
 Conversion Factors For Production Traits. Source: INTERBULL 1612

Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = PCORR2*Foreign Reliability

breed	country2	amilk	bmilk	afat	bfat	aprot	bprot	pcorr2
AYS	AUS	395.40	1.2360	26.200	1.3740	20.000	1.3330	0.4761
AYS	DEU	452.70	0.8930	36.400	0.8280	24.700	0.8640	0.7744
AYS	DFS	-4417.30	54.2340	-152.900	1.9960	-116.000	1.5960	0.7921
AYS	EST	490.90	1.0680	23.000	1.0830	21.900	0.9740	0.6724
AYS	GBR	-269.00	2.4300	-8.100	2.6720	-4.600	2.6180	0.6889
AYS	IRL	1032.98	3.5757	34.281	2.9981	36.354	3.2452	0.5476
AYS	LTU	-466.10	1.5300	-4.900	1.2980	-7.000	1.6130	0.6889
AYS	LVA	256.50	1.8510	19.200	1.6620	14.600	1.9930	0.6724
AYS	NLD	1540.49	0.8337	55.033	0.7842	52.252	0.6877	0.7744
AYS	NOR	-3725.60	44.4100	-129.400	1.5990	-98.800	1.3220	0.7569
AYS	NZL	40.60	1.6580	31.900	1.4640	18.500	1.7820	0.4761
AYS	USA	-148.30	0.8750	-10.400	0.8970	-6.800	0.8940	0.8100
AYS	ZAF	4.90	0.8745	-2.250	0.9256	0.669	0.8857	0.6561

 Conversion Factors For SCS Traits. Source: INTERBULL 1612

Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = SCORR2*Foreign Reliability

breed	country2	a	b	scorr2
AYS	AUS	3.800	-0.0070	0.7921
AYS	DEU	4.600	-0.0160	0.8649
AYS	DFS	4.700	-0.0180	0.8836
AYS	EST	4.900	-0.0180	0.7921
AYS	GBR	3.000	0.0200	0.8836
AYS	LTU	3.100	0.6190	0.8100
AYS	LVA	3.100	0.4980	0.8100
AYS	NLD	-2.446	0.0537	0.8281
AYS	NOR	4.500	-0.0150	0.8464
AYS	NZL	3.200	0.5210	0.7569
AYS	USA	0.100	0.9630	0.8649
AYS	ZAF	3.003	0.0088	0.7921

 Conversion Factors For Type. Source = INTERBULL MACE 1612

Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=AUS

c	c	f			
a	o	o			
n	u	r	a	b	t
b	n	t	v	v	c
r	t	r	a	a	o
e	r	a	l	l	r
e	y	i	u	u	r
d	2	t	e	e	2

AYS	CONFORMATION	AUS	CONFORMATION	-70.843	0.6519	0.36
AYS	FEET AND LEGS	AUS	OVERALL FEET & LEG	-41.300	0.3610	
AYS	MAMMARY SYSTEM	AUS	OVERALL UDDER SCORE	-78.821	0.7370	
AYS	STATURE	AUS	STATURE	-96.787	0.9304	
AYS	CHEST WIDTH	AUS	CHEST WIDTH	-72.987	0.7451	
AYS	BODY DEPTH	AUS	BODY DEPTH	-86.521	0.8466	
AYS	PIN WIDTH	AUS	RUMP WIDTH	-84.022	0.8274	
AYS	RUMP ANGLE	AUS	RUMP ANGLE	-81.298	0.7992	
AYS	FOOT ANGLE	AUS	FOOT ANGLE	-63.661	0.6279	
AYS	REAR LEGS SIDE VIEW	AUS	REAR LEG SET	-58.858	0.6343	
AYS	REAR LEG REAR VIEW	AUS	REAR LEG REAR VIEW	-59.023	0.5614	
AYS	UDDER DEPTH	AUS	UDDER DEPTH	-75.239	0.7056	
AYS	MEDIAN SUSPENSORY	AUS	MEDIAN SUSPENSORY	-67.894	0.6546	
AYS	FORE ATTACHMENT	AUS	FORE UDDER	-69.450	0.6475	
AYS	TEAT PLACEMENT	AUS	FRONT TEAT PLACEMENT	-72.216	0.7117	
AYS	TEAT LENGTH	AUS	TEAT LENGTH	-83.853	0.8518	
AYS	REAR ATTACHMENT HEIGHT	AUS	REAR UDDER HEIGHT	-84.668	0.7626	
AYS	REAR TEAT PLACEMENT	AUS	REAR TEAT PLACEMENT	-88.203	0.8524	
AYS	ANGULARITY	AUS	ANGULARITY	-68.343	0.6208	

Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=DEU

c	a	n	b	r	e	e	d	c	o	u	n	t	r	a	y	2	f	o	u	r	a	i	t	a	b	v	v	a	l	u	e	t	c	o	r	r	2	
AYS	FEET AND LEGS	DEU	OVERALL FEET & LEG	-36.747	0.3582																																	
AYS	MAMMARY SYSTEM	DEU	OVERALL UDDER SCORE	-37.117	0.3526																																	
AYS	STATURE	DEU	STATURE	-44.993	0.4655																																	
AYS	CHEST WIDTH	DEU	CHEST WIDTH	-50.335	0.5152																																	
AYS	BODY DEPTH	DEU	BODY DEPTH	-54.550	0.5585																																	
AYS	PIN WIDTH	DEU	RUMP WIDTH	-58.668	0.6100																																	
AYS	RUMP ANGLE	DEU	RUMP ANGLE	-71.454	0.6767																																	
AYS	FOOT ANGLE	DEU	FOOT ANGLE	-38.065	0.4087																																	
AYS	REAR LEGS SIDE VIEW	DEU	REAR LEG SET	-67.817	0.6633																																	
AYS	REAR LEG REAR VIEW	DEU	REAR LEG REAR VIEW	-61.990	0.6272																																	
AYS	UDDER DEPTH	DEU	UDDER DEPTH	-48.561	0.4759																																	
AYS	MEDIAN SUSPENSORY	DEU	MEDIAN SUSPENSORY	-43.637	0.4336																																	
AYS	FORE ATTACHMENT	DEU	FORE UDDER	-53.061	0.4946																																	
AYS	FRONT TEAT PLACEMENT	DEU	FRONT TEAT PLACEMENT	-42.596	0.4127																																	
AYS	TEAT LENGTH	DEU	TEAT LENGTH	-38.734	0.3732																																	
AYS	REAR ATTACHMENT HEIGHT	DEU	REAR UDDER HEIGHT	-43.169	0.3870																																	
AYS	REAR TEAT PLACEMENT	DEU	REAR TEAT PLACEMENT	-46.058	0.4286																																	
AYS	ANGULARITY	DEU	ANGULARITY	-47.770	0.4704																																	

Conversion Factors For Type. Source = INTERBULL MACE 1612

Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=DFS

c		c		f				
a		o		o				
n		u		r		a	b	t
b	t	n	t	v	v	c		
r	r	t	r	a	a	o		
e	a	r	a	l	l	r		
e	i	y	i	u	u	r		
d	t	2	t	e	e	2		
AYS	CONFORMATION	DFS	OVERALL CONFORMATION	-51.255	0.4617	0.56		
AYS	FEET AND LEGS	DFS	OVERALL FEET & LEG	-40.765	0.3801			
AYS	MAMMARY SYSTEM	DFS	OVERALL UDDER SCORE	-45.607	0.4256			
AYS	STATURE	DFS	STATURE	-66.524	0.6482			
AYS	CHEST WIDTH	DFS	CHEST WIDTH	-44.950	0.4621			
AYS	BODY DEPTH	DFS	BODY DEPTH	-46.267	0.4283			
AYS	PIN WIDTH	DFS	RUMP WIDTH	-51.269	0.5119			
AYS	RUMP ANGLE	DFS	RUMP ANGLE	-55.674	0.5613			
AYS	FOOT ANGLE	DFS	FOOT ANGLE	-49.304	0.5056			
AYS	REAR LEGS SIDE VIEW	DFS	REAR LEG SET	-63.059	0.6701			
AYS	REAR LEG REAR VIEW	DFS	REAR LEG REAR VIEW	-53.998	0.5269			
AYS	UDDER DEPTH	DFS	UDDER DEPTH	-49.239	0.4814			
AYS	MEDIAN SUSPENSORY	DFS	MEDIAN SUSPENSORY	-36.495	0.3453			
AYS	FORE ATTACHMENT	DFS	FORE UDDER	-43.600	0.4126			
AYS	FRONT TEAT PLACEMENT	DFS	FRONT TEAT PLACEMENT	-41.146	0.4088			
AYS	TEAT LENGTH	DFS	TEAT LENGTH	-44.133	0.4268			
AYS	REAR ATTACHMENT HEIGHT	DFS	REAR UDDER HEIGHT	-55.250	0.4919			
AYS	REAR TEAT PLACEMENT	DFS	REAR TEAT PLACEMENT	-45.698	0.4402			
AYS	ANGULARITY	DFS	ANGULARITY	-63.362	0.5764			

 Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=GBR

c		c		f				
a		o		o				
n		u		r		a	b	t
b	t	n	t	v	v	c		
r	r	t	r	a	a	o		
e	a	r	a	l	l	r		
e	i	y	i	u	u	r		
d	t	2	t	e	e	2		
AYS	FEET AND LEGS	GBR	OVERALL FEET & LEG	-3.245	2.8473			
AYS	MAMMARY SYSTEM	GBR	OVERALL UDDER SCORE	-1.346	3.1424			
AYS	STATURE	GBR	STATURE	-1.953	4.6470			
AYS	CHEST WIDTH	GBR	CHEST WIDTH	2.072	3.7927			
AYS	BODY DEPTH	GBR	BODY DEPTH	0.846	3.4939			
AYS	PIN WIDTH	GBR	RUMP WIDTH	-0.455	4.0179			
AYS	RUMP ANGLE	GBR	RUMP ANGLE	-2.038	3.7795			
AYS	FOOT ANGLE	GBR	FOOT ANGLE	-0.849	2.9434			
AYS	REAR LEGS SIDE VIEW	GBR	REAR LEG SET	-1.153	3.4986			

AYS	UDDER DEPTH	GBR	UDDER DEPTH	-0.700	2.8348
AYS	MEDIAN SUSPENSORY	GBR	MEDIAN SUSPENSORY	-0.750	2.5959
AYS	FORE ATTACHMENT	GBR	FORE UDDER	0.072	2.9788
AYS	TEAT PLACEMENT	GBR	FRONT TEAT PLACEMENT	2.055	3.2136
AYS	TEAT LENGTH	GBR	TEAT LENGTH	-1.266	3.3269
AYS	REAR ATTACHMENT HEIGHT	GBR	REAR UDDER HEIGHT	-2.804	3.6598
AYS	ANGULARITY	GBR	ANGULARITY	-5.314	4.5745

Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=NLD

	c		c	f			
	a		o	o			
	n		u	r	a	b	t
b	t		n	t	v	v	c
r	r		t	r	a	a	o
e	a		r	a	l	l	r
e	i		y	i	u	u	r
d	t		2	t	e	e	2

AYS	CONFORMATION	NLD	CONFORMATION	-124.943	1.3061	0.62
AYS	FEET AND LEGS	NLD	OVERALL FEET & LEG	-56.121	0.5455	
AYS	MAMMARY SYSTEM	NLD	OVERALL UDDER SCORE	-104.028	1.0966	
AYS	STATURE	NLD	STATURE	-106.426	1.1798	
AYS	CHEST WIDTH	NLD	CHEST WIDTH	-183.106	1.9518	
AYS	BODY DEPTH	NLD	BODY DEPTH	-115.410	1.2634	
AYS	PIN WIDTH	NLD	RUMP WIDTH	-91.757	1.0007	
AYS	RUMP ANGLE	NLD	RUMP ANGLE	-100.756	0.9950	
AYS	FOOT ANGLE	NLD	FOOT ANGLE	-98.968	1.0406	
AYS	REAR LEGS SIDE VIEW	NLD	REAR LEG SET	-109.289	1.0734	
AYS	REAR LEG REAR VIEW	NLD	REAR LEG REAR VIEW	-109.916	1.1030	
AYS	UDDER DEPTH	NLD	UDDER DEPTH	-108.823	1.1250	
AYS	MEDIAN SUSPENSORY	NLD	MEDIAN SUSPENSORY	-95.139	0.9760	
AYS	FORE ATTACHMENT	NLD	FORE UDDER	-115.444	1.1784	
AYS	TEAT PLACEMENT	NLD	FRONT TEAT PLACEMENT	-121.662	1.2638	
AYS	TEAT LENGTH	NLD	TEAT LENGTH	-79.669	0.8110	
AYS	REAR ATTACHMENT HEIGHT	NLD	REAR UDDER HEIGHT	-88.616	0.9321	
AYS	REAR TEAT PLACEMENT	NLD	REAR TEAT PLACEMENT	-110.130	1.1241	
AYS	ANGULARITY	NLD	ANGULARITY	-87.592	0.9502	

Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=NOR

	c		c	f			
	a		o	o			
	n		u	r	a	b	t
b	t		n	t	v	v	c
r	r		t	r	a	a	o
e	a		r	a	l	l	r
e	i		y	i	u	u	r

d	t	2	t	e	e	2
AYS	CONFORMATION	NOR	OVERALL CONFORMATION	-40.323	0.3246	0.71
AYS	FEET AND LEGS	NOR	OVERALL FEET & LEG	-32.193	0.2546	
AYS	MAMMARY SYSTEM	NOR	OVERALL UDDER SCORE	-45.049	0.3764	
AYS	STATURE	NOR	STATURE	-44.979	0.3769	
AYS	BODY DEPTH	NOR	BODY DEPTH	-37.174	0.3272	
AYS	RUMP ANGLE	NOR	RUMP ANGLE	-40.044	0.4328	
AYS	FOOT ANGLE	NOR	FOOT ANGLE	-29.650	0.2879	
AYS	REAR LEGS SIDE VIEW	NOR	REAR LEG SET	-28.374	0.3262	
AYS	REAR LEG REAR VIEW	NOR	REAR LEG REAR VIEW	-37.933	0.3465	
AYS	UDDER DEPTH	NOR	UDDER DEPTH	-45.738	0.3947	
AYS	MEDIAN SUSPENSORY	NOR	MEDIAN SUSPENSORY	-32.645	0.2677	
AYS	FORE ATTACHMENT	NOR	FORE UDDER	-43.014	0.3781	
AYS	FRONT TEAT PLACEMENT	NOR	FRONT TEAT PLACEMENT	-38.798	0.3669	
AYS	TEAT LENGTH	NOR	TEAT LENGTH	-38.055	0.3675	
AYS	REAR ATTACHMENT HEIGHT	NOR	REAR UDDER HEIGHT	-45.786	0.3483	
AYS	REAR TEAT PLACEMENT	NOR	REAR TEAT PLACEMENT	-36.316	0.3440	

Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=NZL

c	a	n	b	r	e	e	d	c	f	o	u	n	t	a	b	t
AYS	CONFORMATION	NZL	OVERALL CONFORMATION	-8.366	12.3522											0.35
AYS	MAMMARY SYSTEM	NZL	OVERALL UDDER SCORE	-7.838	11.8996											
AYS	STATURE	NZL	STATURE	-11.204	10.6571											
AYS	CHEST WIDTH	NZL	CHEST WIDTH	0.772	13.2289											
AYS	BODY DEPTH	NZL	BODY DEPTH	-2.619	12.3280											
AYS	PIN WIDTH	NZL	RUMP WIDTH	-3.562	17.0144											
AYS	RUMP ANGLE	NZL	RUMP ANGLE	-5.315	19.1257											
AYS	REAR LEGS SIDE VIEW	NZL	REAR LEG SET	4.097	44.7162											
AYS	MEDIAN SUSPENSORY	NZL	MEDIAN SUSPENSORY	-3.781	12.1458											
AYS	FORE ATTACHMENT	NZL	FORE UDDER	-7.290	14.0980											
AYS	FRONT TEAT PLACEMENT	NZL	FRONT TEAT PLACEMENT	-4.155	17.4291											
AYS	REAR ATTACHMENT HEIGHT	NZL	REAR UDDER HEIGHT	-7.473	14.4726											
AYS	REAR TEAT PLACEMENT	NZL	REAR TEAT PLACEMENT	-5.495	16.5050											

Conversion Factors For Type. Source = INTERBULL MACE 1612
 Converted Canadian Proof = A + (B* Foreign Proof)
 Converted Proof Reliability = TCORR2*Foreign Reliability

country2=USA

c	a	c	f
		o	o

b	n	u	r	a	b	t
r	t	n	t	v	v	c
e	a	t	r	a	a	o
e	i	r	a	l	l	r
d	t	y	i	u	u	r
		2	t	e	e	2

AYS	CONFORMATION	USA	CONFORMATION	-2.762	5.5734	0.69
AYS	FEET AND LEGS	USA	OVERALL FEET & LEG	-2.573	3.7391	
AYS	MAMMARY SYSTEM	USA	OVERALL UDDER SCORE	-0.729	5.1293	
AYS	STATURE	USA	STATURE	-1.048	2.6299	
AYS	CHEST WIDTH	USA	CHEST WIDTH	-0.413	5.2128	
AYS	BODY DEPTH	USA	BODY DEPTH	-1.100	4.1952	
AYS	PIN WIDTH	USA	RUMP WIDTH	-0.341	4.3521	
AYS	RUMP ANGLE	USA	RUMP ANGLE	-0.975	5.3675	
AYS	FOOT ANGLE	USA	FOOT ANGLE	-0.472	6.1080	
AYS	REAR LEGS SIDE VIEW	USA	REAR LEG SET	0.771	7.7192	
AYS	REAR LEG REAR VIEW	USA	REAR LEG REAR VIEW	-4.395	6.2917	
AYS	UDDER DEPTH	USA	UDDER DEPTH	-0.203	4.8338	
AYS	MEDIAN SUSPENSORY	USA	MEDIAN SUSPENSORY	-1.877	4.5628	
AYS	FORE ATTACHMENT	USA	FORE UDDER	-1.015	4.6022	
AYS	TEAT PLACEMENT	USA	FRONT TEAT PLACEMENT	-0.013	3.9763	
AYS	TEAT LENGTH	USA	TEAT LENGTH	-0.630	4.1456	
AYS	REAR ATTACHMENT HEIGHT	USA	REAR UDDER HEIGHT	-1.325	4.2339	
AYS	REAR TEAT PLACEMENT	USA	REAR TEAT PLACEMENT	-0.058	4.6064	
AYS	ANGULARITY	USA	ANGULARITY	-1.613	5.5179	

CALCULATION OF FAT% AND PROTEIN% FOR DECEMBER 2016

BREED	BMILK	BFAT	BPRT
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AYS	7597	314	257
BSW	8157	342	287
CN	5698	247	203
GUE	6765	320	234
JER	6462	323	247
HOL	9994	384	320
MS	6326	244	210

$$EBVFAT\% = 200 * [(BFAT + EBVFAT * 0.5) / (BMILK + EBVMILK * 0.5) - (BFAT / BMILK)]$$

$$EBVPROT\% = 200 * [(BPRT + EBVPRT * 0.5) / (BMILK + EBVMILK * 0.5) - (BPRT / BMILK)]$$

EXAMPLE :

A HOLSTEIN bull has EBV MILK=+1000, EBVFAT=+50, EBVPROT=+40

$$\begin{aligned}
 EBVFAT\% &= 200 * [(384 + 50 * .5) / (9994 + 1000 * .5) - (384 / 9994)] \\
 &= 200 * [(384 + 25) / (9994 + 500) - (0.03842)] \\
 &= 200 * [0.03897 - 0.03842] \\
 &= 200 * 0.00055 \\
 &= 0.11
 \end{aligned}$$

$$\begin{aligned}
 EBVPROT\% &= 200 * [(320 + 40 * .5) / (9994 + 1000 * .5) - (320 / 9994)] \\
 &= 200 * [(320 + 20) / (9994 + 500) - (0.03202)] \\
 &= 200 * [0.03240 - 0.03202] \\
 &= 200 * 0.00038
 \end{aligned}$$

$$= 0.08$$