties processors encounter when removing particles of vegetable matter. When wool is combed, heavy shive is difficult to remove and penalty discounts are applied, for example, seedy jowls mixed with free pieces.

In carding wool there is a difficulty with hard heads, such as Noogoora and Bathurst burr. These burrs have hard kernels and may not absorb sufficient acid when being carbonised. These partly carbonised burrs break up at carding and splinter. The small splintered burrs act like shive, are difficult to remove and find their way into the finished fabric.

For AWEX market reporting, the percentage of VM is always reported from the test result, but the type of VM is not guaranteed. For this reason the predominant type of VM that affects processing performance is appraised in AWEX-ID and reflected in premium and discount market reports.

# Style

Style is included in the AWEX-ID system. The term 'style' refers to the physical appearance of the wool, particularly in relation to dust penetration, wastiness of the tip, colour and bulk or density of the wool.

Style is of less importance to topmakers. Seventy-five per cent of wool in Australia falls into two types: Good or Best Topmakers (which relates to AWEX-ID style 5 and 4 respectively). Fine wool that aligns with the categories Spinners, Best Spinners (AWEX-ID styles 3, 2 and 1, respectively) or Choice has the largest variation in price premium or discounts applied to it. Lower style wool – Average and Inferior Topmakers (AWEX-ID styles 6 and 7 respectively) – is wool that has been affected by dust penetration well down the staple. These wool types have a lower yield and will have a poorer background colour after processing. This reduces the value and is reflected in the discounts applied to these types. The discount for style is less as micron increases.

# Colour

Presently, colour is appraised visually as measured trials with colour tests have been shown to have limited impact on buyer decisions.

Wool with a significant amount of light discolouration or odd unscourable discolouration may be typed as H1. Wool typed H2 has obvious discolouration. H3-typed wool has quite significant heavy discolouration and can only be dyed certain dark colours to overcome the effect of the severe yellowness.

More emphasis is placed on the finer portion of the clip and its ability to be dyed from the lightest pastel to the darkest navy. It is this option that influences the discounts applied to fine wool compared with broader micron wool.

Some broader wool tends to have a natural creamy colour associated with a higher suint factor depending upon the sheep type.

Colour is difficult to appraise as there are many degrees of unscourable colour and confusion over fleece that may look discoloured, yet will scour white. Suint is water soluble and this type of colour is usually scourable.

# Cott

Cott is included in the AWEX-ID system. Where there is extensive cotted or matted wool in a fleece or where fibres are entangled to such an extent that it is difficult to pull the fleece apart, the fleece may be described as Soft Cott (F), Medium Cott (C2) or Hard Cott (C3).

The commercial value of the wool is affected due to the extra cost in opening the wool by passing it through a series of mechanical teeth that tear the cott apart. This results in breakage of the fibre and reduction in the average fibre length.

Light cotts sometimes have little discount applied, while the discount will vary for heavy cotts, as there is generally only limited competition for them.

# Stain

If sheep are not crutched within three months of shearing, it is virtually impossible to guarantee that the resulting lines of wool will be free from dark fibre caused by dung and urine stain. Therefore, it is recommended that growers and classers indicate the crutched status of the mob as part of the Dark and Medullated Fibre Risk (DMFR) Declaration on the Woolclasser's Specification. This information is transferred to the sale catalogue as a risk rating.

There may be a large variation in the intensity of staining; however, all stain, regardless of its intensity, will cause problems for the processor. The dyeing of wool containing stain is restricted to dark colours.

# Lot size

Lot size may affect wool value. There may be some buyer resistance when one or two bale lines that are not considered to be a specialty type are presented for sale. Remember, the woolclasser's role is to make large, even lines of wool. If the broker considers the line is too large, the decision may be made to split the line; however, this is a marketing decision the broker will make based on prevailing market conditions.

# Dark and medullated fibre risk

With the introduction of Dark and Medullated Fibre Risk (DMFR) rating into the sale catalogue in July 2004, a grower's wool is ranked from 1 to 6, according to the risk of dark or medullated fibres occurring in the wool top.

Topmakers must meet the specifications set by the spinners. In their contractual specification, limits for dark and medullated fibre count per kilogram of top are set.

If buyers can confidently purchase wool that has been declared to be in a low risk category, they will be prepared to pay higher prices for a grower's line of wool.

If the grower has not made a declaration, buyers may take the view that the wool is in the higher risk category and decide against bidding.

### DMFR Scheme

Current information on the DMFR Scheme and DMFR ratings can be accessed from the website of the Australian Wool Testing Authority. You can link to this website from your CD-ROM.

# Calculating greasy wool prices

To apply market intelligence to wool preparation or for estimation of current market value for particular lines, access to current market quotations must be available. Greasy wool prices can be calculated using market information, Internet-based programs and 'guesstimation'.

## Information required

Information is also obtainable through weekly rural papers or reports available from major brokers.

For calculating greasy wool prices, the following information must be accessed:

- the non-measured characteristics of a line of wool (AWEX-ID)

- the measured characteristics (test results) for the line of wool

- the current AWEX market report (Premium and Discount Report)

- information from other industry market reporting services.

It is possible to accurately determine the greasy price for a line of wool or the entire clip once the test results and accompanying AWEX-ID have been received.

An example of an AWEX Premium and Discount Report is provided in Figure 1 (three pages).

**AWEXreports**

## SOUTHERN REGION

**Fleece Wool** — MF4E / ASF4E 80mm 1.0%vm — MF4E 90mm 1.0%vm

| Mic. | Strength (Nkt) 42 | 35 | 32 | W1 28 | W2 21 | W3 14 |
|---|---|---|---|---|---|---|
| 16.0 | 1720 n | 1540 n | 1470 n | 1430 n | 1250 n | 1195 n |
| .1 | +180 | | -70 | -110 | -290 | -345 |
| .2 | | | | | | |
| .3 | | | | | | |
| .4 | | | | | | |
| .5 | 1575 | 1465 | 1425 n | 1365 n | 1235 n | 1185 n |
| .6 | | 1451 | -40 | -100 | -230 | -280 |
| .7 | | 1437 | | | | |
| .8 | | 1423 | | | | |
| .9 | | 1409 | | | | |
| 17.0 | 1465 | 1395 | 1355 n | 1325 n | 1215 n | 1140 n |
| .1 | +70 | 1387 | -40 | -70 | -180 | -255 |
| .2 | | 1379 | | | | |
| .3 | | 1371 | | | | |
| .4 | | 1363 | | | | |
| .5 | 1415 | 1355 | 1320 | 1290 | 1200 | 1120 n |
| .6 | +60 | 1350 | -35 | -65 | -155 | -235 |
| .7 | | 1345 | | | | |
| .8 | | 1340 | | | | |
| .9 | | 1335 | | | | |
| 18.0 | 1395 | 1330 | 1295 | 1245 | 1175 | 1105 |
| .1 | +65 | 1323 | -35 | -85 | -155 | -225 |
| .2 | | 1316 | | | | |
| .3 | | 1309 | | | | |
| .4 | | 1302 | | | | |
| .5 | 1330 | 1295 | 1275 | 1225 | 1160 | 1095 |
| .6 | +35 | 1284 | -20 | -70 | -135 | -200 |
| .7 | | 1273 | | | | |
| .8 | | 1262 | | | | |
| .9 | | 1251 | | | | |
| 19.0 | 1255 | 1240 | 1215 | 1190 | 1095 | 1070 |
| .1 | +15 | 1225 | -25 | -50 | -145 | -170 |
| .2 | | 1210 | | | | |
| .3 | | 1195 | | | | |
| .4 | | 1180 | | | | |
| .5 | 1185 | 1165 | 1145 | 1105 | 1075 | 1045 |
| .6 | +20 | 1155 | -20 | -60 | -90 | -120 |
| .7 | | 1145 | | | | |
| .8 | | 1135 | | | | |
| .9 | | 1125 | | | | |
| 20.0 | 1130 | 1115 | 1085 | 1045 | 1035 | 1015 |
| .1 | +15 | 1103 | -30 | -70 | -80 | -100 |
| .2 | | 1091 | | | | |
| .3 | | 1079 | | | | |
| .4 | | 1067 | | | | |
| .5 | 1080 | 1055 | 1035 | 990 | 970 | 950 |

| 18.0 | 17.5 - 18.5 micron | 21.0 | 20.6 - 22.0 micron | n = nominal |
|---|---|---|---|---|
| 19.0 | 18.6 - 19.5 micron | 23.0 | 22.1 - 24.0 micron | |
| 20.0 | 19.6 - 20.5 micron | 25.0 | 24.1 - 25.0 micron | |

### Premium and Discounts

| Premium and Discounts | | | Micron 18.0 | 19.0 | 20.0 |
|---|---|---|---|---|---|
| Length | 110mm | | -30 | -21 | -12 |
| | 100mm | | -11 | -6 | -2 |
| | 90mm | | +2 | +5 | 0 |
| | 80mm | | 0 | 0 | -5 |
| | 70mm | | -25 | -22 | -20 |
| | 60mm | | -110 | -90 | -70 |
| Style | Spinners | 3 | na | +36 | na |
| | Best | 4 | 0 | 0 | 0 |
| | Good | 5 | -10 | -8 | -4 |
| | Ave/Inf | 6-7 | -40 | -28 | -20 |
| | Weaner | MWF | -10 | -10 | -9 |
| Vegetable Matter | 1% | | 0 | 0 | 0 |
| | 2% | | -30 | -20 | -12 |
| | 3% | | -50 | -25 | -25 |
| | 4% | | -70 | -45 | -45 |
| | 5% | | -90 | -60 | -60 |
| | 6% | | -100 | -100 | -90 |
| | 8% | | na | na | na |
| VM Type | Seed | E | 0 | 0 | 0 |
| | Burr | B | -4 | -3 | -2 |
| | Shive | S | -6 | -4 | -3 |
| | Moit | M | -9 | -6 | -6 |
| | Bogan Flea | F | na | na | na |
| | Noog/Bath | N/T | -25 | na | na |
| Colour | Scourable | M | -10 | -8 | -7 |
| | Light | H1 | -16 | -14 | -14 |
| | Med | H2 | -55 | -55 | -50 |
| | Heavy | H3 | na | na | na |
| | Water | N1 | na | na | -24 |
| Cott | Odd | C1 | -49 | -35 | -30 |
| | Medium | C2 | na | na | -120 |
| | Heavy | C3 | na | na | na |
| Derm | Odd | A1 | na | -65 | na |
| | Medium | A2 | na | na | na |
| A.M. | Yes | | 0 | 0 | 0 |
| | No | | -40 | -38 | -36 |
| Mid break | <40 | | +20 | +15 | +12 |
| | 40-60 | | 0 | 0 | 0 |
| | >60 | | -25 | -18 | -15 |
| Cert type | Grower | P | 0 | 0 | 0 |
| | Interlot | I | -30 | -33 | -35 |
| | Bulk Class | B | -45 | -40 | -40 |
| Lot size | | 2 | -4 | -2 | -2 |
| | | 6 | 0 | na | 0 |
| | | 16 | -4 | -3 | -2 |
| | | 30 | na | na | na |

*Figure 1 (page 1 of 3): AWEX Premium and Discount Report, Southern Region, 22 November, 2007 Week 21, Sale: M21*

# PREMIUM & DISCOUNT REPORT  -        SOUTHERN REGION

Week:    21            22-Nov-07    Sale:    M21

**Fleece Wool**

| Mic. | Strength (Nkt) 42 | 35 | 32 | W1 28 | W2 21 | W3 14 |
|---|---|---|---|---|---|---|
| **MF4E 90mm 1.0%vm** | | | | | | |
| 20.5 | 1080 | **1055** | 1035 | 990 | 970 | 950 |
| .6 | +25 | 1049 | -20 | -65 | -85 | -105 |
| .7 | | 1043 | | | | |
| .8 | | 1037 | | | | |
| .9 | | 1031 | | | | |
| 21.0 | 1050 | **1025** | 1015 | 985 | 940 | 915 |
| .1 | +25 | 1019 | -10 | -40 | -85 | -110 |
| .2 | | 1013 | | | | |
| .3 | | 1007 | | | | |
| .4 | | 1001 | | | | |
| .5 | 1015 | **995** | 980 | 960 | 930 | 905 |
| .6 | +20 | 991 | -15 | -35 | -65 | -90 |
| .7 | | 987 | | | | |
| .8 | | 983 | | | | |
| .9 | | 979 | | | | |
| 22.0 | 995 | **975** | 955 | 945 | 915 | 900 n |
| **MF5E 100mm 1.0%vm** | | | | | | |
| .1 | +20 | 974 | -20 | -30 | -60 | -75 |
| .2 | | 973 | | | | |
| .3 | | 972 | | | | |
| .4 | | 971 | | | | |
| .5 | 975 | **970** | 945 | 930 | 895 n | 850 n |
| .6 | +5 | 967 | -25 | -40 | -75 | -120 |
| .7 | | 964 | | | | |
| .8 | | 961 | | | | |
| .9 | | 958 | | | | |
| 23.0 | 965 | **955** | 935 | 875 n | 865 n | 820 n |
| .5 | +10 | 905 | -20 | -80 | -90 | -135 |
| 24.0 | 885 n | **880** n | 870 n | 855 n | 805 n | |
| .5 | +5 | 850 | | | | |
| 25.0 | | | | | | |
| .5 | | | | | | |
| 26.0 | | | | | | |

n = nominal quote

| Mic. | 42 | 35 | 32 |
|---|---|---|---|
| **XF5E 110mm** | | | |
| 26.0 | 660 | 655 | 650 |
| .5 | +5 | 610 | -5 |
| 27.0 | | 565 | |
| .5 | | 500 | |
| 28.0 | 465 | **460** | 455 |
| .5 | +5 | 430 | -5 |
| 29.0 | | 400 | |
| .5 | | 375 | |
| 30.0 | 372 | **370** | 368 |
| .5 | +2 | 360 | -2 |
| 31.0 | | 355 | |
| .5 | | 350 | |
| 32.0 | | **315** | |

| Premium and Discounts | | Micron 21.0 | 23.0 | 25.0 |
|---|---|---|---|---|
| **Length** | 110mm | -10 | -2 | 0 |
| | 100mm | -2 | **0** | **0** |
| | 90mm | **0** | 0 | -4 |
| | 80mm | -5 | -6 | -13 |
| | 70mm | -25 | -30 | -30 |
| | 60mm | -70 | -70 | -80 |
| **Style** | Spinners 3 | na | na | na |
| | Best 4 | **0** | +4 | na |
| | Good 5 | -3 | **0** | **0** |
| | Ave/Inf 6-7 | -18 | -18 | na |
| | Weaner MWF | -7 | na | na |
| **Vegetable Matter** | 1% | **0** | **0** | **0** |
| | 2% | -12 | -12 | -10 |
| | 3% | -20 | -20 | -28 |
| | 4% | -45 | -50 | -40 |
| | 5% | -60 | -60 | -55 |
| | 6% | -85 | -80 | na |
| | 8% | -95 | na | na |
| **VM Type** | Seed E | **0** | **0** | **0** |
| | Burr B | -1 | -1 | -2 |
| | Shive S | -3 | -3 | -2 |
| | Moit M | na | na | na |
| | Bogan Flea F | na | na | na |
| | Noog/Bath N/T | na | na | na |
| **Colour** | Scourable M | -5 | -5 | -3 |
| | Light H1 | -14 | -14 | na |
| | Med H2 | -50 | na | na |
| | Heavy H3 | na | na | na |
| | Water N1 | na | na | na |
| **Cott** | Odd C1 | -25 | -18 | na |
| | Medium C2 | -110 | -100 | na |
| | Heavy C3 | na | na | na |
| **Derm** | Odd A1 | na | na | na |
| | Medium A2 | na | na | na |
| **A.M.** | Yes | **0** | **0** | **0** |
| | No | -35 | -33 | na |
| **Mid break** | <40 | +10 | 0 | 0 |
| | 40-60 | **0** | **0** | **0** |
| | >60 | -10 | -8 | -2 |
| **Cert type** | Grower P | **0** | **0** | **0** |
| | Interlot I | -35 | -30 | na |
| | Bulk Class B | -38 | -37 | na |
| **Lot size** | 2 | 0 | 0 | na |
| | 6 | **0** | **0** | **0** |
| | 16 | -1 | -1 | na |
| | 30 | na | na | na |

**A guide to the Premium and Discount Report.**

To calculate a price for your wool:
1. Select the appropri    0
2. Apply the relevant premiums or discounts
3. Your calculated price will be in AUD cents/kg clean.
4. To calculate greasy price, multiply by yield and divide by 100

If VM Base <= to 1.0 % do not discount for VM type.
When applying premiums and discounts to XF5 (Good style) use 25.0 range.
Discounts and Premiums are calculated using a range of data
covering the last 2 months of sales in the region.

*Figure 1 (page Figure 1 (page 2 of 3): AWEX Premium and Discount Report, Southern Region, 22 November, 2007 Week 21, Sale: M21*

# PREMIUM & DISCOUNT REPORT - SOUTHERN REGION

## Merino Skirtings

### 80mm - MP5E

| Mic. | 1% | VM 2% | 5% | 8% | 15% |
|------|------|------|------|------|------|
| 17.0 | 1270 n | 1235 n | | | |
| .2 | +35 | 1221 | | | |
| .4 | | 1207 | | | |
| .6 | | 1193 | | | |
| .8 | | 1179 | | | |
| 18.0 | 1185 | 1165 | | | |
| .2 | +20 | 1149 | | | |
| .4 | | 1133 | | | |
| .6 | | 1117 | | | |
| .8 | | 1101 | | | |
| 19.0 | 1100 | 1085 | 1025 | | |
| .2 | +15 | 1071 | -60 | | |
| .4 | | 1057 | | | |
| .6 | | 1043 | | | |
| .8 | | 1029 | | | |
| 20.0 | 1035 | 1015 | 1005 | 940 n | 840 n |
| .2 | +20 | 997 | -10 | -75 | -175 |
| .4 | | 979 | | | |
| .6 | | 961 | | | |
| .8 | | 943 | | | |
| 21.0 | 945 | 925 | 880 | 825 n | 790 n |
| .5 | | 915 | -45 | -100 | |
| 22.0 | | 865 | 840 | | |
| .5 | | 845 | | | |
| 23.0 | | | | | |
| .5 | | | | | |
| 24.0 | | | | | |

n = nominal quote

## Premium and Discounts

| Premium and Discounts | | | Micron 19.0 | Micron 21.0 |
|------|------|------|------|------|
| **Strength** | | 42 | +10 | +7 |
| | | 35 | 0 | 0 |
| | W1 | 28 | -12 | -7 |
| | W2 | 21 | -25 | -20 |
| | W3 | 14 | -30 | -25 |
| **Length** | | 90mm | +15 | +12 |
| | | 80mm | 0 | 0 |
| | | 70mm | -28 | -25 |
| | | 60mm | -60 | -58 |
| **Style** | Best | 4 | +22 | +16 |
| | Good | 5 | 0 | 0 |
| | Average | 6 | -48 | -45 |
| | Stain | 7 | Refer S2,S3 | |
| | Bellies | MB | -45 | -40 |
| **VM Type** | Seed | E | 0 | 0 |
| | Burr | B | -5 | -5 |
| | Shive | S | -9 | -6 |
| | Moit | M | na | na |
| | Bogan Flea | F | na | na |
| | Noog/Bath | N/T | na | na |
| **Colour** | Light | H1 | -20 | -18 |
| | Med | H2 | -48 | -45 |
| | Heavy | H3 | na | na |
| | Water | N1 | na | na |
| **Stain** | Light | S1 | -55 | -50 |
| | Medium | S2 | -270 | -265 |
| | Heavy | S3 | -300 | -300 |
| **Cott** | Odd | C1 | -15 | -15 |
| | Medium | C2 | -65 | -60 |
| | Heavy | C3 | na | na |
| **A.M.** | Yes | | 0 | 0 |
| | No | | -14 | -13 |

## Merino Cardings

### Locks — MZ5E.

| Micron | 2% | V.M. % 5% | 8% |
|------|------|------|------|
| 17.0 | 570 w | | |
| 18.0 | 565 w | 640 c | |
| 19.0 | 550 w | 630 c | 615 c |
| 20.0 | 535 w | 610 c | 600 c n |
| 21.0 | 525 w | 600 c | 595 c |
| 22.0 | 520 w | 595 c | 580 c |

### Crutchings — MC5E.

| Micron | 2% | V.M. % 5% | 8% |
|------|------|------|------|
| 17.0 | 695 w | | |
| 18.0 | 675 w | 670 c | |
| 19.0 | 635 w | 665 c | 640 c |
| 20.0 | 630 w | 655 c | 630 c |
| 21.0 | 605 w | 645 c | 620 c n |
| 22.0 | 590 w | | |

### Lambs — MLF5E.40

| Micron | 0.2% | V.M. % 1% | 3% |
|------|------|------|------|
| 17.0 | 995 w | 915 w | |
| 18.0 | 965 w | 895 w | |
| 19.0 | 960 w | 870 w | 810 c |
| 20.0 | 910 w | 830 w | 765 c |
| 21.0 | | 820 w | |
| 22.0 | | | |

| Premium and Discounts | | Locks 2% | Locks 5% | Crutchings 2% | Crutchings 5% |
|------|------|------|------|------|------|
| **Style** | 4 | +8 | +7 | +28 | +28 |
| | 5 | 0 | 0 | 0 | 0 |
| | 6 | -20 | -15 | -35 | -40 |
| **Stain** | s1 | -15 | -15 | -28 | -27 |
| | s2 | -40 | -38 | -60 | -60 |
| | s3 | na | na | -75 | -75 |
| | q3 | na | na | na | na |

w = washing (17% scoured yield)     c = carbo (Aust. Carbonising yield)

*Figure 1 (page 3 of 3): AWEX Premium and Discount Report, Southern Region, 22 November, 2007 Week 21, Sale: M21*

# Calculating the valuation

To calculate the valuation it is first necessary to establish the base price for the micron. Discounts or premiums are applied for the traits that need to be

identified. If the discount is unavailable, an estimate should be made of the possible range from other quotes that align with the specific scenario.

Once the clean price is established, the greasy wool price is calculated by multiplying the yield (Schlumberger dry combing) and dividing the answer by 100 to arrive at the cent price per kilogram.

The following pages give examples of calculations of greasy wool prices on different lines of wool offered for sale.

There are two methods shown for the same wool lot offered for sale.

## Method 1: AWEX Premium and Discount Report

The first method uses the AWEX Premium and Discount Report, Northern Region Sale 14, 6 October 2005, pages 19–23. An AWEX Premium and Discount Report is a 'snapshot' of one market and is specific only to that market.

This method involves reading the test results as printed in the sale catalogue, interpreting the AWEX-ID and using AWEX Premium and Discount Reports to determine a base micron price, cent per kilogram (c/kg) clean, and then applying various adjustments to that price, depending on whether the wool attracts a discount or premium.

## Method 2: WoolQ Ready Reckoner

The second method of valuing the same line of wool uses the online Ready Reckoner system developed by Australian Wool Innovation, through WoolQ. WoolQ utilises recent sales data to generate a valuation of a lot of wool to provide users an indicative price for the lot. To utilise the Ready Reckoner, users are required to enter clip information into the tool to return indicative prices. The more clip information you provide, the more accurate the indicative price will be.

See the WoolQ Ready Reckoner tool at www.woolq.com/portal/readyReckoner

# Example 1

Example 1 is a line of Merino fleece containing hard heads and medium discolouration. The details are shown in the sale catalogue shown in Figure 2.

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM NET | MIC | S/L MM | CV% | S/S N/KT | POB T | M | B | SS25 DMFR | LOT No. | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 1.8 1.2 | 63.4 1834 | 67.0 1938 | 71.7 2074 | 65.1 1883 | 3.0 2893 | 20.4 20.6% | 97 MF5N.H2 AAAM | 14 | 32 | 32 | 60 | 8 | | B 120 P | 15 |

*Figure 2: Wool sale catalogue entry for Example 1.*

## Method 1: AWEX Premium and Discount Report

The first method uses the AWEX Premium and Discount Report (in this case, the example provided in Figure 1).

The first step is to determine the Base Micron price for the appropriate micron range in cents per kilogram (c/kg) clean. For the 20.4-micron wool in this example, this price is 1067 c/kg (circled in the AWEX Premium and Discount Report).

The next steps involve calculating discounts or premiums that are applied to this Base Micron price. For 20.4-micron wool, these are shown in the table below. They are circled in the extract from the AWEX Premium and Discount Report (Figure 1).

### Calculating premiums and discounts

|  |  | c/kg |
|---|---|---|
| Base Price Clean | | 1067 |
| Staple Strength (N/KT) | 32 | - 30 |
| Staple Length (S/L) | 97 | -2 |
| Style | 5 | -4 |
| Vegetable Matter (VMB) | 3.0% | -25 |
| Vegetable Matter Category (NMC) | S | -3 |
| Colour | H2 | -50 |
| Mid Breaks (POB/M) | 60% | -15 |
| Total Discounts | | -129 |

Total discounts are obtained by adding the individual discounts. The total discount in this case is 129 c/kg.

### Calculating Clean Price

To calculate the Clean Price, the total discounts are deducted from the Base Price Clean.

|  | c/kg |
|---|---|
| Base Price Clean | 1067 |
| Less Total Discounts | 129 |
| Clean Price | 938 |

### Determining the Greasy Price

To determine the Greasy Price, the following formula is used:

$$\text{Greasy Price} = \text{Clean Price} \times \left( \frac{\text{SCH DRY}}{100} \right)$$

Therefore, in this example, the Greasy Price is calculated as follows:

$$\text{Greasy Price} = 938 \times \left( \frac{65.1}{100} \right)$$

Greasy Price = 611 c/kg

# Method 2: WoolQ Ready Reckoner

The second method of wool valuing uses the WoolQ Ready Reckoner. THis involves transferring the appropriate details from the sale catalogue and inputting them into the WoolQ Ready Reckoner.

See the WoolQ Ready Reckoner tool at
www.woolq.com/portal/readyReckoner

## MARKET ANALYSIS

To access these tools, you will need to click on Ready Reckoner in the navigation menu on the left-hand side of the screen and choose either Market Analysis or Market Results.
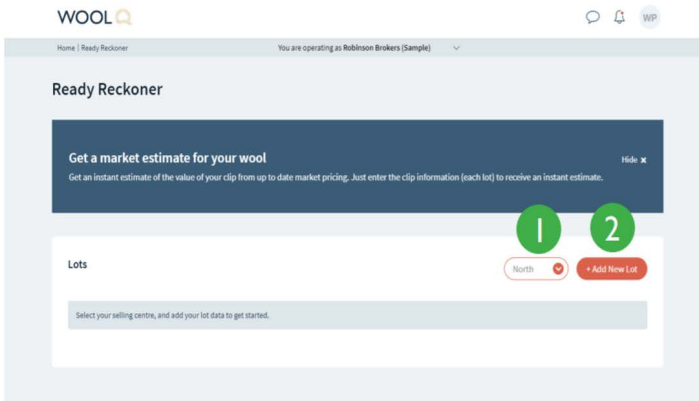
The landing page for Market Analysis looks like this. It is important that the first thing you do is determine your selling centre.

Click on the drop-down box ❶ and choose either North, South or West.
Once you have chosen your selling centre, click on Add New Lot ❷ to enter your real or hypothetical lot information.



*Figure 3: WoolQ worksheet for Example 1.*

When you land on the Market analysis page and follow the instructions above you will be presented will be presented with a Lot details window. The top six squares need to be completed as a minimum requirement. The bottom three squares are optional. We recommend you fill in all the fields to gain the most accurate results.

**Required:**
**AWEX ID:** AWEX ID is a system for the appraisal and description of non-measured characteristics of greasy wool. By combining AWEX ID with presale objective measurements, a full and credible description for wool is possible. Enter the relevant ID here based on the analysis you wish to undertake.
**Description:** This is the Wool description (i.e. AAAM, AAM or BLS etc).
**No. bales:** This numeric field will determine the number of bales you want to include.
**Weight:** Enter the weight of the bales as a total value in kilograms.
**Micron:** Enter the micron value you wish to analyse.
**Yield:** Yield is a measure of the amount of clean wool produced from a kilo of greasy wool. Enter your estimated yield here.

**Optional:**
**VM:** Vegetable Matter – enter a numeric value here.
**SS** (Staple Strength): Strength measures the force required to break the wool. It is measured in Newtons per kilotex. Enter your number value here.
**Length:** Enter a numeric value for the length of wool you are going to analyse.
**POBM:** Position of Break is a measure of the position in the staple (base, mid or tip) where it will break given enough force. Enter a numeric value here.
**Mulesing Status:** Select a mulesing status option from the dropdown box.

Click on SAVE to start the analysis.

1. You can tick or untick a lot – if you have entered more than one lot you are able to re-calculate the figures you see by adding or subtracting lots using these tick boxes.
2. You can edit the details in the lot/s you have entered, click on the pencil icon and you are presented the Lot Details window again and can change any of the details you entered.
3. Selling Centre – you can toggle between the different selling centres to see what your wool is worth across Australia.
4. Add New Lot + – you are able to add multiple lots for analysis. Click on this and you will enter different lot information into the Lot Details window as outlined above.
5. There is an accuracy indicator for the estimates that the WoolQ Ready Reckoner returns. This indicator lets you know the confidence level based on the input data you have used. The more green bars that are visible the greater the accuracy. If this is low, we suggest adding more detail to your lot information using the pencil icon and recalculating.

Wool valuing

**Method 2: WoolQ Ready Reckoner**

| Characteristic | AWEX Premium and Discount Report | WoolQ Ready Reckoner |
|---|:---:|:---:|
| Vegetable Matter | ✓ | ✓ |
| VM Type | ✓ | ✓ |
| Staple Length | ✓ | ✓ |
| Staple Strength | ✓ | ✓ |
| Colour | ✓ | X |
| Style | ✓ | ✓ |

✓ = detail provided

X = no detail provided

# Example 2

Example 2 is a line of crossbred fleece wool, most likely from crossbred ewes that have had lambs at foot, resulting in a low strength value. See the wool sale catalogue extract shown in Figure 4.

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM NET | MIC | S/L MM | CV% | S/S N/KT | POB T | M | B | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.8 | 72.8 | 76.9 | 79.1 | 75.8 | 0.8 | 26.0 | 115 | 17 | 32 | 27 | 70 | 3 | | B 121 | 15 |
| 0.0 | 2081 | 2199 | 2261 | 2167 | 2859 | 21.2% | | | XF5E.MCI | | | | | | |
| 0.0 | | | | | | | AAAFX | | | | | | | P | |

Figure 4: Wool sale catalogue entry for Example 2.

## Method 1: AWEX Premium and Discount Report

This method uses the AWEX Premium and Discount Report provided in Figure 1.

### Calculating premiums and discounts

| | c/kg |
|---|---|
| Base Price Clean | 655 |
| Staple Strength | -5 |
| Staple Length | -0 |
| Style | -0 |
| VMB | -0 |
| VM Type | -0 |
| Colour | -0 |
| Total Discounts | -5 |

### Calculating Clean Price

To calculate Clean Price, the total discounts are deducted from the Base Price Clean.

| | c/kg |
|---|---|
| Base Price Clean | 655 |
| Less Total Discounts | -5 |
| Clean Price | 650 |

### Determining the Greasy Price

To determine the Greasy Price, use the formula:

Greasy Price = Clean Price x $\left( \dfrac{\text{SCH DRY}}{100} \right)$

Therefore, in this example, the Greasy Price is calculated as follows:

Greasy Price = 650 x $\left( \dfrac{75.8}{100} \right)$

Greasy Price = 492.7 c/kg

# Example 3

Example 3 is a line of Merino pieces. See the wool sale catalogue extract shown in Figure 6.

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | | | |
| 0.0 4.2 | 58.4 627 | 61.8 664 | 67.9 729 | 59 634 | 4.2 1074 | 19.6 21.9 | 88 MPCS | 23 | 35 | 8 | 67 | 25 | | ME1537 P | 7 |

*Figure 6: Wool sale catalogue entry for Example 3.*

## Method 1: AWEX Premium and Discount Report

These calculations use the figures provided in the AWEX Premium and Discount Report in Figure 1.

### Calculating premiums and discounts

| | c/kg |
|---|---|
| Base Price Clean | 1043 |
| VMB | -60 |
| VM Type | -9 |
| Total Discounts | -69 |

### Calculating Clean Price

To calculate Clean Price, the total discounts are deducted from the Base Price Clean.

| | c/kg |
|---|---|
| Base Price Clean | 1043 |
| Less Total Discounts | 69 |
| Clean Price | 974 |

### Determining the Greasy Price

To determine the Greasy Price, use the formula:

$$\text{Greasy Price} = \text{Clean Price} \times \left( \frac{\text{SCH DRY}}{100} \right)$$

Therefore, in this example, the Greasy Price is calculated as follows:

Greasy Price = 974 x $\left( \dfrac{59}{100} \right)$

Greasy Price = 575 c/kg

# Example 4

Example 4 is a line of Merino crutching containing stain (most likely not picked for stain). The details are shown in the sale catalogue provided as Figure 8.

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM NET | MIC | S/L MM | CV% | S/S N/KT | POB T | M | B | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.3 | 60.4 | 64.3 | 66.7 | 62.8 | 5.1 | | | | | | | | | B 126 | 3 |
| 3.6 | 345 | 368 | 382 | 359 | 572 | 21.1 | MC6S.30S2 | | | | | | | | |
| 1.2 | | | | | | | MCRT | | | | | | | P | |

*Figure 8: Wool sale catalogue entry for Example 4.*

# Method 1: AWEX Premium and Discount Report

### Calculating premiums and discounts

|                     | c/kg  |
|---------------------|-------|
| Base Price Clean    | 645   |
| Style (Crutch)      | -40   |
| Stain               | -60   |
| Total Discounts     | -100  |

### Calculating Clean Price

To calculate Clean Price, the total discounts are deducted from the Base Price Clean.

|                      | c/kg |
|----------------------|------|
| Base Price Clean     | 645  |
| Less Total Discounts | -100 |
| Clean Price          | 545  |

### Determining the Greasy Price

To determine the Greasy Price, use the formula:

$$\text{Greasy Price} = \text{Clean Price} \times \left( \frac{ACY}{100} \right)$$

(ACY is used because the crutchings will be carbonised.)

Therefore, in this example, the Greasy Price is calculated as follows:

$$\text{Greasy Price} = 545 \times \left( \frac{60.4}{100} \right)$$

Greasy Price = 329 c/kg

To obtain these results it would be necessary to subscribe to AWEX Marketing Reporting Services. Copies of the Premium and Discount Reports are made available to woolclassers at a reduced price. (More information is available at www.awex.com under Market Information).

WoolQ's Ready Reckoner is a free service but Internet access is required (https://www.woolq.com/portal/readyReckoner).

The other option is to use weekly market reports that appear in the newspapers or the websites of the major brokers. These provide a variety of reports including weekly market summaries.

# Activity 1: Calculating greasy price

Use the AWEX Premium and Discount Report provided as Figure 1 or obtain a current report from your teacher.

Calculate the expected average Greasy Price of the following Sale Catalogue Lots would obtain.

a. Lot 4 ....................................................................................................

b. Lot 116 ...............................................................................................

c. Lot 1085..............................................................................................

d. Lot 1092 .............................................................................................

e. Lot 1601 .............................................................................................

f. 1603 ...................................................................................................

## Lot 4

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | | | |
| 0.0 2.7 0.0 | 70.5 349 | 74.0 366 | 78.4 388 | 72.0 356 | 2.7 495 | **17.3** 19.7% | 72 MF5S.H1 AAASUP | 13 | 41 | 67 | 28 | 5 | | 4 P | 3 |

| | | | |
|---|---|---|---|
| Micron | _____ | Base Price | _____ |
| Strength | _____ | Total Discounts | _____ |
| Length | _____ | Clean Price | _____ |
| Style | _____ | | |
| VMB | _____ | Greasy Price = | |
| VM Type | _____ | CLEAN x SCH DRY ÷ 100 | _____ |
| Colour | _____ | | |
| Mid Breaks | _____ | Greasy Price | |
| Lot Size | _____ | | _____ |

## Lot 116

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | | | |
| .1 1.0 .5 | 58.0 777 | 61.8 828 | 64.7 866 | 60.2 806 | 1.6 1339 | **18.3** 23.5% | 82 | 14 | 35 | 6 | 60 | 34 | | 116 P | 7 |
| | | | | | | | MF6N.H2C1 **DYNEVOR DOWNS/G** N23 COLM | | | | | | | | |

| | |
|---|---|
| Micron | _____ |
| Strength | _____ |
| Length | _____ |
| Style | _____ |
| VMB | _____ |
| VM Type | _____ |
| Colour | _____ |
| Cott | _____ |
| Mid Breaks | _____ |

| | |
|---|---|
| Base Price | _____ |
| Less Total Discounts | _____ |
| Clean Price | _____ |
| Greasy Price = | |
| CLEAN x SCH DRY ÷ 100 | _____ |
| Greasy Price | _____ |

## Lot 1085

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | | | |
| 2.5 .7 .1 | 57.4 481 | 61.0 511 | 65.9 552 | 58.5 490 | 3.3 838 | **18.2** 22.0% | 76 | 18 | 26 | X | 78 | 22 | | 1085 P | 5 |
| | | | | | | | MP5B.H1 **NINDI THANA** TO5 MPCS | | | | | | | | |

| | |
|---|---|
| Micron | _____ |
| Strength | _____ |
| Length | _____ |
| Style | _____ |
| VMB | _____ |
| VM Type | _____ |
| Colour | _____ |

| | |
|---|---|
| Base Price | _____ |
| Less Total Discounts | _____ |
| Clean Price | _____ |
| Greasy Price = | |
| CLEAN x SCH DRY ÷ 100 | _____ |
| Greasy Price | _____ |

## Lot 1092

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 DMFR | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | DMFR | | |
| 2.4 1.3 | 53.5 337 | 57.1 359 | 62.5 393 | 54.4 342 | 4.7 629 | **21.0** 23.0% | MZ6E MLKS | | | | | | | 1092 P | 4 |

| | |
|---|---|
| Micron | _____ |
| Style | _____ |
| VM% | _____ |

| | |
|---|---|
| Base Price | _____ |
| Greasy Price = | |
| CLEAN x ACY ÷ 100 | _____ |
| Greasy Price | _____ |

## Lot 1601

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | DMFR | | |
| 2.0 .9 | 64.8 566 | 68.3 596 | 72.9 636 | 66.5 581 | 2.9 873 | **27.6** 23.6% | 104 XF5E.H1 AAAMX | 19 | 20 | 15 | 23 | 62 | | 1601 P | 6 |

Micron _____

Strength _____

Length _____

Style _____

VMB _____

VM Type _____

Colour _____

Base Price _____

Less Total Discounts _____

Clean Price _____

Greasy Price =

CLEAN x SCH DRY ÷ 100 _____

Greasy Price _____

## Lot 1603

| VMC 123 | ACY | JCSY | SCD 17% | SCH DRY | VBM | MIC | S/L | | S/S | POB | | | SS25 | LOT No | BS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NET | | MM | CV% | N/KT | T | M | B | DMFR | | |
| 1.0 .9 .4 | 67.0 243 | 70.6 256 | 74.5 270 | 68.9 249 | 2.3 362 | **26.0** 25.9% | XWF5S.60H1 FXLMS | | | | | | | 1603 P | 3 |

Micron _____

Strength _____

Length _____

Style _____

VMB _____

VM Type _____

Colour _____

Base Price _____

Less Total Discounts _____

Clean Price _____

Greasy Price =

CLEAN x SCH Dry ÷ 100 _____

Greasy Price _____

# Activity 2: Comparison of valuation methods

a. Select any three lots of Activity 1 and use the WoolQ Ready Reckoner program to determine the value (Greasy Price c/kg).

Fill in the valuation details for your selected lots in the table below.

| Lot | AWEX Premium and Discount Report | WoolQ Ready Reckoner program |
|-----|----------------------------------|------------------------------|
|     |                                  |                              |
|     |                                  |                              |
|     |                                  |                              |

       b.      If you were asked to provide a grower with a valuation of the Greasy Price for these lots, which figure (the figure based on the AWEX Premium and Discount Report or the figure derived from the WoolQ Ready Reckoner program) would you use?

             Give your reasons.

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# Activity 3: Influences on price

a. What information can be gained from following market reports in the preparation of wool in the shearing shed?

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b. Why is the micron (average fibre diameter) the most important of all the wool characteristics?

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c. Why does finer wool receive a premium when it has tested 42 N/ktex or better?

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d. Give the standard greasy length that buyers expect when purchasing fleece wool of the following microns.

18u ...............................................................................................

19u ...............................................................................................

20u ...............................................................................................

21u ...............................................................................................

23u ...............................................................................................

25u ...............................................................................................

e. Why is a 30c to 40c discount placed on average style Merino fleece wool, compared to good topmaking types?

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# Activity 4: Calculating clean price

Calculate the Clean Price for the following wool lots sold at auction.

$$\text{Clean Price} = \frac{\text{Greasy Price}}{\text{Yield}} \times \frac{100}{1}$$

| SCH DRY | VMB NET | MIC | SL MM CV% | SS N/KT | POB | | | LOT | PRICE GREASY | CLEAN VALUE |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T | M | B | | | |
| 69.0 | .5 | 21.5 21.9% | 93 12 MF5E AAAM | 38 | 78 | 20 | 2 | 1 | 483 | |
| 72.0 | .5 | 21.4 22.2% | 94 14 MF5E AAAM | 35 | 73 | 27 | X | 10 | 500 | |
| 71.0 | 1.2 | 21.4 | 96 13 MF5B AAAM | 36 | 5 | 15 | 80 | 24 | 498 | |
| 68.0 | 1.6 | 21.5 | 94 16 MF5B AAAM | 34 | 2 | 24 | 74 | 25 | 480 | |
| 73.0 | 1.0 | 21.6 | 96 14 MF5E AAAM | 38 | 18 | 40 | 42 | 30 | 505 | |
| 71.0 | 1.8 | 21.6 | 98 16 MF5B AAAM | 34 | X | 20 | 80 | 35 | 483 | |

a. Which of the above lots obtained the highest Clean Price?

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b. Which lot achieved the lowest price?

.........................................................................................................

c. What would be the market quote for 21.5 micron wool for this sale?

.........................................................................................................

# Activity 5: Factors influencing wool valuation

Select a line of wool of a particular micron value you are familiar with. (It could be one from a sale catalogue or one of the examples provided here or from a shed in which you have worked.)

Enter the data into the WoolQ Ready Reckoner program to obtain a valuation: Clean Price, Greasy Price, and Total Price. (Note: You may choose to use one of the lots from Activity 1.) Factors such as Staple Strength, Position of Break, Staple Length and Vegetable Matter percentage will all influence the valuation.

Select one factor from those that influence wool value. Alter this factor by changing its value in the WoolQ Ready Reckoner program. You might want to select and alter two or three different values to see how the changes influence the valuation.

Write a brief report (50 to 100 words) outlining the influence of changes in the value of this factor on the overall wool valuation. (Note: You may use figures and tables in your report.)

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