

**Specifications for Sahiwal semen
(Deep Frozen Semen – 12,000 doses for NCP)**

	SPECIFICATION	BIDDER RESPONSE (YES/NO)	EVIDENT DOCUMENTS / DETAILS ARE ATTACHED (YES / NO)	REMARK
1	Breed purity - 100% Sahiwal	Yes / No		
2	Breed type - Dairy Breeds	Yes / No		
3	Semen should be provided at least 12 unrelated bulls.	No of bulls :		
4	Donor bulls should be unrelated for at least four generations. History of the bull indicating names, herd registration and the pedigree of three generation should be produced along with the tender document.	Unrelated : Yes / No		
5	Dam's First standard lactation yield (305 days) not less than 2500kg of milk, butters fat \geq 5.0%. (should provide the dam's first lactation yield with butter fat % of each bulls selected)	Yield \geq 2500Kg : Yes / No Butter Fat \geq 5.0% : Yes / No		
6	<i>progeny tested donor bulls are preferable</i> , progeny tested. (Indicate the number of daughters tested with EBVs)	Yes / No		
7	<i>If progeny tested, Donor bull</i> should have + sire indices / Breeding values (EBVs) (with reliability of \geq 85%. Milk yield \geq + 1000 kg, Fat yield \geq +35 kg and Protein yield \geq + 35 kg. Fat percentage \geq 4.5%, protein percentage \geq 3.0%. (progeny testing details should provide for each bulls)	Yes / No		
8	<i>If progeny tested,</i> Progeny testing details of <i>sires and paternal & maternal grand sires</i> including EBVs of milk yield, Fat and Protein yields and percentages should be provided	Yes / No		
9	The donor bulls should be free from fertility problems.	Yes / No		
10	Bull's sire should be improver for type characters like foot and udder conformation	Yes / No		
11	Semen donors should be from registered herds with Official Certificates of Registration with Pedigree and Production records.	Registered : Yes / No		
12	Bulls should be free from all known genetic disorders like bovine leukocyte adhesion disease (BLAD), deficiency of uridine mono-phosphate synthetase (DUMPS), citrulinemia (deficiency of argino-succinate synthetase) and Factor XI.	Yes / No		
13	All details including history and performance should be in English language.	Yes / No		

Semen Details			
1	Country of semen production		
2	The semen should be in 0.25 ml deep frozen semen straws with easy identification of the breed and sire.	Yes / No	
3	Ejaculated sperm concentration should be approximately 1000×10^6 /ml	Yes / No	
4	Mass motility should be \geq +++ (in 1 to 4 scale)	Yes / No	
5	Dead sperm should not exceed 20-30% and the abnormal sperm in the first ejaculation should not exceed 15-20%	Yes / No	
6	Semen should be evaluated on the basis of functional integrity of sperm membrane (Fresh semen collected from bulls should be subjected to the hypo osmotic swelling (HOS) test). The mean sperm positive to HOS test should be > 65%.	Yes / No	
7	Post thawing forwarded progressive motility should be more than 50%.	Yes / No	
8	frozen straw (each dose) should contain minimum 15, million sperms	Yes / No	
9	Cold chain management of semen (LN) at - 196 °C up to dispatch is essential	Yes / No	
10	Disease free status - semen must be free from the diseases that are in the health protocol provided by Veterinary Regulatory Division - DAPH	Yes / No	

**Specifications for Brazilian Milking Gir semen
Deep Frozen Semen - 11000 doses**

S NO	SPECIFICATION	BIDDER RESPONSE (YES/NO)	EVIDENT DOCUMENTS / DETAILS ARE ATTACHED (YES / NO)	REMARK
1	Breed purity - 100% Milking Gir (Brazilian)	Yes / No		
2	Breed type - Dairy Breeds	Yes / No		
	Semen should be provided at least 10 unrelated bulls.	Yes / No		
3	Donor bulls should be unrelated for at least four generations. History of the bull indicating names and herd registration, parents and all grand parents should be produced along with the tender document.	Yes / No		
4	Dam's First standard lactation yield (305 days) not less than 3000kg of milk, fat \geq 3.6% and protein \geq 3.2% . (should provide the dam's first lactation yield with fat % and Protein % of each bulls selected)	Yes / No		
5	<i>progeny tested donor bulls are preferable</i> , progeny tested in year 2022/2023. (Indicate the number of daughters tested with EBVs)	Yes / No		
6	<i>If progeny tested,</i> Donor bull should have + sire indices / Breeding values (EBVs) (with reliability of \geq 85%. Milk yield \geq + 1000 kg, Fat yield \geq +35 kg and Protein yield \geq + 35 kg. Fat percentage \geq 3.0%, protein percentage \geq 3.0%. (progeny testing details should provide for each bulls)	Yes / No		
7	<i>If progeny tested,</i> Progeny testing details of <i>sires and paternal & maternal grand sires</i> including EBVs of milk yield, Fat and Protein yields and percentages should be provided	Yes / No		
8	The donor bulls should be free from fertility problems.	Yes / No		
9	Bull's sire should be improver for type characters like foot and udder conformation	Yes / No		
10	Semen donors should be from registered herds with Official Certificates of Registration with Pedigree and Production records.	Yes / No		
11	Bulls should be free from all known genetic disorders like bovine leukocyte adhesion disease (BLAD), deficiency of uridine mono-phosphate synthetase(DUMPS), citrulinemia (deficiency of argino-succinate synthetase) and Factor XI.	Yes / No		
12	All details including history and performance should be in English language.	Yes / No		

B	Semen Details			
1	Country of semen production			
2	The semen should be in 0.25ml deep frozen semen straws with easy identification of the breed and sire.	Yes / No		
3	Ejaculated sperm concentration should be approximately 1000×10^6 /ml	Yes / No		
4	Mass motility should be \geq +++ (in 1 to 4 scale)	Yes / No		
5	Dead sperm should not exceed 20-30% and the abnormal sperm in the first ejaculation should not exceed 15-20%	Yes / No		
6	Semen should be evaluated on the basis of functional integrity of sperm membrane (Fresh semen collected from bulls should be subjected to the hypo osmotic swelling (HOS) test). The mean sperm positive to HOS test should be $> 65\%$.	Yes / No		
7	Post thawing forwarded progressive motility should be more than 50%.	Yes / No		
8	frozen straw (each dose) should contain minimum 15 million sperms	Yes / No		
9	Cold chain management of semen (LN) at - 196 °C up to dispatch is essential	Yes / No		
10	Disease free status - semen must be free from the diseases that are in the health protocol provided by Veterinary Regulatory Division - DAPI	Yes / No		

**Specifications for Girolando (5/8 Holstein : 3/8 Gyr)
(Deep Frozen Semen - 1000 doses)**

S NO	SPECIFICATION	BIDDER RESPONSE (YES/NO)	EVIDENT DOCUMENTS / DETAILS ARE ATTACHED (YES / NO)	REMARK
1	Genetic Composition - 5/8 Holstein : 3/8 Gyr	Yes / No		
2	Breed type - Dairy Breeds	Yes / No		
	Semen should be provided at least 5 unrelated bulls.	Yes / No		
3	Donor bulls should be unrelated for at least four generations. History of the bull indicating names and herd registration, parents and all grand parents should be produced along with the tender document.	Yes / No		
4	Dam's First standard lactation yield (305 days) not less than 4500kg of milk, fat \geq 3.5% and protein \geq 3.0% . (should provide the dam's first lactation yield with fat % and Protein % of each bulls selected)	Yes / No		
5	<i>progeny tested donor bulls are preferable</i> , progeny tested in year 2022/2023. (Indicate the number of daughters tested with EBVs)	Yes / No		
6	<i>If progeny tested,</i> Donor bull should have + sire indices / Breeding values (EBVs) (with reliability of \geq 85%. Milk yield \geq + 1000 kg, Fat yield \geq +35 kg and Protein yield \geq + 35 kg. Fat percentage \geq 3.0%, protein percentage \geq 3.0%. (progeny testing details should provide for each bulls)	Yes / No		
7	<i>If progeny tested,</i> Progeny testing details of <i>sires and paternal & maternal grand sires</i> including EBVs of milk yield, Fat and Protein yields and percentages should be provided	Yes / No		
8	The donor bulls should be free from fertility problems.	Yes / No		
9	Bull's sire should be improver for type characters like foot and udder conformation	Yes / No		
10	Semen donors should be from registered herds with Official Certificates of Registration with Pedigree and Production records.	Yes / No		
11	Bulls should be free from all known genetic disorders like bovine leukocyte adhesion disease (BLAD), deficiency of uridine mono-phosphate synthetase (DUMPS), citrulinemia (deficiency of argino-succinate synthetase) and Factor XI.	Yes / No		
12	All details including history and performance should be in English language.	Yes / No		

B Semen Details				
1	Country of semen production			
2	The semen should be in 0.25 ml deep frozen semen straws with easy identification of the breed and sire.	Yes / No		
3	Ejaculated sperm concentration should be approximately 1000×10^6 /ml	Yes / No		
4	Mass motility should be \geq +++ (in 1 to 4 scale)	Yes / No		
5	Dead sperm should not exceed 20-30% and the abnormal sperm in the first ejaculation should not exceed 15-20%	Yes / No		
6	Semen should be evaluated on the basis of functional integrity of sperm membrane (Fresh semen collected from bulls should be subjected to the hypo osmotic swelling (HOS) test). The mean sperm positive to HOS test should be $> 65\%$.	Yes / No		
7	Post thawing forward progressive motility should be more than 50%.	Yes / No		
8	frozen straw (each dose) should contain minimum 15 million sperms	Yes / No		
9	Cold chain management of semen (LN) at - 196 °C up to dispatch is essential	Yes / No		
10	Disease free status - semen must be free from the diseases that are in the health protocol provided by Veterinary Regulatory Division - DAPH	Yes / No		