Information Standards Along the Meat Supply Chain

Australian Red Meat Industry

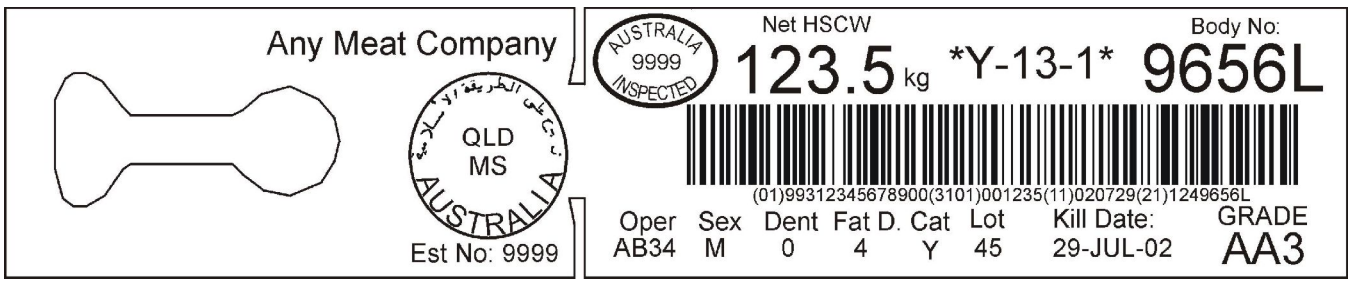
Technical Fact Sheet - Variable Weight Carcase Label

The label requirement detailed only relates to the GS1 System. Other human readable information may be printed on the carton ticket, which may not be bar coded. These requirements have not been included in this document and left to the trading partners, some of which may be for statutory requirements.

Bar Code Symbology

The bar code symbology used in the Australian Red Meat Industry Standard Variable Weight Carcass Label is GS1-128 (previously called UCC/EAN-128). The GS1-128 Bar Code Symbol allows secondary attribute information over and above primary item identification to be represented in the barcode. Application Identifiers (AIs) effectively act as prefixes for this information and define the meaning and structure of the embedded data which follows.

Also allow you to represent attribute information such as weight, slaughter date and serial numbers in a standard format. This ensures that the attribute information encoded by one company can also be scanned and interpreted by any other company in the supply chain.



Minimum bar code information required represented by Application Identifiers (AIs)

AI	Example Data & Format	Attribute Information
(01)	**99327111031766** n14- 14 digits numeric (fixed length)	**Global Trade Item Number (GTIN)** Item Identification. (Primary identification of the product carton) 9 indicates that it is a variable measure (weight) product 93271110 - GS1 Company Prefix. (7, 8 or 9 digits in length depending on the GS1 Prefix allocated) 3176 – Company product code or AUSMEAT code. 3, 4 or 5 digits in length. 6 – Check Digit
(310n)	**001235** n6 - 6 digits numeric (fixed length)	**Net Weight – Kilograms** In this example as n = 1, start at the very right of the measurement data field and count to the left 1 place. The net weight is 123.5kg. n represents the decimal point indicator, which shows where the decimal point is located.
(11)	**020729** n6 - 6 digits numeric (fixed length)	**Production Date (YYMMDD)** Referred to as the 'Kill' or 'Slaughter' date in the meat industry In this example the kill date is 29th July 2002.
(21)	**1249656L** an…20 – alpha numeric up to 20 characters (variable length)	**Serial Number** In this example an 8 digit alpha-numeric serial number has been allocated.

Note: Additional AI's can also be used at the suppliers discretion.

Concatenation

Concatenation (stringing AIs together) is an effective means for presenting multiple element strings in a single GS1-128 Bar Code Symbol and should be used to conserve space and optimise scanning operations.

Maximum Length

When concatenating AIs the maximum number of characters in the GS1-128 Bar Code Symbol must not exceed 48. This includes Function Code 1 (FNC1) when used as a field separator, but excludes auxiliary characters and the Symbol Check Character (Modulo 103).
The length of the GS1-128 Bar Code Symbol must never exceed 165mm, including the Quiet Zones (light margins).

Magnification

The size of the GS1-128 Bar Code Symbol depends on:

- The X-dimension (single bar width) chosen
- The number of characters encoded
- The number of non-numeric characters in the data

For the meat industry it was determined that it would be primarily a hand scanning requirement, which has an allowable magnification range of 25% - 100% (X-dimension 0.25mm – 1.02mm)
For GS1-128 Bar Code Symbols that are to be scanned in a general distribution environment (primarily automated scanning), the allowable magnification range is 48.7% - 100% (X-dimension 0.50mm – 1.02mm).

Height of Bars

The minimum bar height is 13mm. For scanning in a General Distribution (automated scanning) environment, the minimum bar height for a GS1-128 Bar Code Symbol is 32mm.

Human Readable Interpretation

Print the Human Readable Interpretation either above or below the symbol bars. Make sure the Application Identifiers (AIs) are clearly recognisable by placing them in brackets in the Human Readable Interpretation only.

Further Information

For further technical information please refer to the **GS1 Australia User Manual - Numbering and Bar coding** by visiting the information library at www.gs1au.org or contact GS1 Australia on 1300 366 033.