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 Conversion Factors For Production Traits. Source: INTERBULL 1408

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

breed	country2	amilk	bmilk	afat	bfat	aprot	bprot	pcorr2
AYS	AUS	522.82	1.215	29.570	1.131	23.299	1.580	0.5776
AYS	DEU	455.00	0.909	33.572	0.836	23.976	0.843	0.7744
AYS	DFS	-4296.68	53.617	-155.629	2.021	-109.278	1.544	0.7921
AYS	EST	231.16	0.972	14.579	1.039	15.734	0.900	0.7569
AYS	GBR	-133.91	2.435	-2.118	2.572	0.115	2.636	0.7396
AYS	IRL	836.29	3.711	23.076	3.246	24.189	3.944	0.6084
AYS	LTU	-442.64	1.674	0.185	1.273	-1.870	1.608	0.7744
AYS	LVA	-279.55	1.879	5.065	1.596	-0.071	2.021	0.7569
AYS	NLD	1453.97	0.798	54.247	0.765	51.416	0.675	0.7921
AYS	NOR	-4308.08	50.896	-165.332	1.971	-116.361	1.520	0.8100
AYS	NZL	109.98	1.617	30.713	1.490	16.387	1.709	0.5776
AYS	USA	-193.58	0.867	-10.481	0.873	-6.387	0.876	0.8281
AYS	ZAF	-124.48	0.907	-6.344	0.938	-5.104	0.906	0.7396

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 Conversion Factors For SCS Traits. Source: INTERBULL 1408

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

breed	country2	a	b	scorr2
AYS	AUS	3.806	-0.007	0.7569
AYS	DEU	2.981	0.525	0.8464
AYS	DFS	4.800	-0.019	0.8464
AYS	EST	4.994	-0.020	0.7744
AYS	GBR	2.990	0.021	0.8649
AYS	LTU	3.073	0.611	0.7569
AYS	LVA	3.088	0.514	0.7744
AYS	NLD	-3.014	0.058	0.8281
AYS	NOR	4.961	-0.020	0.8281
AYS	NZL	3.164	0.513	0.6084
AYS	USA	0.004	1.005	0.8836
AYS	ZAF	2.957	0.008	0.7569

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 Conversion Factors For Type. Source = INTERBULL MACE 1408

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

AYS	CONFORMATION	AUS	CONFORMATION	-56.759	0.4967	0.40
AYS	FEET AND LEGS	AUS	OVERALL FEET & LEG	-19.758	0.1535	
AYS	MAMMARY SYSTEM	AUS	OVERALL UDDER SCORE	-61.668	0.5507	
AYS	STATURE	AUS	STATURE	-55.274	0.5104	
AYS	CHEST WIDTH	AUS	CHEST WIDTH	-57.495	0.5823	
AYS	BODY DEPTH	AUS	BODY DEPTH	-60.439	0.5766	
AYS	PIN WIDTH	AUS	RUMP WIDTH	-60.884	0.5968	
AYS	RUMP ANGLE	AUS	RUMP ANGLE	-69.077	0.6871	
AYS	FOOT ANGLE	AUS	FOOT ANGLE	-55.057	0.5434	
AYS	REAR LEGS SIDE VIEW	AUS	REAR LEG SET	-85.153	0.9015	
AYS	REAR LEG REAR VIEW	AUS	REAR LEG REAR VIEW	-83.289	0.7955	
AYS	UDDER DEPTH	AUS	UDDER DEPTH	-58.401	0.5366	
AYS	MEDIAN SUSPENSORY	AUS	MEDIAN SUSPENSORY	-60.553	0.5785	
AYS	FORE ATTACHMENT	AUS	FORE UDDER	-53.734	0.4831	
AYS	TEAT PLACEMENT	AUS	FRONT TEAT PLACEMENT	-40.561	0.3842	
AYS	TEAT LENGTH	AUS	TEAT LENGTH	-42.090	0.4372	
AYS	REAR ATTACHMENT HEIGHT	AUS	REAR UDDER HEIGHT	-62.062	0.5316	
AYS	REAR TEAT PLACEMENT	AUS	REAR TEAT PLACEMENT	-74.641	0.7069	
AYS	ANGULARITY	AUS	ANGULARITY	-48.532	0.4288	

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 Converted Proof Reliability = TCORR2\*Foreign Reliability

country2=DEU

c	a	n	b	r	e	e	d	c	f	o	u	n	t	r	a	y	2	a	b	t	v	v	a	l	u	e	c	o	r	r	2
AYS	CONFORMATION	DEU	OVERALL TYPE (RZE)	-26.928	0.2606	0.59																									
AYS	FEET AND LEGS	DEU	OVERALL FEET & LEG	-46.922	0.4627																										
AYS	MAMMARY SYSTEM	DEU	OVERALL UDDER SCORE	-42.528	0.3948																										
AYS	STATURE	DEU	STATURE	-49.327	0.5049																										
AYS	CHEST WIDTH	DEU	CHEST WIDTH	-43.797	0.4594																										
AYS	BODY DEPTH	DEU	BODY DEPTH	-46.313	0.4912																										
AYS	PIN WIDTH	DEU	RUMP WIDTH	-48.763	0.5199																										
AYS	RUMP ANGLE	DEU	RUMP ANGLE	-57.898	0.5304																										
AYS	FOOT ANGLE	DEU	FOOT ANGLE	-41.470	0.4451																										
AYS	REAR LEGS SIDE VIEW	DEU	REAR LEG SET	-57.738	0.5689																										
AYS	REAR LEG REAR VIEW	DEU	REAR LEG REAR VIEW	-48.200	0.4867																										
AYS	UDDER DEPTH	DEU	UDDER DEPTH	-48.764	0.4710																										
AYS	MEDIAN SUSPENSORY	DEU	MEDIAN SUSPENSORY	-42.716	0.4301																										
AYS	FORE ATTACHMENT	DEU	FORE UDDER	-49.695	0.4500																										
AYS	FRONT TEAT PLACEMENT	DEU	FRONT TEAT PLACEMENT	-44.808	0.4262																										
AYS	TEAT LENGTH	DEU	TEAT LENGTH	-37.198	0.3656																										
AYS	REAR ATTACHMENT HEIGHT	DEU	REAR UDDER HEIGHT	-51.609	0.4698																										
AYS	REAR TEAT PLACEMENT	DEU	REAR TEAT PLACEMENT	-53.818	0.5044																										
AYS	ANGULARITY	DEU	ANGULARITY	-47.952	0.4965																										

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AYS	FOOT ANGLE	GBR	FOOT ANGLE	-0.330	2.9843
AYS	REAR LEGS SIDE VIEW	GBR	REAR LEG SET	-0.808	3.1883
AYS	UDDER DEPTH	GBR	UDDER DEPTH	-0.486	3.0094
AYS	MEDIAN SUSPENSORY	GBR	MEDIAN SUSPENSORY	-0.254	2.9188
AYS	FORE ATTACHMENT	GBR	FORE UDDER	0.304	2.8888
AYS	TEAT PLACEMENT	GBR	FRONT TEAT PLACEMENT	2.130	3.2716
AYS	TEAT LENGTH	GBR	TEAT LENGTH	-0.941	3.1347
AYS	REAR ATTACHMENT HEIGHT	GBR	REAR UDDER HEIGHT	-3.612	3.8852
AYS	ANGULARITY	GBR	ANGULARITY	-5.710	4.9419

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Conversion Factors For Type. Source = INTERBULL MACE 1408  
 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		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	NLD	CONFORMATION	-138.568	1.4387	0.62					
AYS	FEET AND LEGS	NLD	OVERALL FEET & LEG	-72.916	0.7275						
AYS	MAMMARY SYSTEM	NLD	OVERALL UDDER SCORE	-107.431	1.1003						
AYS	STATURE	NLD	STATURE	-106.488	1.1538						
AYS	CHEST WIDTH	NLD	CHEST WIDTH	-148.273	1.5731						
AYS	BODY DEPTH	NLD	BODY DEPTH	-108.298	1.1874						
AYS	PIN WIDTH	NLD	RUMP WIDTH	-96.025	1.0170						
AYS	RUMP ANGLE	NLD	RUMP ANGLE	-98.808	0.9788						
AYS	FOOT ANGLE	NLD	FOOT ANGLE	-133.725	1.3750						
AYS	REAR LEGS SIDE VIEW	NLD	REAR LEG SET	-120.658	1.1960						
AYS	REAR LEG REAR VIEW	NLD	REAR LEG REAR VIEW	-119.521	1.2183						
AYS	UDDER DEPTH	NLD	UDDER DEPTH	-107.524	1.0841						
AYS	MEDIAN SUSPENSORY	NLD	MEDIAN SUSPENSORY	-111.288	1.1364						
AYS	FORE ATTACHMENT	NLD	FORE UDDER	-139.440	1.3927						
AYS	TEAT PLACEMENT	NLD	FRONT TEAT PLACEMENT	-128.540	1.3019						
AYS	TEAT LENGTH	NLD	TEAT LENGTH	-91.907	0.9467						
AYS	REAR ATTACHMENT HEIGHT	NLD	REAR UDDER HEIGHT	-92.007	0.9488						
AYS	REAR TEAT PLACEMENT	NLD	REAR TEAT PLACEMENT	-126.555	1.2703						
AYS	ANGULARITY	NLD	ANGULARITY	-92.148	1.0162						

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Conversion Factors For Type. Source = INTERBULL MACE 1408  
 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		n		t		v		v		c	
r		t		r		a		a		o	

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	-19.337	0.1053	0.09
AYS	FEET AND LEGS	NOR	OVERALL FEET & LEG	-29.129	0.2377	
AYS	MAMMARY SYSTEM	NOR	OVERALL UDDER SCORE	-57.666	0.4772	
AYS	STATURE	NOR	STATURE	-57.849	0.4969	
AYS	BODY DEPTH	NOR	BODY DEPTH	-33.836	0.2972	
AYS	RUMP ANGLE	NOR	RUMP ANGLE	-43.623	0.4497	
AYS	FOOT ANGLE	NOR	FOOT ANGLE	-23.180	0.2349	
AYS	REAR LEGS SIDE VIEW	NOR	REAR LEG SET	-38.244	0.4289	
AYS	REAR LEG REAR VIEW	NOR	REAR LEG REAR VIEW	-44.977	0.4160	
AYS	UDDER DEPTH	NOR	UDDER DEPTH	-48.010	0.4171	
AYS	MEDIAN SUSPENSORY	NOR	MEDIAN SUSPENSORY	-33.597	0.2826	
AYS	FORE ATTACHMENT	NOR	FORE UDDER	-47.339	0.4267	
AYS	FRONT TEAT PLACEMENT	NOR	FRONT TEAT PLACEMENT	-39.848	0.3614	
AYS	TEAT LENGTH	NOR	TEAT LENGTH	-41.556	0.3935	
AYS	REAR ATTACHMENT HEIGHT	NOR	REAR UDDER HEIGHT	-55.157	0.4283	
AYS	REAR TEAT PLACEMENT	NOR	REAR TEAT PLACEMENT	-34.825	0.3208	

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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 u n t r y 2	f o r e i g n	a v a l u e	b v a l u e	t c o r r 2
AYS	CONFORMATION	NZL	OVERALL CONFORMATION	-8.267	10.1117	0.23
AYS	MAMMARY SYSTEM	NZL	OVERALL UDDER SCORE	-8.523	12.3824	
AYS	STATURE	NZL	STATURE	-10.680	10.7692	
AYS	CHEST WIDTH	NZL	CHEST WIDTH	0.072	11.0591	
AYS	BODY DEPTH	NZL	BODY DEPTH	-3.073	10.1516	
AYS	PIN WIDTH	NZL	RUMP WIDTH	-3.598	18.1399	
AYS	RUMP ANGLE	NZL	RUMP ANGLE	-4.645	19.0344	
AYS	REAR LEGS SIDE VIEW	NZL	REAR LEG SET	4.077	38.5864	
AYS	MEDIAN SUSPENSORY	NZL	MEDIAN SUSPENSORY	-4.133	13.5788	
AYS	FORE ATTACHMENT	NZL	FORE UDDER	-7.499	14.1109	
AYS	FRONT TEAT PLACEMENT	NZL	FRONT TEAT PLACEMENT	-4.486	17.5256	
AYS	REAR ATTACHMENT HEIGHT	NZL	REAR UDDER HEIGHT	-8.498	14.7119	
AYS	REAR TEAT PLACEMENT	NZL	REAR TEAT PLACEMENT	-6.186	16.4227	

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Conversion Factors For Type. Source = INTERBULL MACE 1408  
 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	-3.052	6.6161	0.69
AYS	FEET AND LEGS	USA	OVERALL FEET & LEG	-3.152	4.3898	
AYS	MAMMARY SYSTEM	USA	OVERALL UDDER SCORE	-1.533	6.0992	
AYS	STATURE	USA	STATURE	-2.062	2.8867	
AYS	CHEST WIDTH	USA	CHEST WIDTH	-0.404	5.6927	
AYS	BODY DEPTH	USA	BODY DEPTH	-1.445	4.5752	
AYS	PIN WIDTH	USA	RUMP WIDTH	-0.374	4.5291	
AYS	RUMP ANGLE	USA	RUMP ANGLE	-0.284	5.6680	
AYS	FOOT ANGLE	USA	FOOT ANGLE	-0.992	6.7477	
AYS	REAR LEGS SIDE VIEW	USA	REAR LEG SET	0.932	8.5569	
AYS	UDDER DEPTH	USA	UDDER DEPTH	-0.876	4.9413	
AYS	MEDIAN SUSPENSORY	USA	MEDIAN SUSPENSORY	-1.584	5.2063	
AYS	FORE ATTACHMENT	USA	FORE UDDER	-1.844	4.9735	
AYS	TEAT PLACEMENT	USA	FRONT TEAT PLACEMENT	-0.432	4.2668	
AYS	TEAT LENGTH	USA	TEAT LENGTH	-0.051	4.0421	
AYS	REAR ATTACHMENT HEIGHT	USA	REAR UDDER HEIGHT	-1.984	4.9167	
AYS	ANGULARITY	USA	ANGULARITY	-1.548	6.5030	

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CALCULATION OF FAT% AND PROTEIN% FOR AUGUST 2014

BREED	BMILK	BFAT	BPRT
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AYS	7512	308	253
BSW	8007	334	283
CN	6157	264	215
GUE	6753	313	230
JER	6362	315	243
HOL	9858	375	316
MS	6878	250	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

$$\begin{aligned}
 EBVFAT\% &= 200 * [ (375 + 50 * 0.5) / (9858 + 1000 * 0.5) - (375 / 9858) ] \\
 &= 200 * [ (375 + 25) / (9858 + 500) - (0.03804) ] \\
 &= 200 * [ 0.03862 - 0.03804 ] \\
 &= 200 * 0.00058 \\
 &= 0.12
 \end{aligned}$$

$$\begin{aligned}
 EBVPROT\% &= 200 * [ (316 + 40 * 0.5) / (9858 + 1000 * 0.5) - (316 / 9858) ] \\
 &= 200 * [ (316 + 20) / (9858 + 500) - (0.03206) ] \\
 &= 200 * [ 0.03244 - 0.03206 ] \\
 &= 200 * 0.00038
 \end{aligned}$$

$$= 0.08$$