

INTERBULL breeding values calculated April 2026

This newsletter is primarily written for VikingGenetics staff and breeding advisors in Denmark, Sweden, and Finland, but can also be of interest for dairy farmers.

Table of content

International breeding values for the traits and breeds shown in table 1 have been published 7th April 2026.

Current evaluation	
Daughter proven bulls: Yield Conformation Somatic cell count and udder health Longevity Calving – maternal and direct Female fertility Milking speed and temperament NTM for Nordic and foreign bulls	Young genomic tested bulls - HOL: Yield Conformation Somatic cell count and udder health Longevity Calving – maternal and direct Female fertility Milking speed and temperament

Table 1. Traits and breeds for which international breeding values are published.

Trait:	International breeding values for the breeds:
Yield	Red breeds, Holstein and Jersey
Conformation	Red breeds, Holstein and Jersey
Udder health	Red breeds, Holstein and Jersey
Longevity	Red breeds, Holstein and Jersey
Calving – maternal and direct	Red breeds and Holstein
Female fertility	Red breeds, Holstein and Jersey
Milking speed	Red breeds, Holstein and Jersey
Temperament	Red breeds and Holstein

You can find Interbull breeding values for all bulls with international breeding values on [NAV Interbull search](#)

On the page you can search within breed or country of birth. You can also search with the herdbook number or the name of the bull. Click on the herdbook number of the bull and view a graphical representation of the bulls' breeding values.

You can sort the bulls by different breeding values by clicking on the top line of the table.

Bulls born in Denmark, Finland and Sweden are in the following grouped under DNK/FIN/SWE

Daughter proven bulls

In the tables below, only sires that have breeding values based on daughter information is shown. Country refer to birth country of the bulls.

Yield

In tables 2-4 is a comparison of the genetic level of yield for bulls from different countries. The analysis includes bulls born in 2019 or later, that have more than 60 daughters in the genetic evaluation.

Table 2. Genetic level for yield traits, Red breeds. Bulls born in 2019 or later.

Country	No. of bulls	Milkindex	Fatindex	Proteinindex	Y-index	Y-index STD
Australia	7	92,9	82,7	80,3	78,4	20,4
Canada	12	96,3	88,2	87,0	85,4	12,4
Germany	8	102,3	95,5	99,9	97,1	8,4
DNK/FIN/SWE	107	99,0	104,2	103	104,7	8,8
Norway	113	100,4	94,4	96,3	94,3	10,7
New Zealand	12	92,9	85,2	84,0	82,5	9,3

Table 3. Genetic level for yield traits, Holstein. Bulls born in 2019 or later.

Country	No. of bulls	Milkindex	Fatindex	Proteinindex	Y-index	Y-index STD
Australia	32	97,7	99,5	99,2	99,8	6,0
Belgium	10	104,2	108,6	108,5	109,7	6,4
Canada	256	107,3	111,8	106,4	109,2	13,1
Switzerland	64	96,8	97,2	94,7	95,6	9,6
Czech Republic	36	112,0	109,1	110,4	109,3	7,6
Germany	586	114,5	107,8	112,0	109,0	9,8
DNK/FIN/SWE	143	99,3	105,5	104,8	106,5	8,1
Spain	51	112,7	101,1	105,3	101,1	7,2
France	220	106,7	100,8	105,3	102,5	8,4
UK	41	101,5	112,2	104,2	109,3	11,1
Ireland	12	66,6	82,7	72,6	79,7	6,6
Israel	88	101,5	97,3	98,3	96,9	7,4
Italy	95	108,7	104,8	108,9	106,7	8,0
Japan	10	111,0	112,1	109,1	110,3	6,9
Netherlands	363	105,1	106,8	106,8	107,2	9,7
New Zealand	538	70,1	89,4	79,3	87,1	7,4
Poland	55	108,1	100,5	106,3	102,7	7,2
Slovenia	19	100,9	85,7	90,6	85,4	9,0
USA	1835	109,4	117,3	110,0	114,1	10,0

Table 4. Genetic level for yield traits, Jersey. Bulls born in 2019 or later.

Country	No. of bulls	Milkindex	Fatindex	Proteinindex	Y-index	Y-index STD
Australia	19	105,8	89,0	95,5	88,3	6,5
Canada	19	101,6	91,1	93,4	89,5	14,6
DNK/FIN/SWE	56	101,6	105,0	105,3	106,3	8,4
New Zealand	327	95,5	92,6	94,9	93,3	7,7
USA	333	117,1	106,6	112,5	107,2	10,5

Conformation

The international genetic evaluation is done for 16 linear traits for Holstein, Red breeds and Jersey. In addition, frame, body condition score and locomotion are included in this trait group.

Breeding values for frame

EBV for frame is calculated from the 6 linear traits that are part of the international genetic evaluation. The composite NAV breeding value for frame also includes topline. There is no international genetic evaluation of topline.

We calculate international breeding value for frame based on a regression of NAV breeding values for the 6 linear international traits on NAV EBV for frame for Danish, Swedish and Finnish bulls born in 2015-2018. The estimated regression coefficients are used to calculate international breeding value for frame for foreign bulls. This method is used to ensure the same relative weight between traits in NAV and international composite traits.

Breeding values for feet and legs

EBV for feet and legs is calculated from the 3 linear traits that are part of the international genetic evaluation. The composite NAV breeding values for feet and legs also include hock quality and bone quality. There is no international genetic evaluation for these two traits.

We calculate international breeding value for feet and legs based on a regression of NAV breeding values for the 3 linear international traits on NAV EBV for feet and legs for Danish, Swedish and Finnish bulls born in 2015-2018. The estimated regression coefficients are used to calculate international breeding value for feet and legs for foreign bulls.

Breeding values for udder

The international genetic evaluation for udder includes 7 traits. The Nordic genetic evaluation for udder also includes teat thickness and udder balance. There is no international evaluation for these two traits.

We calculate international breeding value for udder based on a regression of NAV breeding values for the 7 linear international traits on NAV EBV for udder for Danish, Swedish and Finnish bulls born in 2015-2018. For Holstein the non Interbull traits Rear udder Width, Udder balance and Teat thickness are estimated from the 7 seven linear Interbull udder traits. For RDC and Jersey the estimated regression coefficients are used to calculate international breeding value for udder for foreign bulls.

Genetic level of composite conformation traits

In tables 5-7 is a comparison of genetic level of composite conformation traits for bulls from different countries. The calculation includes bulls that have at least 25 daughters in genetic evaluation.

Table 5. Genetic level for conformation traits, Red breeds. Bulls born in 2019 or later.

Country	No. of bulls	Frame		Feet&legs		Udder	
		Average	STD	Average	STD	Average	STD
Canada	15	101,7	5,3	104,7	4,1	101,6	7,6
Germany	10	107,8	5,1	104,4	4,1	106,7	8,2
DNK/FIN/SWE	107	97,0	8,9	103,4	6,0	102,5	6,7
Norway	89	97,3	8,6	101,1	6,4	87,6	9,3
New Zealand	12	91,8	10,2			93,3	7,3

Table 6. Genetic level of conformation traits, Holstein. Bulls born in 2019 or later.

Country	No	Frame		Feet&legs		Udder	
		Average	STD	Average	STD	Average	STD
Australia	14	113,3	10,9	99,1	4,5	101,9	8,8
Belgium	9	108,4	6,9	107,9	5,3	102,8	6,6
Canada	224	112,7	10,8	98,7	5,8	106,0	9,4
Switzerland	68	110,1	8,0	99,0	5,1	111,2	8,7
Czech Republic	35	107,4	7,9	100,5	5,0	97,4	8,8
Germany	575	105,4	8,9	101,3	5,0	104,6	8,4
DNK/FIN/SWE	135	98,9	9,3	100,9	5,9	102,3	8,5
Spain	62	109,9	9,2	100,1	5,8	107,9	10,3
France	212	114,9	8,6	103,0	5,2	111,2	8,8
UK	27	101,5	12,2	99,9	5,4	102,3	7,3
Ireland	6	87,3	11,0	98,2	3,1	71,8	9,7
Italy	91	110,4	9,4	98,1	4,9	103,0	9,5
Japan	195	108,9	8,2	97,5	4,7	99,3	9,4
Netherlands	272	106,4	10,2	107,5	6,9	100,2	10,5
New Zealand	543	84,8	9,7			88,3	7,8
Poland	51	109,9	13,4	102,8	4,9	101,7	9,1
Slovenia	17	105,3	6,0	98,9	5,0	91,3	10,1
USA	1029	105,4	10,5	98,8	5,6	100,2	8,9

Table 7. Genetic level of conformation traits, Jersey. Bulls born in 2019 or later.

Country	No	Frame		Feet&legs		Udder	
		Average	STD	Average	STD	Average	STD
Australia	10	111	8,0	102,1	4,7	92,3	7,4
Canada	24	105,1	10,4	106,1	7,1	102,0	10,2
DNK/FIN/SWE	53	96,1	7,6	96,4	7,4	102,0	10,1
USA	212	103,5	8,4	100,1	6,8	99,4	8,5

Somatic cell count and udder health

Interbull does two international genetic evaluations – one for somatic cell count and one for udder health. In the first one only somatic cell count is included for all countries. NAV sends breeding values for somatic cell count to Interbull, so Nordic bulls get official breeding values for somatic cell count in countries where this trait is official. In the second evaluation breeding values based on mastitis diagnoses are included. NAV's official breeding value for udder health is used. For countries that do not record mastitis diagnoses, somatic cell count is included in this evaluation.

Index for udder health is published in the Nordic countries when reliability is 40% or higher. In tables 8-10 is a comparison of genetic level of udder health for bulls from different countries.

Table 8. Genetic level for udder health, Red breeds. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	8	93,5	6,9
Canada	5	86,6	2,9
DNK/FIN/SWE	128	100,7	8,7
Norway	114	101,3	8,2
New Zealand	20	91,8	6,3

Table 9. Genetic level for udder health, Holstein. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	33	100,2	5,8
Belgium	6	97,9	7,3
Canada	139	98,2	9,2
Switzerland	18	98,5	8,1
Czech Republic	39	96,2	9,4
Germany	397	100,7	7,9
DNK/FIN/SWE	131	103,6	7,0
Spain	64	102,4	7,1
France	188	103,0	5,8
UK	29	98,6	5,9
Ireland	6	89,0	6,8
Israel	92	99,1	9,3
Italy	71	101,5	7,2
Japan	126	95,3	7,6
Korea	5	93,0	3,9
Netherlands	186	99,9	7,5
New Zealand	552	93,0	7,5
Poland	64	103,4	8,8
Slovenia	19	94,6	8,0
USA	950	99,7	7,8

Table 10. Genetic level for udder health, Jersey. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	20	89,3	5,5
Canada	6	90,9	6,8
DNK/FIN/SWE	54	103,9	7,0
New Zealand	347	92,3	6,5
USA	156	82,8	8,5

Longevity

In tables 11-13 is a comparison of genetic level of longevity for bulls from different countries. Bulls are included if they have at least 40 daughters in the genetic evaluation.

Table 11. Genetic level for longevity, Red breeds. Bulls born in 2018 or later.

Country	No. of bulls	Average	STD
Canada	9	80,5	5,8
Germany	8	94,5	8,0
DNK/FIN/SWE	49	101,1	12,3
Norway	86	91,8	6,9

Table 12. Genetic level for longevity, Holstein. Bulls born in 2018 or later.

Country	No. of bulls	Average	STD
Australia	24	98,7	7,5
Belgium	10	100,1	6,8
Canada	201	99,6	9,5
Switzerland	57	99,9	6,4
Czech Republic	37	109,3	4,9
Germany	531	106,7	8,3
DNK/FIN/SWE	97	104,7	7,2
Spain	9	100,9	5,0
France	131	99,8	7,3
UK	26	99,0	11,1
Ireland	9	88,3	6,5
Israel	85	95,3	5,5
Italy	48	104,2	6,3
Netherlands	328	104,0	7,7
New Zealand	332	84,3	5,8
Poland	30	98,7	7,5
Slovenia	18	92,3	9,8
USA	1301	104,0	8,1

Table 13. Genetic level for longevity, Jersey. Bulls born in 2018 or later.

Country	No. of bulls	Average	STD
Australia	18	95,0	4,9
Canada	20	94,2	5,9
DNK/FIN/SWE	61	100,7	7,4
New Zealand	145	90,5	6,2
USA	327	100,2	6,5

Calving – maternal and direct

For Red breeds Canada, Denmark, Finland, Norway, Sweden and The United States send data to this evaluation. It has not been possible to obtain enough high correlations between countries for still birth, so the international evaluation only includes calving ease (maternal and direct) for Red breeds.

In the Holstein group there are international breeding values for both still birth (maternal and direct) and calving ease (maternal and direct), but only for first lactation. In the Nordic countries also, information from later lactations and from birth weight is included in calving, maternal and calving, direct.

We have calculated international indices for calving, maternal and calving, direct by performing a regression between NAV breeding values for still birth and calving ease and NAV breeding value for calving for Nordic bulls born in 2008-2012. The calculated regression coefficients are used to calculate a calving index for foreign bulls - same method is used for calving, maternal and calving, direct.

In Tables 14 and 15 the average genetic level for Red breed and Holstein bulls is shown for different countries. Only bulls born in 2019 or later are included. Bulls need to have breeding values for yield to be included.

Table 14. Genetic level for calving, maternal and calving, direct, Red breeds. Bulls born in 2019 or later.

Country	Calving, direct			Calving, maternal		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Canada	15	95,1	4,9	7	100,7	7,8
DNK/FIN/SWE	110	101,0	7,0	98	99,8	5,6
Norway	112	100,4	8,8	112	91,6	6,9

Table 15. Genetic level for calving, maternal and calving, direct, Holstein. Bulls born in 2019 or later.

Country	Calving, direct			Calving, maternal		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Australia	38	98,7	5,0	2	99,5	4,9
Austria	5	96,6	8,2	3	104,7	7,5
Belgium	11	102,0	4,7	9	100,8	4,8
Canada	259	98,5	5,9	203	101,2	5,3
Switzerland	35	99,3	5,1	41	101,9	5,5
Germany	642	99,9	5,5	575	101,0	5,5
DNK/FIN/SWE	153	101,0	5,0	146	101,6	4,5
Spain	30	100,1	6,0	7	100,1	3,0
France	269	97,1	5,8	236	107,3	6,6
UK	30	100,7	4,0	21	101,0	4,1
Israel	64	97,2	4,8	98	92,8	6,3
Italy	101	98,1	4,9	72	101,9	4,5
Netherlands	361	99,4	5,3	316	98,8	7,2
Poland	69	96,7	4,7	48	95,1	6,3
USA	1916	100,3	4,7	1325	103,2	4,4

Female fertility

NAV calculates breeding values for female fertility based on linear regression between NAV breeding values for female fertility and NAV breeding values for the sub-indices in female fertility. Basis for the regressions are Nordic bulls born in 2003-2007 – see more information below. The estimated regression coefficients are used to calculate international breeding value for female fertility for foreign bulls.

In practice 3 regressions are calculated with different explaining variables (Jersey only 2 and 3):

- 1: Female fertility = Ability to conceive (R^2 , HOL = 0,05) (R^2 , Red breeds = 0,35)
- 2: Female fertility = Days open (R^2 , HOL = 0,87) (R^2 , Red breeds = 0,85) (R^2 , Jer = 0,87)
- 3: Female fertility = Ability to return to recycle after calving + ability to conceive + Days open (R^2 , HOL = 0,96) (R^2 , Red breeds = 0,94), (R^2 , Jer = 0,94).

R^2 (degree of explanation) indicates the proportion of the variance of the index for female fertility, that the traits in the regression can explain. Since the regression is used on foreign bulls, and the genetic correlations between international and NAV traits are not 1, the observed degree of explanation will be lower.

For each foreign bull we use the regression with the greatest explanatory power given the international sub-indices that are available. The degree of explanation therefore depends largely of the traits being available from the different countries.

Table 16. Genetic level for female fertility, Red breeds. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	5	93,6	7,9
Canada	11	90,3	10,6
Germany	8	95,3	12,2
DNK/FIN/SWE	105	101,6	9,9
Norway	87	112,6	7,0
New Zealand	7	95,7	5,2

Table 17. Genetic level for female fertility, Holstein. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	31	99,6	5,4
Belgium	10	92,9	7,3
Canada	233	93,6	7,9
Switzerland	60	97,0	2,9
Czech Republic	32	95,7	6,0
Germany	510	97,8	9,4
DNK/FIN/SWE	144	104,2	10,2
Spain	22	95,0	8,3
France	183	99,3	8,2
UK	30	100,7	8,7
Ireland	12	101,2	5,7
Israel	85	95,7	2,3
Italy	88	96,6	8,9
Japan	10	86,4	5,7
Netherlands	335	94,2	9,6
New Zealand	352	99,1	4,8
Poland	21	94,1	6,4
USA	1712	94,4	7,1

Table 18. Genetic level for female fertility, Jersey. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	17	88,7	5,5
Canada	18	85,3	6,5
DNK/FIN/SWE	63	104,2	13,0
New Zealand	218	95,9	6,5
USA	309	86,7	8,1

Milking speed and temperament

In Tables 19-21, the genetic level for bulls from different countries, born in 2019 or later are shown for Holstein, Red breeds and Jersey.

Table 19. Genetic level for milking speed and temperament, Red breeds. Bulls born in 2019 or later.

Country	Milking speed			Temperament		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Canada	12	89,2	13,4	12	92,7	9,8
Germany	8	105,3	5,8	10	105,7	5,8
DNK/FIN/SWE	128	98,2	7,1	105	100,7	11,0
Norway	103	94,1	4,4	95	100,1	6,0

Table 20. Genetic level for milking speed and temperament, Holstein. Bulls born in 2019 or later.

Country	Milking speed			Temperament		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Australia	14	100,7	6,5	14	105,5	7,1
Austria	5	88,2	10,3			
Belgium	8	92,2	4,1	7	104,8	8,0
Canada	173	99,1	12,3	163	104,0	12,6
Switzerland	72	97,2	9,4	71	103,5	9,5
Germany	431	93,4	8,7	329	101,9	16,8
DNK/FIN/SWE	71	98,9	9,2	98	100,0	15,2
France	204	92,3	10,4	202	104,3	11,2
UK	28	96,9	16,3	28	103,2	11,1
Italy	70	92,9	4,8	69	102,7	12,5
Netherlands	295	91,4	6,9	221	102,2	11,8
New Zealand	548	102,2	4,4	548	98,1	2,9
Slovenia	19	93,9	5,6			
USA	422	98,9	12,9	394	103,3	13,6

Table 21. Genetic level for milking speed, Jersey. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australien	12	104,8	6,3
Canada	21	95,3	10,6
DNK/FIN/SWE	54	99,5	9,4
New Zealand	317	100,1	6,4
USA	17	102,2	7,0

NTM for Nordic and foreign bulls

NTM index is calculated for all bulls (Nordic and others) that have official breeding values (NAV breeding values or international EBVs) for yield, udder health and conformation.

Interbull NTM is calculated by weighing the Interbull / NAV breeding values for yield, female fertility, calving (maternal and direct), udder health, longevity, feet&legs, udder, milking speed and temperament. The same economic weight factors are used as for NAV breeding values.

Rules for calculation of NTM based partly or entirely on international breeding values are stated below in order of priority.

1. Bull has NAV breeding value for a trait

If the bull has NAV breeding value for a specific trait, this is used in the calculation of NTM - no matter if the bull also has international breeding value for that trait.

2. Bull has no NAV breeding value, but has an international breeding value for a trait

If the bull does not have NAV breeding value for the trait, the international breeding value is used, provided that Interbull calculates international breeding values for that trait and the bull comes from a country which provides data for that trait.

3. Bull has no NAV or no international breeding value for a trait

For traits where no Interbull EBV is available or the bull has no Interbull EBV, and at the same time it is not tested in the Nordic countries, a pedigree index is used. Pedigree index is calculated as $\frac{1}{2} (EBV_{\text{sire}} - 100) + \frac{1}{4} (EBV_{\text{maternal grand sire}} - 100) + 100$. The contributions from the sire and maternal grand sire can be based on either NAV breeding values or international breeding values. If EBV_{sire} or $EBV_{\text{maternal grand sire}}$ are unofficial the pedigree index is set to 100.

Publication rules for NTM

All foreign and Nordic bulls that have Interbull breeding values for yield, udder health and udder get a public Interbull NTM. This NTM is calculated with a lower reliability than an NTM for Nordic proven bulls, where information for all traits is always available.

Genetic level for Interbull NTM

In tables 22-24 genetic level for Interbull NTM for Jersey, Red breeds and Holstein are shown. Bulls included are born in 2019 or later.

Table 22. Genetic level for NTM, Red breeds. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Canada	9	-26,9	13,3
DNK/FIN/SWE	106	11,0	9,1
Norway	91	-7,1	10,1
New Zealand	10	-23,0	10,5

Table 23. Genetic level for NTM, Holstein. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	12	2,1	6,4
Belgium	8	6,1	7,4
Canada	174	5,8	15,7
Switzerland	39	-1,0	10,1
Czech Republic	32	6,5	6,2
Germany	427	9,9	8,5
DNK/FIN/SWE	139	13,6	7,8
Spain	51	2,2	7,2
France	195	5,3	8,1
UK	27	10,2	9,5
Italy	73	5,9	7,9
Japan	10	-0,2	4,8
Netherlands	245	6,5	9,7
Poland	51	1,1	7,2
Slovenia	18	-20,0	9,8
USA	726	11,6	8,4

Table 24. Genetic level for NTM, Jersey. Bulls born in 2019 or later.

Country	No. of bulls	Average	STD
Australia	10	-16,8	5,3
Canada	13	-12,4	12,0
DNK/FIN/SWE	56	11,3	8,0
USA	145	-5,7	8,2

Changes since last run

In the evaluation in April 2026 the following changes are done compared to December 2025 evaluation:

Yield:

- Canada (ALL), France (ALL), Germany (ALL), Netherland (ALL) and Italy (HOL, JER) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits
- Netherland (ALL) has minor change in EDC calculation leading to a small drop in EDC
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Fertility:

- Canada (ALL), Germany (ALL), Netherland (ALL), France (HOL) and Italy (HOL) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Calving:

- Canada (ALL), Germany (ALL) Netherland (ALL), and Italy (HOL) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Conformation:

- Canada (ALL), Germany (ALL), Netherland (ALL), France (HOL) and Italy (HOL, JER) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.
- Australia (JER) has updated OCS, OUS in the calculation of the linears that go into the composite traits. the calculation of the Jersey composite involved: 1. Linears are adjusted to reflect mainly optimal traits. 2. Raw composites are calculated using weights on adjusted linears 3. Raw composites are adjusted for scale (number of linears included) and scaled. 4. ocs (Overall conformation score) is calculated from adjusted composites. Furthermore OFL calculated for the first time.

Udder health:

- Canada (ALL), France (ALL), Germany (ALL) Netherland (ALL), and Italy (HOL, JER) have base change.
- Denmark, Finland and Sweden (ALL) have small drops in information due to data edits
- Germany (ALL) has changes in the data caused drops in information for several bulls causing few bulls to be missing as no longer qualifying.
- Netherland (ALL) has minor change in EDC calculation leading to a small drop in EDC.
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Longevity:

- Canada (ALL), France (ALL), Germany (ALL), Netherland (ALL) and Italy (HOL, JER) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits.
- Netherland (ALL) has update of genetic parameters, extra effect of inbreeding to the model, extra edit in data selection: max of 18 month of lactation is used.
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Milking speed and temperament:

- Canada (ALL), Germany (ALL), Netherland (ALL), France (HOL) and Italy (HOL, JER) have base change.
- Denmark, Finland and Sweden (ALL) have drops in information due to data edits.
- USA (ALL) has drops in herds/daughters/EDC related to pedigree correctness and daughter-herd-year minimum edits.
- Italy (HOL) has applied a yearly cutoff of data causing some bulls to be missing.

Genomic tested young Holstein bulls

In the tables below, only Holstein sires that have breeding values based on genomic information and no daughters is shown.

Averages are only shown for countries with more than 20 bulls.

Yield

In tables 25 is a comparison of the genetic level of yield for bulls from different countries.

Table 25. Genetic level for yield traits, Holstein. Bulls born in 2023 or later.

Country	No. of bulls	Milkindex	Fatindex	Proteinindex	Y-index	Y-index STD
Australia	32	97,3	100,4	96,1	98,3	8,3
Belgium	12	118,2	121,8	121,3	122,3	8,5
Canada	345	110,8	121,1	112,3	117,5	11,5
Switzerland	7	110,3	109,0	109,1	108,7	8,0
Czech Republic	16	115,3	116,4	116,2	116,7	7,7
Germany	348	117,9	117,4	118,7	118,2	7,0
DNK/FIN/SWE	113	105,9	123,2	119,4	124,9	6,2
Spain	52	119,4	111,9	114,9	112,1	12,7
France	249	113,6	110,4	114,2	112,3	7,1
UK	23	114,2	125,7	117,9	123,0	6,7
Hungary	12	109,2	101,5	107,1	103,6	5,6
Italy	40	117,7	114,3	118,8	116,6	8,6
Netherlands	326	112,5	114,2	115,7	115,7	7,8
New Zealand	5	69,8	94,6	81,8	92,2	10,6
Poland	53	115,7	117,0	117,2	117,5	5,7
USA	1107	113,6	127,6	118,3	124,6	7,6

Conformation

The international genetic evaluation is done for 16 linear traits for Holstein. In addition, frame condition score and locomotion are included in this trait group.

Calculation of frame, feet&legs and udder follows same principles as for daughter proven bulls.

In tables 26 is a comparison of genetic level of composite conformation traits for bulls from different countries.

Table 26. Genetic level of conformation traits, Holstein. Bulls born in 2023 or later.

Country	No	Frame		Feet&legs		Udder	
		Average	STD	Average	STD	Average	STD
Belgium	12	108,9	9,5	106,7	5,1	105,8	6,6
Canada	344	113,1	11,0	101,0	4,4	105,4	9,3
Switzerland	7	116,3	7,6	105,9	5,1	111,4	3,8
Czech Republic	5	108,4	5,9	101,4	2,8	100,2	0,8
Germany	348	107,7	8,6	103,8	4,8	109,3	8,2
DNK/FIN/SWE	112	100,6	9,1	101,8	4,0	106,6	6,5
Spain	52	118,1	12,1	103,2	4,8	107,3	10,5
France	249	115,5	8,6	106,0	4,6	114,4	7,8
UK	23	102,6	8,0	98,9	4,0	96,4	6,0
Hungary	12	108,3	6,4	100,8	4,3	105,3	8,0
Italy	40	114,1	8,0	100,2	4,2	108,2	8,6
Netherlands	326	107,4	9,5	109,0	5,9	104,9	8,2
Poland	53	108,5	8,0	103,0	4,7	108,7	8,8
USA	1105	105,0	9,2	97,4	4,2	97,3	8,2

Somatic cell count and udder health

In tables 27 is a comparison of genetic level of udder health for bulls from different countries.

Table 27. Genetic level for udder health, Holstein. Bulls born in 2023 or later.

Country	No. of bulls	Average	STD
Belgium	12	103,5	6,7
Canada	344	99,0	4,9
Switzerland	7	99,4	3,6
Czech Republic	5	100	4,8
Germany	348	104,5	6,1
DNK/FIN/SWE	111	105,1	5,5
Spain	52	101,8	7,3
France	249	106,4	6,3
UK	23	99,3	5,5
Hungary	12	97,1	9,1
Italy	40	102,4	6,1
Netherlands	323	103,6	6,7
Poland	53	105,7	7,6
USA	1101	100,2	4,9

Longevity

In tables 28 is a comparison of genetic level of longevity for bulls from different countries.

Table 28. Genetic level for longevity, Holstein. Bulls born in 2023 or later.

Country	No. of bulls	Average	STD
Belgium	12	111,7	6,4
Canada	344	105,9	6,0
Switzerland	7	111,9	6,3
Czech Republic	5	105,8	4,3
Germany	348	115,2	5,6
DNK/FIN/SWE	112	110,3	5,1
Spain	52	106,0	8,7
France	249	110,1	6,0
UK	23	106,6	5,7
Hungary	12	101,5	5,9
Italy	40	107,5	5,7
Netherlands	326	112,0	6,7
Poland	53	109,7	5,2
USA	1107	107,2	5,2

Calving – maternal and direct

In Tables 29 the average genetic level for bulls is shown for different countries.

Table 29. Genetic level for calving, maternal and calving, direct, HOL. Bulls born in 2023 or later.

Country	Calving, direct			Calving, maternal		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Belgium	12	100,4	3,3	12	104,4	5,1
Canada	344	98,7	3,8	344	101,3	4,7
Switzerland	7	99,7	4,2	7	104,3	3,4
Germany	348	100,7	3,6	348	103,3	4,6
DNK/FIN/SWE	111	100,3	3,7	111	102,7	5,1
Spain	52	98,6	4,3	52	102,3	5,0
France	238	98,4	3,7	238	103,2	4,9
UK	23	99,0	4,4	23	103,6	3,2
Hungary	12	97,4	2,4	10	99,9	2,6
Italy	40	99,5	3,6	40	103,1	4,3
Netherlands	326	100,8	3,5	323	102,0	4,8
Poland	53	99,6	3,6	53	103,2	4,6
USA	1096	100,6	3,4	1101	103,6	3,6

Female fertility

In Tables 30 the average genetic level for bulls is shown for different countries.

Table 30. Genetic level for female fertility, Holstein. Bulls born in 2023 or later.

Country	No. of bulls	Average	STD
Belgium	12	105,7	8,6
Canada	343	97,1	7,4
Switzerland	7	97,7	4,2
Germany	347	104,2	7,9
DNK/FIN/SWE	112	108,0	8,4
Spain	52	97,8	10,1
France	239	104,4	7,8
UK	22	99,9	5,1
Italy	40	100,2	7,4
Netherlands	323	101,7	7,9
Poland	53	102,5	6,4
USA	1004	99,0	5,6

Milking speed and temperament

In Tables 31, the genetic level for bulls from different countries.

Table 31. Genetic level for milking speed and temperament, Holstein. Bulls born in 2023 or later.

Country	Milking speed			Temperament		
	No. of bulls	Average	STD	No. of bulls	Average	STD
Belgium	12	98,4	3,0	12	109,4	4,1
Canada	343	99,7	5,4	289	104,9	5,9
Switzerland	7	93,4	2,5			
Germany	346	96,9	2,8	345	104,9	4,4
DNK/FIN/SWE	110	101,1	13,0	112	105,1	3,8
Spain	52	96,9	4,0	43	103,7	6,3
France	248	94,7	3,1	236	107,9	3,8
UK	22	99,5	3,5	19	102,8	1,5
Italy	40	93,4	7,2	40	106,8	9,9
Netherlands	323	94,0	7,3	287	103,8	5,7
Poland	48	91,3	6,0	48	103,4	6,7
USA	1004	101,9	3,1	982	104,0	4,1

Changes since last run

In the evaluation in April 2026 the following changes are done compared to December 2025 evaluation:

Yield:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- France has some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Netherland has drop in information due to introduction of DGV BLUP

Fertility:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- France has decrease in reliability due to pedigree update and some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Netherland has drop in information due to introduction of DGV BLUP

Calving:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- Denmark, Sweden and Finland used MACE data for DCE
- France has decrease in reliability due to pedigree update and some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Italy has decrease in reliability for DCE and MSB due to the data eidt and low heritability
- Netherland has drop in information due to introduction of DGV BLUP

Conformation:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- France has some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Netherland has drop in information due to introduction of DGV BLUP

Udder health:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- France has some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Germany has drop in information for SCS
- Netherland has drop in information due to introduction of DGV BLUP

Longevity:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- France has some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Netherland has drop in information due to introduction of DGV BLUP

Milking speed and temperament:

- Canada, France, Germany, Italy and Netherland have base change
- Canada has some bulls that changed from official to unofficial due to change in qualification for publication
- Denmark, Sweden and Finland have decrease in reliability due to fixing a bug
- France has some bulls that changed from official to unofficial due to change in publication rules from breed societies
- Netherland has drop in information due to introduction of DGV BLUP

Dates of publication of Interbull breeding values in 2026 and 2027:

Month	Date
August	11
December	1
April	6
August	10
December	7

The indices can be found at the national databases in Denmark, Sweden, and Finland 2-3 days after they have been published by Interbull.

Regards

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