

Catalogue information

Identity: The sheep's identity detail indicates the Registered Flock (2 or 3 letter prefix), the year of drop (the first two numbers), followed by the tag number (4 numbers).

The sheep's sire and dam, birth date, and the number in the birth are listed after the sheep's identity. The sire and dam plus the birth details are taken into account when calculating each sheep's ASBVs and therefore Index.

Note: When a registered Dohne is purchased the seller, when requested, is required to give the buyer the sheep's Flock Book Certificate as proof of the Dohne QA and performance.

Final Grade: There are 4 Final Grades, R, C, UR and P. **A ram with an R grade is a high quality commercial flock or stud ram.** Sheep with a C (Cull), UR (Unregistered) or P (Pending) Grade cannot be sold for breeding.

Index: A sheep's Index is the combined value for measured traits in the Dohne Breeding Objective. An Index Value of 100 is the average performance of the year 2000 Drop Registered Dohne progeny. Numbers above 100 are higher performing. An index value of 130 and above is at the higher end (top 50%) of the present drop – see the table on the following page.

Trait ASBVs: On the following page each individual ASBV trait is described. In general an ASBV describes the expected performance of a Dohne sheep's progeny. Each measured trait is reported as a Dohne ASBV (as a deviation from the average performance of all the sheep in the 2000 drop progeny – the average is expressed as 0.0).

As a commercial breeder how can I relate a ram's ASBV to my flock's performance?

1. Ask a local Dohne breeder how a Dohne flock will perform on your property.
2. Relative to this flock performance define your flock's breeding objective for each trait, e.g. reduce FD relative to the general Dohne performance.
3. Select rams for the stated breeding objective, e.g., rams with an ASBV finer than average, that is, ASBVs that have a negative value (finer) than 0.0.

Your Benchmark – the current Dohne standard

A guide to the performance of a registered Dohne relative to the current Dohne breed standard (2014 drop – the most recent drop) is reported in the table below.

For example, if a Dohne ram (or ewe) has a post weaning bodyweight (PWT) ASBV of **4.4** this sheep is in the highest 20% for PWT when compared with the current Dohne standard. That is they have a higher PWT than the 20% band (4.3%). The ram is not in the highest 10% as they would need to have an ASBV of 4.8 or higher. In this context "highest" means the extreme end of performance for a trait; it does not indicate "best" as best is defined by a breeder's objective.

Percentile Band	WWT (kg)	PWT (kg)	YEMD (mm)	YFat (mm)	YCFW (%)	YFD (µm)	YFDCV (%)	NLW (%)	Dohne Index
10	4.2	4.8	1.4	0.6	10	-1.0	-1.4	9.0	148
20	3.7	4.3	1.1	0.4	8	-0.8	-1.1	7.0	142
30	3.4	3.8	0.9	0.4	7	-0.7	-0.9	5.0	137
40	3.1	3.5	0.7	0.3	5	-0.5	-0.7	4.0	133
50	2.8	3.2	0.6	0.2	4	-0.4	-0.6	2.0	130
70	2.2	2.5	0.3	0.0	2	-0.1	-0.2	0.0	123
90	1.4	1.5	-0.2	-0.2	-1	0.3	0.4	-4.0	113

In the table above W before the trait abbreviation indicates the Weaning age (2 up to 5 months of age); P is Post-weaning age (7 up to 10 months of age); Y is Yearling age (10 up to 13 months of age).

Trait name, abbreviation and description

WT: Rams with a positive ASBV for **bodyweight** (WT) will produce lambs that grow faster and reach their target weights sooner. A ram that has a WT of 4.4 will generally breed progeny that are genetically 2.2kg heavier than those of a ram with a WT ASBV of 0.0 (zero).

EMD: Rams with a higher ASBV for **eye muscle depth** (EMD) will produce lambs that have a higher lean meat yield. A ram that has a EMD of 0.8 mm will breed progeny that genetically have a 0.4 mm deeper eye muscle area than a ram with an EMD ASBV of 0.0 (zero).

Fat: Rams with a lower **fat depth** (Fat) ASBV will produce lambs that are leaner at the same weight. A ram with a negative Fat ASBV means that his progeny are leaner than those sired by a ram with a positive Fat ASBV.

CFW: Rams with a higher ASBV for **clean fleece weight** (CFW) will produce progeny that cut more wool. A ram that has a CFW of 2.6% will breed progeny that genetically cut 1.3% more wool than progeny of a ram with a CFW ASBV of 0.0 (zero).

FD: Rams with a lower **fibre diameter** (FD) ASBVs are finer. A ram with an ASBV of -2.4 will breed progeny that are genetically -1.2 microns finer than those of a ram with a FD of 0.0.

FDCV: Rams with a lower ASBV for **fibre diameter coefficient of variation** (FDCV) will produce progeny that have less variation in FD in their fleece. A ram with an ASBV of -1.2% will generally breed progeny that are genetically -0.6% lower FDCV than those of a ram with a FDCV ASBV of 0.0 (zero). A lower FDCV% is associated with higher staple strength.

Dohne index value: (high growth, maintain fleece) The index value is a summary of the sheep's performance for **measured** traits. A ram with a higher index value will breed progeny that are more suited to higher meat production and maintain fleece weight and fibre diameter.

Dohne Genetic Performance Information

The Dohne breeding system

Dohne ram breeders and commercial producers are obtaining a major improvement in the breeding progress and commercial returns from their flock by using the Dohne Genetic Performance system.

When Dohne Genetic Performance is combined with the Dohne Classers Grading system the breed has the most advanced across-flock sheep breed evaluation system in Australia. Dohne Genetic Performance information is focused on maximizing \$dollar returns for commercial sheep producers while the Dohne Classers Grading system ensures conformation, quality and type standards are maintained. No other breed offers its members and their commercial clients the quality assurance and ability to make across-flock assessments. The system has been developed to maximize the standard and genetic improvement of all breeders' flocks.

Breeding progress could be as much as 50% greater if genetic performance records are used efficiently. Even larger gains are possible when breeders use the benefit that comes from all Registered Dohne ram breeding flocks being linked together thus allowing more accurate selections from the best genetics available.

When commercial meat and wool producers buy Dohne rams they have a guaranteed and easy to use genetic improvement service. **Dohne ram breeders are required to use and provide to clients their sale rams Genetic Performance and Classers Grade in a standard format.** Genetic Performance includes PWT, YCFW, YFD, YFDCV and Dohne Index.

Dohne genetic performance records – Australian Sheep Breeding Values (ASBV)

ASBV are calculated by “Sheep Genetics” and describe the expected performance of the progeny of a sheep, not just the performance of the sheep itself. An ASBV therefore describes the breeding value of the sheep – and as a breeder isn't that what you want to know?

Dohne ram breeders produce ASBVs for major measured performance traits, including the traits required to be recorded– weaning and post-weaning weight, fleece weight, fibre diameter and CV of fibre diameter. Most breeders also record eye muscle and fat depth.

Dohne ASBV performance is based on the measured evaluation made by the ram breeder. The measurement is then **value added** by accounting for factors that breeders recognise can improve the ability of measured information to describe a sheep's breeding value. Factors accounted for include the trait heritability, if the sheep was a twin or single, date of birth of the lamb, the sheep's pedigree (relative's) performance and difference in environment between groups.

Pedigree performance records allow all Dohne ASBVs to be reported across-years and across-flocks. The result is that the performance of all Dohnes from large and small, old and new, Registered Dohne ram breeding flocks can be directly compared.

Dohne ASBV describes the expected performance of the sheep's progeny for a trait relative to the performance of the sheep in all Registered Dohne ram breeding flocks.

The Dohne Index – higher growth, maintain fleece

A ram with a higher index value will breed progeny that are more suited to a breeding objective for higher meat production, including higher reproduction, and maintain fleece weight, fibre diameter and staple strength. The Dohne Index summarizes into one number the genetic performance of a sheep for measured traits – weaning and yearling bodyweight, muscle depth, fat depth, reproduction, fleece weight, fibre diameter and CV of fibre diameter. This summary value of all the traits simplifies and improving the accuracy of selections.

More Information

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Most up to date and accurate performance

It is the intention of this catalogue to present the most up to date and accurate performance ASBVs and index values to assist buyers in their choice of animals. To achieve this, the ASBVs and index values presented in this catalogue are taken from the most recent breed analysis that all sheep were included in. The ASBVs and index values presented may vary over time as a result of more performance information from the sheep and/or relatives being added into the Dohne analysis.

The Australian Dohne Breeders Association (who own and manage the database) and Sheep Genetics who conduct the analysis do not collect the information used in the analysis and therefore are not responsible for the ASBVs and index values reported.