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 Conversion Factors For Production Traits. Source: INTERBULL 1308

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

breed	country2	amilk	bmilk	afat	bfat	aprot	bprot	pcorr2
AYS	AUS	531.22	1.284	29.728	1.182	23.242	1.669	0.5776
AYS	DEU	521.72	0.921	37.695	0.851	26.608	0.853	0.7921
AYS	DFS	-4314.13	54.149	-154.786	2.028	-108.473	1.546	0.7921
AYS	EST	282.99	1.034	16.158	1.085	17.034	0.993	0.7569
AYS	GBR	-261.46	2.343	-9.664	2.492	-3.723	2.596	0.7396
AYS	IRL	874.86	3.769	25.651	3.356	25.341	4.204	0.6241
AYS	LTU	-433.78	1.796	2.132	1.337	-0.803	1.701	0.7744
AYS	LVA	-261.30	1.954	5.959	1.666	1.082	2.081	0.7569
AYS	NLD	1507.07	0.781	56.770	0.720	53.596	0.642	0.8100
AYS	NOR	-3881.82	46.871	-157.880	1.904	-111.403	1.483	0.8100
AYS	NZL	161.92	1.637	33.535	1.508	18.555	1.740	0.5776
AYS	USA	-119.32	0.842	-7.424	0.854	-3.953	0.839	0.8281
AYS	ZAF	-72.72	0.912	-4.010	0.938	-3.517	0.916	0.7396

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 Conversion Factors For SCS Traits. Source: INTERBULL 1308

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

breed	country2	a	b	scorr2
AYS	AUS	3.791	-0.007	0.7569
AYS	DEU	2.962	0.529	0.8464
AYS	DFS	4.768	-0.019	0.8464
AYS	EST	4.959	-0.020	0.7744
AYS	GBR	3.002	0.020	0.8649
AYS	LTU	3.058	0.634	0.7569
AYS	LVA	3.069	0.519	0.7744
AYS	NLD	-3.944	0.066	0.8464
AYS	NOR	5.018	-0.020	0.8281
AYS	NZL	3.140	0.511	0.6084
AYS	USA	0.063	0.981	0.8836
AYS	ZAF	2.921	0.008	0.7396

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 Conversion Factors For Type. Source = INTERBULL MACE 1308

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	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	AUS	CONFORMATION	-56.071	0.4769	0.40
AYS	FEET AND LEGS	AUS	OVERALL FEET & LEG	-15.120	0.1102	
AYS	MAMMARY SYSTEM	AUS	OVERALL UDDER SCORE	-61.848	0.5442	
AYS	STATURE	AUS	STATURE	-56.588	0.5108	
AYS	CHEST WIDTH	AUS	CHEST WIDTH	-57.652	0.5736	
AYS	BODY DEPTH	AUS	BODY DEPTH	-61.969	0.5857	
AYS	PIN WIDTH	AUS	RUMP WIDTH	-59.609	0.5794	
AYS	RUMP ANGLE	AUS	RUMP ANGLE	-68.028	0.6842	
AYS	FOOT ANGLE	AUS	FOOT ANGLE	-57.342	0.5676	
AYS	REAR LEGS SIDE VIEW	AUS	REAR LEG SET	-82.162	0.8699	
AYS	REAR LEG REAR VIEW	AUS	REAR LEG REAR VIEW	-71.279	0.6876	
AYS	UDDER DEPTH	AUS	UDDER DEPTH	-58.223	0.5338	
AYS	MEDIAN SUSPENSORY	AUS	MEDIAN SUSPENSORY	-57.567	0.5409	
AYS	FORE ATTACHMENT	AUS	FORE UDDER	-58.076	0.5207	
AYS	TEAT PLACEMENT	AUS	FRONT TEAT PLACEMENT	-39.927	0.3687	
AYS	TEAT LENGTH	AUS	TEAT LENGTH	-42.827	0.4377	
AYS	REAR ATTACHMENT HEIGHT	AUS	REAR UDDER HEIGHT	-61.851	0.5225	
AYS	REAR TEAT PLACEMENT	AUS	REAR TEAT PLACEMENT	-64.466	0.5906	
AYS	ANGULARITY	AUS	ANGULARITY	-45.779	0.3994	

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 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=DEU

c		c	f			
a		o		a	b	t
n		u	r	v	v	c
b	t	n	t	a	a	o
r	r	t	r	l	l	r
e	a	r	a	u	u	r
e	i	y	i	e	e	r
d	t	2	t			2
AYS	CONFORMATION	DEU	OVERALL TYPE (RZE)	-24.399	0.2430	0.49
AYS	FEET AND LEGS	DEU	OVERALL FEET & LEG	-45.361	0.4615	
AYS	MAMMARY SYSTEM	DEU	OVERALL UDDER SCORE	-40.002	0.3840	
AYS	STATURE	DEU	STATURE	-49.348	0.5065	
AYS	CHEST WIDTH	DEU	CHEST WIDTH	-41.990	0.4427	
AYS	BODY DEPTH	DEU	BODY DEPTH	-43.856	0.4653	
AYS	PIN WIDTH	DEU	RUMP WIDTH	-50.701	0.5467	
AYS	RUMP ANGLE	DEU	RUMP ANGLE	-56.730	0.5170	
AYS	FOOT ANGLE	DEU	FOOT ANGLE	-40.771	0.4330	
AYS	REAR LEGS SIDE VIEW	DEU	REAR LEG SET	-58.494	0.5715	
AYS	REAR LEG REAR VIEW	DEU	REAR LEG REAR VIEW	-43.647	0.4476	
AYS	UDDER DEPTH	DEU	UDDER DEPTH	-49.852	0.4817	
AYS	MEDIAN SUSPENSORY	DEU	MEDIAN SUSPENSORY	-40.806	0.4192	
AYS	FORE ATTACHMENT	DEU	FORE UDDER	-48.102	0.4310	
AYS	FRONT TEAT PLACEMENT	DEU	FRONT TEAT PLACEMENT	-45.314	0.4295	
AYS	TEAT LENGTH	DEU	TEAT LENGTH	-36.495	0.3565	
AYS	REAR ATTACHMENT HEIGHT	DEU	REAR UDDER HEIGHT	-48.973	0.4551	
AYS	REAR TEAT PLACEMENT	DEU	REAR TEAT PLACEMENT	-53.486	0.5040	
AYS	ANGULARITY	DEU	ANGULARITY	-43.957	0.4605	

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AYS	FOOT ANGLE	GBR	FOOT ANGLE	0.038	3.0208
AYS	REAR LEGS SIDE VIEW	GBR	REAR LEG SET	-1.170	2.9304
AYS	UDDER DEPTH	GBR	UDDER DEPTH	-0.447	2.8109
AYS	MEDIAN SUSPENSORY	GBR	MEDIAN SUSPENSORY	0.157	3.0383
AYS	FORE ATTACHMENT	GBR	FORE UDDER	0.568	3.0073
AYS	TEAT PLACEMENT	GBR	FRONT TEAT PLACEMENT	2.549	3.2674
AYS	TEAT LENGTH	GBR	TEAT LENGTH	-1.122	2.9967
AYS	REAR ATTACHMENT HEIGHT	GBR	REAR UDDER HEIGHT	-2.891	3.6958
AYS	ANGULARITY	GBR	ANGULARITY	-4.962	4.3334

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Conversion Factors For Type. Source = INTERBULL MACE 1308  
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 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=NLD

	c		c	f				
	a		o	o		a	b	t
	n		u	r		v	v	c
b	t		n	t		a	a	o
r	r		t	r		l	l	r
e	a		r	a		u	u	r
e	i		y	i		e	e	2
d	t		2	t				
AYS	CONFORMATION	NLD	CONFORMATION	-106.206	1.1121	0.59		
AYS	FEET AND LEGS	NLD	OVERALL FEET & LEG	-86.630	0.8778			
AYS	MAMMARY SYSTEM	NLD	OVERALL UDDER SCORE	-118.654	1.2372			
AYS	STATURE	NLD	STATURE	-102.309	1.1084			
AYS	CHEST WIDTH	NLD	CHEST WIDTH	-148.456	1.5541			
AYS	BODY DEPTH	NLD	BODY DEPTH	-108.967	1.1867			
AYS	PIN WIDTH	NLD	RUMP WIDTH	-106.013	1.1283			
AYS	RUMP ANGLE	NLD	RUMP ANGLE	-94.435	0.9340			
AYS	FOOT ANGLE	NLD	FOOT ANGLE	-123.007	1.2662			
AYS	REAR LEGS SIDE VIEW	NLD	REAR LEG SET	-119.396	1.1832			
AYS	REAR LEG REAR VIEW	NLD	REAR LEG REAR VIEW	-131.420	1.3467			
AYS	UDDER DEPTH	NLD	UDDER DEPTH	-113.589	1.1537			
AYS	MEDIAN SUSPENSORY	NLD	MEDIAN SUSPENSORY	-105.942	1.0929			
AYS	FORE ATTACHMENT	NLD	FORE UDDER	-143.549	1.4467			
AYS	TEAT PLACEMENT	NLD	FRONT TEAT PLACEMENT	-131.055	1.3303			
AYS	TEAT LENGTH	NLD	TEAT LENGTH	-93.276	0.9605			
AYS	REAR ATTACHMENT HEIGHT	NLD	REAR UDDER HEIGHT	-91.026	0.9538			
AYS	REAR TEAT PLACEMENT	NLD	REAR TEAT PLACEMENT	-125.563	1.2780			
AYS	ANGULARITY	NLD	ANGULARITY	-79.122	0.8759			

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 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=NOR

	c		c	f				
	a		o	o		a	b	t
	n		u	r		v	v	c
b	t		n	t		a	a	o
r	r		t	r				

e e d	a i t	r y 2	a i t	l u e	l u e	r r 2
AYS	CONFORMATION	NOR	OVERALL CONFORMATION	-15.722	0.0734	0.04
AYS	FEET AND LEGS	NOR	OVERALL FEET & LEG	-28.299	0.2347	
AYS	MAMMARY SYSTEM	NOR	OVERALL UDDER SCORE	-56.467	0.4651	
AYS	STATURE	NOR	STATURE	-61.480	0.5309	
AYS	BODY DEPTH	NOR	BODY DEPTH	-33.456	0.2927	
AYS	RUMP ANGLE	NOR	RUMP ANGLE	-38.075	0.3926	
AYS	FOOT ANGLE	NOR	FOOT ANGLE	-18.961	0.1881	
AYS	REAR LEGS SIDE VIEW	NOR	REAR LEG SET	-39.558	0.4396	
AYS	REAR LEG REAR VIEW	NOR	REAR LEG REAR VIEW	-41.620	0.3861	
AYS	UDDER DEPTH	NOR	UDDER DEPTH	-43.099	0.3662	
AYS	MEDIAN SUSPENSORY	NOR	MEDIAN SUSPENSORY	-24.921	0.2018	
AYS	FORE ATTACHMENT	NOR	FORE UDDER	-41.624	0.3611	
AYS	FRONT TEAT PLACEMENT	NOR	FRONT TEAT PLACEMENT	-39.064	0.3513	
AYS	TEAT LENGTH	NOR	TEAT LENGTH	-28.338	0.2676	
AYS	REAR ATTACHMENT HEIGHT	NOR	REAR UDDER HEIGHT	-53.039	0.4139	
AYS	REAR TEAT PLACEMENT	NOR	REAR TEAT PLACEMENT	31.527	-0.3713	

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 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=NZL

c n b r e e d	a t r a i t	c o n f i d	f u r t h e r	a v a l u e	b v a l u e	t c o r r 2
AYS	CONFORMATION	NZL	OVERALL CONFORMATION	-7.629	9.1189	0.16
AYS	MAMMARY SYSTEM	NZL	OVERALL UDDER SCORE	-7.694	12.8269	
AYS	STATURE	NZL	STATURE	-10.904	10.8448	
AYS	CHEST WIDTH	NZL	CHEST WIDTH	-0.920	9.5022	
AYS	BODY DEPTH	NZL	BODY DEPTH	-3.215	8.5746	
AYS	PIN WIDTH	NZL	RUMP WIDTH	-3.320	17.6139	
AYS	RUMP ANGLE	NZL	RUMP ANGLE	-4.462	18.8257	
AYS	REAR LEGS SIDE VIEW	NZL	REAR LEG SET	3.913	26.8775	
AYS	MEDIAN SUSPENSORY	NZL	MEDIAN SUSPENSORY	-3.489	13.0165	
AYS	FORE ATTACHMENT	NZL	FORE UDDER	-7.170	14.4188	
AYS	FRONT TEAT PLACEMENT	NZL	FRONT TEAT PLACEMENT	-4.123	17.3892	
AYS	REAR ATTACHMENT HEIGHT	NZL	REAR UDDER HEIGHT	-7.640	14.2756	
AYS	REAR TEAT PLACEMENT	NZL	REAR TEAT PLACEMENT	-6.220	16.5693	

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Conversion Factors For Type. Source = INTERBULL MACE 1308  
 Converted Canadian Proof = A + (B\* Foreign Proof)  
 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=USA

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	USA	CONFORMATION	-2.146	6.6861	0.67
AYS	FEET AND LEGS	USA	OVERALL FEET & LEG	-2.814	4.2900	
AYS	MAMMARY SYSTEM	USA	OVERALL UDDER SCORE	-0.698	5.8105	
AYS	STATURE	USA	STATURE	-1.849	2.7702	
AYS	CHEST WIDTH	USA	CHEST WIDTH	-0.260	5.1782	
AYS	BODY DEPTH	USA	BODY DEPTH	-1.202	4.3479	
AYS	PIN WIDTH	USA	RUMP WIDTH	0.080	4.2763	
AYS	RUMP ANGLE	USA	RUMP ANGLE	-0.387	5.5050	
AYS	FOOT ANGLE	USA	FOOT ANGLE	-0.531	6.5192	
AYS	REAR LEGS SIDE VIEW	USA	REAR LEG SET	0.767	8.0981	
AYS	UDDER DEPTH	USA	UDDER DEPTH	-0.674	4.8236	
AYS	MEDIAN SUSPENSORY	USA	MEDIAN SUSPENSORY	-0.506	4.9518	
AYS	FORE ATTACHMENT	USA	FORE UDDER	-1.219	4.8432	
AYS	TEAT PLACEMENT	USA	FRONT TEAT PLACEMENT	-0.239	4.2022	
AYS	TEAT LENGTH	USA	TEAT LENGTH	-0.098	3.8057	
AYS	REAR ATTACHMENT HEIGHT	USA	REAR UDDER HEIGHT	-1.521	4.4719	
AYS	ANGULARITY	USA	ANGULARITY	-1.057	5.8276	

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CALCULATION OF FAT% AND PROTEIN% FOR AUGUST 2013

BREED	BMILK	BFAT	BPRT
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AYS	7457	304	251
BSW	8040	333	282
CN	5804	246	203
GUE	6847	300	232
JER	6294	312	240
HOL	9754	369	312
MS	6656	248	226

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

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

EXAMPLE :

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

$$\begin{aligned}
 EBVFAT\% &= 200 * [ (369 + 50 * 0.5) / (9754 + 1000 * 0.5) - (369 / 9754) ] \\
 &= 200 * [ (369 + 25) / (9754 + 500) - (0.03783) ] \\
 &= 200 * [ 0.03842 - 0.03783 ] \\
 &= 200 * 0.00059 \\
 &= 0.12
 \end{aligned}$$

$$\begin{aligned}
 EBVPROT\% &= 200 * [ (312 + 40 * 0.5) / (9754 + 1000 * 0.5) - (312 / 9754) ] \\
 &= 200 * [ (312 + 20) / (9754 + 500) - (0.03199) ] \\
 &= 200 * [ 0.03238 - 0.03199 ] \\
 &= 200 * 0.00039
 \end{aligned}$$

$$= 0.08$$