

**Country**

**Japan**

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**Trait category:**

**Individual trait(s):**

**Conformation**

**Udder**

**Locomotion**

**Other**

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**JAPAN**

<b>Conformation traits</b>	<b>Udder:</b>	fore udder attachment, rear udder height, rear udder width, udder cleft, udder depth, fore teat placement, udder overall
	<b>Locomotion:</b>	rear legs, foot angle
	<b>Other:</b>	Stature, strength, body depth, dairy form, rump angle, rump width, final score overall, dairy character overall, body capacity overall

<b>Breed(s)</b>	Holstein
<b>Trait definition and unit(s) of measuring</b>	Most traits are linear scored on a 1-50 point scale. Overall traits are scored from 70 to 99 points
<b>Method of measuring and collecting data</b>	Scored by official classifier and collected by Japan Holstein Registry association
<b>Time period for data inclusion</b>	Since 1974
<b>Age groups considered</b>	1 <sup>st</sup> lactation cows in the first 305 days of lactation
<b>Genetic parameters</b>	$h^2_{\text{udder traits}} = 0.10 \text{ to } 0.23$ $h^2_{\text{locomotion traits}} = 0.08 \text{ to } 0.11$ $h^2_{\text{other traits}} = 0.15 \text{ to } 0.36$
<b>Sire categories</b>	All AI-bulls
<b>Environmental effects pre-adjustment evaluation model</b>	None Herd x classifier x date of classification, age at classification, lactation stage at classification
<b>Base for age adjustment</b>	None
<b>Use of genetic groups and/or relationships</b>	Genetic groups and relationships between animals
<b>Method (model) of genetic evaluation</b>	ST BLUP AM
<b>System validation</b>	Genetic trend estimation
<b>Expression of proof</b>	Standardized ETA for linear traits with M = 0 and SD = 1 ETA and standardized ETA for overall traits
<b>Genetic (reference) base</b>	Rolling base with the average effect of cows born 8 years before current evaluation
<b>Criteria for official publication of sire proofs</b>	≥ 15 daughters in ≥ 5 herds
<b>Number of evaluations/publications per year</b>	Two; March, September

Conformation traits <i>continued</i>	Udder Locomotion Other
<b>Use in total merit index</b>	NTP (Nippon Total Profit): $[3 \times (\text{production composite}) / 166 + (\text{type composite} + \text{final score}) / 1.212] \times 100$ Production composite = $-0.07 \times \text{milk yield} + 1 \times \text{fat yield} + 8 \times \text{protein yield}$ Type composite = $0.22 \times \text{fore udder attachment} + 0.14 \times \text{rear udder height} + 0.05 \times \text{rear udder width} + 0.16 \times \text{udder cleft} + 0.35 \times \text{udder depth} + 0.08 \times \text{fore teat placement}$
<b>Key reference on methodology applied</b>	-