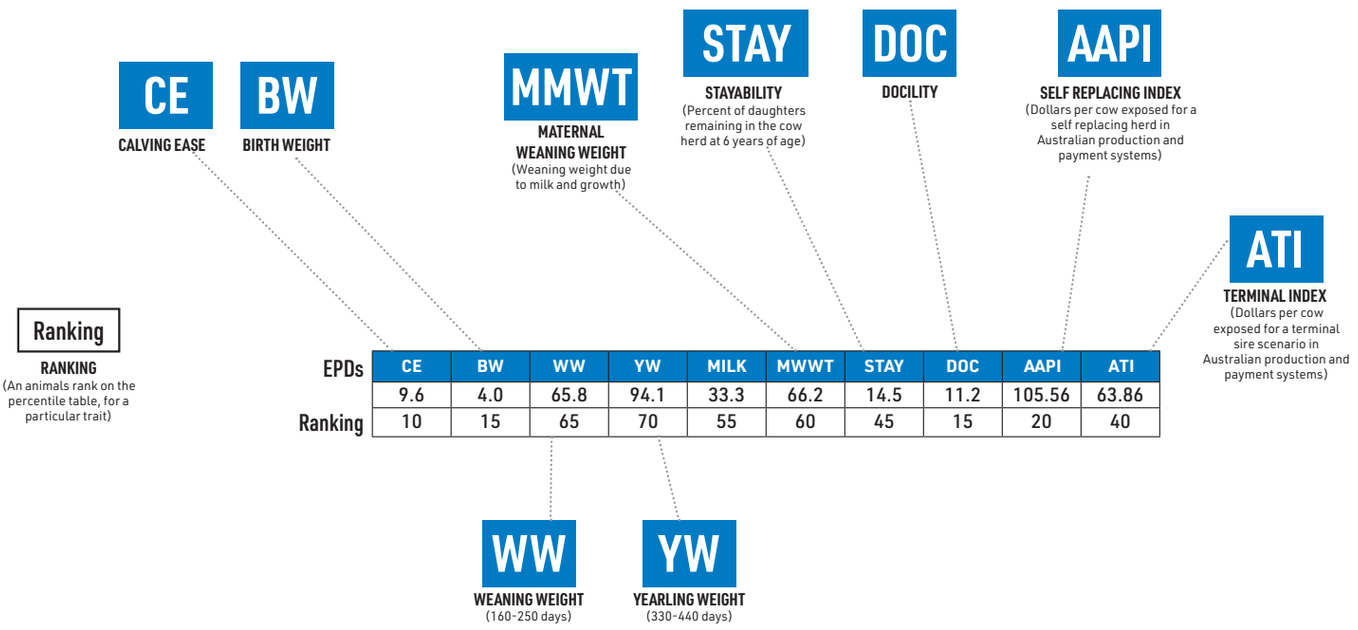
EPD INFORMATION

With the introduction of the IGS performance recording system for Simmental cattle, IGS is the world's largest animal performance recording system.

One of the major changes is the breeding figures being reported as Estimate Progeny Differences (EPDs), rather than Estimated Breeding Values (EBVs). The difference between the two is simple.

Effectively, an EBV is an animal's own genetic value for a particular trait. However, the animal can only pass half of this onto their progeny. EPDs have the "half" already accounted for. That is, an EPD is the genetic merit of an animal's progeny – what they will pass onto their progeny.

IGS can incorporate an animal's genomics into its performance data. All animals in the Simmental Opportunity sale have been 100K GGP-LD DNA profiled.



Simmental - Traditional, Fullblood and Simbrah Register Breed Average

	CED	BW	WW	YW	MILK	MCE	MWWT	STAY	DOC	CW	REA	FAT	MARB	YG	AAPI	ATI	API	TI
EPD	5.3	5.7	69.6	101.1	33.2	3.7	68.0	13.4	8.3	20.8	0.79	-0.122	-0.09	-0.51	42.84	36.15	95.75	62.70

Black, Red, SimAngus and SPR Register Breed Average

	CED	BW	WW	YW	MILK	MCE	MWWT	STAY	DOC	CW	REA	FAT	MARB	YG	AAPI	ATI	API	TI
EPD	10.0	2.4	76.5	116.0	23.1	5.5	61.3	15.1	12.1	29.1	0.83	-0.088	0.07	-0.40	61.14	56.46	122.61	74.27

Polled and Coat Color Information:

PP - Homo Polled - the bull carries two copies of the polled gene
Homo Polled Homo Polled 100% Polled
Hetero Polled 100% Polled
Horned 100% Polled

Pp - Hetero Polled - the bull carries one polled gene and one horned gene
Hetero Polled Homo Polled 100% Polled
Hetero Polled 75% Polled, 25% Horned
Horned 50% Polled, 50% Horned

Homo Black - the bull carries two copies of the black gene
Homo Black Homo Black 100% Black
Hetero Black 100% Black
Red 100% Black

Hetero Black - the bull is black in color, but carries one black gene and one red gene. Black is dominant to red, so the red color is not expressed when it is paired with a black gene.
Hetero Black Homo Black 100% Black
Hetero Black 75% Black, 25% Red
Red 50% Black, 50% Red

Red - the bull carries two copies of the red gene. This example assumes the bull is diluter free.
Red Homo Black 100% Black
Hetero Black 75% Black, 25% Red
Red 100% Red