ABS

Profit From Genetic Progress

Custom Index Traits and Definitions

Your guide to custom index traits and definitions.

Click here for USA Holstein Traits

Click here for GBR Holstein Traits

Click here for USA Jersey Traits

Breed: Holstein, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Milk	Milk	Expected second-lactation milk production in pounds compared to breed average	In cheese markets, increase component percentages while limiting the liquid portion of milk. In fluid markets increase volume of milk.	In cheese markets, enter a slightly negative weight to increase component percentages. In fluid markets enter positive weights to increase milk volume.
Fat	Fat	Expected second-lactation fat production in pounds compared to breed average	Increase fat production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Fat pounds
Protein	Prot	Expected second-lactation protein production in pounds compared to breed average	Increase protein production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Protein pounds
Productive Life	PL	Expressed as additional months of life in the milking string	Increase productive life to decrease cows leaving the herd prematurely	Enter a positive weight to increase focus on higher productive life promoting sires
Livability	LIV	Represents the additional percentage of cows that avoid dying on the farm	Increase livability to help producers recoup disposal income	Enter a positive weight to increase focus on higher PTA LIV
Somatic Cell Score	SCS	Uses somatic cell score data from the first five lactations as an indicator of mastitis resistance	Reduce incidents of high SCC and mastitis on farm	Enter positive weights to focus on lowering the PTA SCS of sires
Daughter Pregnancy Rate	DPR	Percentage of nonpregnant cows that become pregnant during each 21-day period	Increase pregnancy rate on farm to decrease open late lactation cows	Enter a positive weight to emphasize sires that have a higher DPR value
Cow Conception Rate	CCR	Percentage of inseminated cows that become pregnant each service; shown as a deviation in percentage	Increase cow herd conception rate on farm to decrease number of rebreeds	Enter a positive weight to emphasize sires that have a higher PTA CCR
Heifer Conception Rate	HCR	Percentage of inseminated heifers that become pregnant each service; shown as a deviation in percentage	Increase heifer conception rate on farm to decrease the number of rebreeds	Enter a positive weight to emphasize sires that have a higher PTA HCR
Sire Calving Ease	SCE	Percentage of difficult births expected in first calf heifers	Reduce the incidents of difficult calvings that affect production throughout the lactation	Enter positive weights to focus on lowering the PTA SCE
Sire Still Birth	SSB	Percentage of still born calves expected of a sire	Reduce the number of stillbirths on farm due to a particular sire	Enter positive weights to lower the value for PTA SSB

Breed: Holstein, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Daughter Calving Ease	DCE	Percentage of difficult births expected for a particular daughter	Reduce number of calvings that require assistance to decrease labor and costs	Enter positive weights to emphasize sires that have lower values for PTA DCE
Daughter Still Birth	DSB	Percentage of still born calves expected for a particular daughter	Reduce the number of stillbirths a female is likely to have	Enter a positive weight to lower the value for PTA DSB
ABS Health Index	AHI	A composite index that includes mastitis, metritis, ketosis, displaced abomasum, hypocalcemia, retained placenta, twinning rate, and heifer survival.	Create animals that are healthy at all stages of life.	Enter a positive weight to put more emphasis on sires with a higher PTA AHI and create healthier daughters.
Udder Composite	UDC	A composite index that incorporates fore and rear attachments, udder depth, cleft, teat placement, and stature	Create udders with capacity that are well attached	Enter a positive weight to put more emphasis on sires with higher PTA UDC
Feet Legs Composite	FLC	A composite index based on rear legs-rear view, foot angle, feet and legs score, and stature.	Create feet and legs that are slightly straighter when viewed from the side with a steep foot angle and forward tracking	Enter a positive weight to put more emphasis on sires with a higher PTA FLC
Body Weight Composite	BWC	A composite index based on body size and dairy form	Decrease cow size for higher efficiency animals	Enter negative weights to reduce BWC and create smaller cows
Type	PTAT	Difference in final score classification points compared to the base population	For herds that focus on selling genetics for added value of show ring appearance	Enter a positive weight to put more emphasis on sires with a higher PTAT
Stature	STA	Height at the hips	Reduce stature to increase cow comfort in milking and stall facilities	Enter negative weights to focus on decreasing sire's PTA for stature
Strength	STR	Evaluation of strength and substance, including width of chest	Increase strength to create durable cows	Enter a positive weight to emphasize sires that have more strength
Body Depth	BD	Evaluation of depth of barrel	Increase depth of body	Enter a positive weight to emphasize sires that have a higher PTA BD
Dairy Form	DF	Evaluation of openness and angularity	For herds creating durability type cows, decreasing dairy form. For herds wanting to create intensive management style cows, increasing dairy form.	To increase dairy form emphasis, enter a positive weight. To decrease dairy form emphasis, enter a negative weight.

Breed: Holstein, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Rump Angle	RA	The slope from hips to pins, measured in inches	Create level rumps with pins slightly lower than hips	Enter a positive weight to emphasize sires with more slope from hips to pins
Thurl Width	TW	Distance between pins, measured in inches	Create wide rumps	Enter a positive weight to emphasize sires that are wider through their rump
Rear Legs Side View	RLS	Angle of set to hock	Increase set to leg to address concerns of very straight legs	Enter positive weights to help select sires that have a higher sire PTA for RLSV to crease more set in legs
Rear Legs Rear View	RLR	Evaluation of the rear legs ability to stand straight, wide apart with feet squarely placed	Create cows that track straight forward	Enter a positive weight to emphasize sires that have sire daughters that track straight
Foot Angle	FA	The angle the front toes make with the ground, measured in degrees	Increase foot angle	Enter a positive weight to emphasize increasing foot angle
Feet Legs Score	FLS	Classification score based on cumulative evaluation of feet and legs traits including evidence of mobility	Increase mobility	Enter a positive weight to emphasize increasing FLS
Fore Udder Attachment	FUA	Evaluation of the strength, length, and capacity of the fore udder attachment	Increase length and strength of the fore udder attachment	Enter a positive weight to emphasize increase PTA Fore Udder Attachment
Rear Udder Height	RUH	Distance between the bottom of the vulva and the top of the milk secreting tissue, measured in inches	Raise the height of the rear udder to increase milk capacity of udder	Enter a positive weight to emphasize higher rear udder attachments
Rear Udder Width	RUW	The width of the rear udder where the udder attaches to the body, measured in inches	Widen rear udder attachment to increase milk capacity of udder	Enter a positive weight to emphasize increased rear udder width
Udder Cleft	UC	Depth of cleft between the rear quarters, measured in inches	Create the optimum udder cleft, neither too weak or strong	Enter a positive weighting to emphasize sires closer to zero for PTA Udder Cleft
Udder Depth	UD	The distance between the lowest point of the udder floor and the point of the hock, measured in inches	Reduce culls from udders that are too low	Enter a positive weight to emphasize sires that create daughters with shallow udders

Breed: Holstein, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Front Teat Placement	FTP	The distance between the front teats, measured in inches	Place front teats centrally on the quarters	Enter a positive weight to emphasize genetics with closer front teat placement
Rear Tat Placement	RTP	The distance between the rear teats, measured in inches	Widen spacing of rear teats especially in robot settings to increase udder functionality	Enter positive weights to focus on finding sires with a PTA RTP closer to -1, widening the teats
Teat Length	TL	The length of the longest teat, measured in inches	Ensure teats are not too long or too short	Enter a positive weight to emphasize sires that will increase teat length
Milking Speed	CDN MS	First lactation daughters expected to be appraised as "Average" or "Fast" for milking speed, average=100, standard deviation=5	Increase milking speed efficiency without reducing udder health	Enter positive weights to increase milking speed, any bull over 105 is treated equally to protect for udder health
Temperament	CDN MT	The temperament of first lactation cows at milking time, average=100, standard deviation=5	Create cows that are "Calm" or "Very Calm" while being milked	Enter a positive weight to emphasize sires that produce calm or very calm daughters

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Breed: Holstein, Genetic Proof: GBR

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Milk	Milk	A prediction of the animals transmitting ability for Milk (The predicted Merit to be passed to the progeny)	In cheese markets, increase component percentages while limiting the liquid portion of milk. In fluid markets increase volume of milk.	In cheese markets, enter a slightly negative weight to increase component percentages. In fluid markets enter positive weights to increase milk volume.
Fat	Fat	A prediction of the animals transmitting ability for Fat (The predicted Merit to be passed to the progeny)	Increase fat production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Fat pounds
Protein	Prot	A prediction of the animals transmitting ability for Protein (The predicted Merit to be passed to the progeny)	Increase protein production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Protein pounds
Lifespan	Lifespan	Indicates an increase or reduction in lactations of a sire's daughters relative to the daughters of a bull with a PTA of 0	Increase productive life to decrease cows leaving the herd prematurely	Enter a positive weight to increase focus on sires that produce daughters with longer productive lifespans
Somatic Cell Count	SCC	Uses somatic cell score data as an indicator of mastitis resistance	Reduce incidents of high SCC and mastitis on farm	Enter positive weights to focus on lowering the PTA SCS of sires
Fertility Index	Fertility Index	An estimate of a daughter's fertility based on insemination data, calving interval, and condition score of a bull's daughters	Increase pregnancy rate on farm to decrease calving interval	Enter a positive weight to emphasize sires that have a higher fertility rate and shorter calving interval
Direct Calving Ease	DCE	The ease with which a calf is born by a sire	Reduce the incidents of difficult calvings that affect production throughout the lactation	Enter positive weights to focus on sires that allow for easier calvings
Maternal Calving Ease	MCE	The ease with which an animal can calve itself as a mature animal	Reduce number of calvings that require assistance to decrease labor and costs	Enter positive weights to emphasize sires that have higher PTA values for MCE
Mastitis	Mastitis	The Mastitis Index is expressed as a percentage. Every one percent decrease in a bull's index corresponds to a one percent decrease in his daughters' mastitis cases.	Decrease the number of mastitis cases on farm	Enter a negative weight to focus on sires that decrease cases of mastitis

Breed: Holstein, Genetic Proof: GBR

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Locomotion	Locomotion	An index measuring an animal's ability to walk straight with long strides	Increase animal's ability to walk comfortably	Enter a positive weight in emphasize sires that produce daughters with better locomotion
Condition Score	Condition Score	The relative fatness or body composition of a cow	Depending on ideal conformation for herd goals and management style	For dairies looking to increase condition score, enter a positive weight. For dairies looking to decrease condition score, enter a negative weight.
Maintenance	Maintenance	Maintenance is calculated from traits closely related to a cow's weight (stature, chest width, body depth, and angularity)	Reduce body weight to decrease the associated maintenance costs	For dairies looking to reduce maintenance costs associated with cow size, enter a negative weight
TB Advantage	TB Advantage	Indicates the degree of resistance to bTB a bull is predicted to pass on to his offspring. For every +1 in the index, 1% fewer daughters are expected to become infected during a TB breakdown.	Reduce TB infections on farm during a TB breakdown	Enter positive weights to emphasize sires that increase the resistance to bTB
Mammary	Mammary	A composite index that incorporates fore and rear attachments, udder depth, cleft, and teat placement	Create udders with capacity that are well attached	Enter a positive weight to put more emphasis on sires with higher PTA for Mammary
Legs & Feet	Legs & Feet	A composite index based on the shape and quality of the feet and legs	Increase locomotion of animals on farm	Enter positive weight to emphasize sires that have higher values for Legs & Feet
Type Merit	Type Merit	Difference in final score classification points compared to the base population	For herds that focus on selling genetics for added value of show ring appearance	Enter a positive weight to put more emphasis on sires with a higher Type Merit
Stature	Stature	Height at hips	Reduce stature to increase cow comfort in milking and stall facilities	Enter negative weights to focus on decreasing sire's PTA for stature
Chest Width	Chest Width	Evaluation of strength and substance, including width of chest	Increase strength to create durable cows	Enter a positive weight to emphasize sires that have more strength
Body Depth	Body Depth	Evaluation of depth of barrel	Increase depth of barrel	Enter a positive weight to emphasize sires that will produce daughters that are deeper in their barrel

Breed: Holstein, Genetic Proof: GBR

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Angularity	Angularity	Evaluation of openness and angularity	Emphasize more or less condition and angularity per need	Enter a positive weight to select thinner, more angular cows. Enter a negative weight to select for more condition.
Rump Angle	Rump Angle	The slope from the hips to the pins	Create a level rump with pins slightly lower than hips	Enter a positive weight to emphasize more slope from hips to pins. Enter a negative weight to raise pins related to the hips.
Rump Width	Rump Width	Distance between the pins	Increase width of rump	Enter a positive weight to emphasize wider rumps
Rear Legs	Rear Legs	Angle of the set to the hock	Increase set to leg to address concerns of very straight legs	Enter positive weights to help select sires that have a higher sire PTA for Rear Legs to increase set to legs
Foot Angle	Foot Angle	The angle the front of the toe makes with the ground, measured in degrees	Increase foot angle	Enter positive weight to emphasize sires with a steep foot angle
Fore Udder	Fore Udder	Evaluation of the strength, length, and capacity of the fore udder attachment	Create snug fore udder attachments with length to increase capacity	Enter a positive weight to emphasize strength and capacity of fore udder
Rear Udder	Rear Udder	Distance between the bottom of the vulva and the top of the milk secreting tissue	Increase udder capacity with higher rear udder attachments	Enter a positive weight to raise rear udder attachements
Udder Support	Udder Support	Depth of the cleft between the rear quarters	Create the optimum udder cleft, neither to weak or strong	Enter a positive weighting to emphasize sires closer to zero for PTA Udder Support
Udder Depth	Udder Depth	The distance between the lowest point of the udder floor and the point of the hock	Reduce culls from udders that are too low	Enter a positive weight to emphasize sires that create daughters with shallow udders
Front Teat Placement	Front Teat Placement	The distance between the front teats	Place front teats centrally on the quarters	Enter a positive weight to emphasize genetics with closer front teat placement
Rear Teat Placement	Rear Teat Placement	Distance between the rear teats	Widen spacing of rear teats especially in robot settings to increase udder functionality	Enter positive weights to focus on finding sires with a PTA Rear Teat Placement closer to -1, widening the teats

Breed: Holstein, Genetic Proof: GBR

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Teat Length	Teat Length	The length of the longest teat	Ensure teats are not too long or too short	Enter a positive weight to emphasize sires that will increase teat length
Milking Speed	Milking Speed	First lactation daughters expected to be appraised as "Fast" or "Average" for milking speed	Increase milking speed efficiency without reducing udder health	Enter positive weights to increase milking speed, any bull over 1.18 is treated equally to protect for udder health
Temperament	Temperament	The temperament of first lactation cows at milking time	Create cows that are better "Calm" or "Very Calm" while being milked	Enter a positive weight to emphasize sires that produce calm or very calm daughters

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Breed: Jersey, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Milk	Milk	Expected second-lactation milk production in pounds compared to breed average	In cheese markets, increase component percentages while limiting the liquid portion of milk. In fluid markets increase volume of milk.	In cheese markets, enter a slightly negative weight to increase component percentages. In fluid markets enter positive weights to increase milk volume.
Fat	Fat	Expected second-lactation fat production in pounds compared to breed average	Increase fat production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Fat pounds
Protein	Prot	Expected second-lactation protein production in pounds compared to breed average	Increase protein production based on how a producer is paid for their milk	Enter positive weights to focus on sires that are higher for PTA Protein pounds
Productive Life	PL	Expressed as additional months of life in the milking string	Increase productive life to decrease cows leaving the herd prematurely	Enter a positive weight to increase focus on higher productive life promoting sires
Livability	LIV	Represents the additional percentage of cows that avoid dying on the farm	Increase livability to help producers recoup disposal income	Enter a positive weight to increase focus on higher PTA LIV
Somatic Cell Score	SCS	Uses somatic cell score data from the first five lactations as an indicator of mastitis resistance	Reduce incidents of high SCC and mastitis on farm	Enter positive weights to focus on lowering the PTA SCS of sires
Daughter Pregnancy Rate	DPR	Percentage of nonpregnant cows that become pregnant during each 21-day period	Increase pregnancy rate on farm to decrease open late lactation cows	Enter a positive weight to emphasize sires that have a higher DPR value
Cow Conception Rate	CCR	Percentage of inseminated cows that become pregnant each service; shown as a deviation in percentage	Increase cow herd conception rate on farm to decrease number of rebreeds	Enter a positive weight to emphasize sires that have a higher PTA CCR
Heifer Conception Rate	HCR	Percentage of inseminated heifers that become pregnant each service; shown as a deviation in percentage	Increase heifer conception rate on farm to decrease the number of rebreeds	Enter a positive weight to emphasize sires that have a higher PTA HCR
Jersey Udder Index	JUI	A composite that incorporates fore and rear attachments, udder depth, cleft, and teat placement.	Create udders with capacity that are well attached	Enter a positive weight to put more emphasis on sires with higher PTA JUI
Type	PTAT	Difference in final score classification points compared to the base population	For herds that focus on selling genetics for added value of show ring appearance	Enter a positive weight to put more emphasis on sires with a higher PTAT
Stature	STA	Height at the hips	Reduce stature to increase cow comfort in milking and stall facilities	Enter negative weights to focus on decreasing sire's PTA for stature

Breed: Jersey, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Strength	STR	Evaluation of strength and substance, including width of chest	Increase strength to create durable cows	Enter a positive weight to emphasize sires that have more strength
Dairy Form	DF	Evaluation of openness and angularity	For herds creating durability type cows, decreasing dairy form. For herds wanting to create intensive management style cows, increasing dairy form.	To increase dairy form emphasis, enter a positive weight. To decrease dairy form emphasis, enter a negative weight.
Rump Angle	RA	The slope from hips to pins, measured in inches	Create level rumps with pins slightly lower than hips	Enter a positive weight to emphasize sires with more slope from hips to pins
Thurl Width	TW	Distance between pins, measured in inches	Create wide rumps	Enter a positive weight to emphasize sires that are wider through their rump
Rear Legs Side View	RLS	Angle of set to hock	Increase set to leg to address concerns of very straight legs	Enter positive weights to help select sires that have a higher sire PTA for RLSV to crease more set in legs
Foot Angle	FA	The angle the front toes make with the ground, measured in degrees	Increase foot angle	Enter a positive weight to emphasize increasing foot angle
Fore Udder Attachment	FUA	Evaluation of the strength, length, and capacity of the fore udder attachment	Increase length and strength of the fore udder attachment	Enter a positive weight to emphasize increase PTA Fore Udder Attachment
Rear Udder Height	RUH	Distance between the bottom of the vulva and the top of the milk secreting tissue, measured in inches	Raise the height of the rear udder to increase milk capacity of udder	Enter a positive weight to emphasize higher rear udder attachments
Rear Udder Width	RUW	The width of the rear udder where the udder attaches to the body, measured in inches	Widen rear udder attachment to increase milk capacity of udder	Enter a positive weight to emphasize increased rear udder width
Udder Cleft	UC	Depth of cleft between the rear quarters, measured in inches	Create the optimum udder cleft, neither too weak or strong	Enter a positive weighting to emphasize sires closer to zero for PTA Udder Cleft
Udder Depth	UD	The distance between the lowest point of the udder floor and the point of the hock, measured in inches	Reduce culls from udders that are too low	Enter a positive weight to emphasize sires that create daughters with shallow udders

Breed: Jersey, Genetic Proof: USA

Trait	Abbreviation	Definition	Industry Intention	Custom Index Weighting
Front Teat Placement	FTP	The distance between the front teats, measured in inches	Place front teats centrally on the quarters	Enter a positive weight to emphasize genetics with closer front teat placement
Rear Teat Placement-Rear View	RTP-RV	The distance between the rear teats, measured in inches	Widen spacing of rear teats especially in robot settings to increase udder functionality	Enter positive weights to focus on finding sires with a PTA RTP closer to -1, widening the teats
Rear Teat Placement-Side View	RTP-SV	Distance between the front and rear teats	Space rear teats neither too far forward or too far back	Enter positive weight to focus on finding sires that will have values close to 0 for RTP-SV to centrally place teats
Teat Length	TL	The length of the longest teat, measured in inches	Ensure teats are not too long or too short	Enter a positive weight to emphasize sires that will increase teat length
Milking Speed	CDN MS	First lactation daughters expected to be appraised as "Average" or "Fast" for milking speed, average=100, standard deviation=5	Increase milking speed efficiency without reducing udder health	Enter positive weights to increase milking speed, any bull over 105 is treated equally to protect for udder health
Temperament	CDN MT	The temperament of first lactation cows at milking time, average=100, standard deviation=5	Create cows that are better "Calm" or "Very Calm" while being milked	Enter a positive weight to emphasize sires that produce calm or very calm daughters

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