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Indian Standard
CODE FOR TRANSPORT OF PIGS
BY RAIL AND ROAD
(*First Revision*)

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INDIAN STANDARDS INSTITUTION
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Indian Standard

CODE FOR TRANSPORT OF PIGS BY RAIL AND ROAD (First Revision)

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Indian Standard
**CODE FOR TRANSPORT OF PIGS
 BY RAIL AND ROAD**
(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 30 September 1982, after the draft finalized by the Live Animals Sectional Committee had been approved by the Agricultural and Food Products Division Council.

0.2 Of late, piggery has been taken up on a large scale to meet the increased demand of protein and food of animal origin in the country. This has necessitated the transport of large number of pigs to various places both by rail and road.

0.3 This code was first published in 1969. The present revision has been brought out to bring its requirements upto date based on experience gained.

0.4 In the preparation of this code, due consideration has been given to the Prevention of Cruelty to Animals Act, 1960 and Rules framed thereunder. However, it is subject to the restrictions imposed under these, wherever applicable.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This code covers the minimum requisites for the transport of pigs by rail and road.

2. TERMINOLOGY

2.0 For the purpose of this code, the following definitions shall apply.

2.1 Animal — Pigs of all breeds, ages and sex.

*Rules for rounding off numerical values (*revised*).

- 2.2 Piglet** — Male or female pig under 2 months of age.
- 2.3 Weaner** — Piglet which has just been separated from the mother for the purpose of independent rearing.
- 2.4 Young Pig** — Male or female pig between 2 to 6 months of age.
- 2.5 Adult** — A male or female pig above 6 months of age.
- 2.6 Boar** — An adult uncastrated male pig.
- 2.7 Sow** — A female pig that has farrowed at least once.
- 2.8 Gilt** — A female pig that has not yet farrowed.
- 2.9 Litter** — A group of piglets born to a sow.

3. GENERAL CONDITIONS

- 3.1** Only healthy animals in good condition shall be transported unless they are meant for emergency slaughter. These animals should be certified by a qualified veterinarian for freedom from infectious diseases and ecto-parasitic diseases and their fitness to undertake the journey.
- 3.2** When pigs are to be transported from endemic areas of a disease to non-endemic areas, the pigs should be given protective vaccination and kept in quarantine for 30 days, before transportation.
- 3.3** Sows in advance stages of pregnancy shall not be transported.
- 3.4** When transporting bears special arrangements by providing suitable partitions should be made to protect the animals from infighting. Similar arrangements should also be made to protect the young ones from crushing when sows with litter are transported.
- 3.5** To avoid exhaustion, the animals shall be given humane treatment and care during transportation. The pigs shall not be bound or chained during transit and space provided for them shall be large enough to stand or lie.
- 3.6** An attendant alongwith first aid equipment shall accompany the animals in transit.
- 3.7** Before loading, the animals should not be fed heavily. Only light feed may be allowed. For journeys less than 12 hours no feed may be carried but for longer journeys sufficient feed shall be carried to last during the journey. Watering facilities shall be provided at regular intervals.
- 3.8** Light and heavy animals shall be separated by providing partitions; animals from different pens/sheds shall preferably not be mixed during transportation. Male stock shall not be transported with female stock (adults) as males try to mount on females in heat.

3.9 All vehicles should be inspected for safety, suitability and cleanliness before loading the animals. The floor and walls should be undamaged and there should be no nails or sharp projections which may injure the animals.

3.10 The vehicles should be thoroughly sprayed with suitable disinfectant before loading the animals.

3.11 A layer of clean sand to cover the floor to a thickness of not less than 6 cm shall be provided. This layer of sand shall be moistened with water during the summer month. During hot months arrangements shall be made to sprinkle water on the animals at frequent intervals. In winter, a 2-cm layer of clean sand with another 6-cm layer of whole-straw shall be provided.

3.12 Pigs when driven for loading or unloading shall never be struck with stick. Driving could best be done by soft-rubber pipe.

3.13 Pigs shall not be transported alongwith cattle in rail wagon. In case it is necessary to do so, cattle should be tied securely and shall be separated from pigs by partition.

3.14 If pigs are to be transported in extreme cold or hot climate, it is preferable to transport them in covered lorries on road so that they may not die or exhaust or suffer from acute respiratory disease and journey under such adverse climate shall be minimised.

3.15 Each consignment should bear a label showing the following particulars:

- a) Number and kind of the animals loaded;
- b) Name, address and telephone number, if any, of the consignor;
- c) Name address and telephone number, if any, of the consignee;
- d) Quantity of feed provided; and
- e) Instruction regarding feeding and watering.

4. LOADING

4.1 While loading, the extremes of temperatures shall be avoided.

4.2 Suitable ramp shall be provided for loading and unloading the animals. The ramp should be at least 1.5 metre in width with raised sides at least 75 cm high. The floor of the ramp shall have cleats at intervals of about 15 cm, so that animals do not slip as they climb or descend. The angle of the ramp with the floor shall not be more than 30°. The ramp shall be covered with straw to avoid slipping (see Fig. 1). Van at any time of loading and unloading shall be kept clean to avoid slipping of pigs.

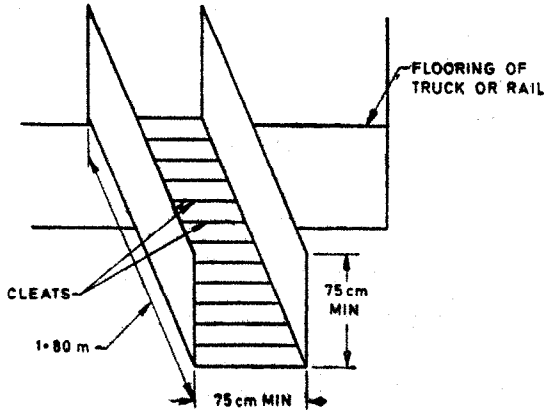


FIG. 1 A TYPICAL RAMP

4.3 In case of railway wagons when loading is done on the platform, the door of the wagon may be used as ramp. In such cases, bails or bags of hay, BHUSA, etc, may be placed on the either side of the dropped door to prevent the animals from getting their legs between the sides of the wagons and platform.

5. SPACE REQUIREMENTS

5.1 Overcrowding shall be avoided.

5.2 Railway wagons shall not accommodate more pigs than those given in Table 1.

TABLE 1 MAXIMUM NUMBER OF PIGS IN A RAILWAY WAGON

Sl. No.	TYPE OF ANIMAL	RAILWAY WAGONS				Narrow Gauge
		Broad Gauge		Metre Gauge		
		Area of wagon less than 21.1 m ²	Area of wagon 21.1 m ² and above	Area of wagon less than 12.5 m ²	Area of wagon 12.5 m ² and above	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i)	Weaner	70	100	50	60	40
ii)	Young pigs	50	60	25	40	25
iii)	Adult	35	50	20	35	20
iv)	Sows with litter	18	20	10	14	10

5.3 The minimum floor space required for a weaner, young pig, adult and sow with litter for road travel shall be 0.30, 0.45, 0.60 and 1.2 m² respectively.

5.4 The speed of truck transporting pigs shall not exceed 40 kilometres per hour, avoiding jerks and jolts. The truck shall not load any other merchandise and shall avoid unnecessary stops on the road.

5.5 For journeys, exceeding 12 hours, the animals shall preferably be transported by railway. Loading shall be done by evening.

(Continued from page 2)

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INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

Quantity	Unit	Symbol
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

Quantity	Unit	Symbol
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

Quantity	Unit	Symbol	Definition
Force	newton	N	1 N = 1 kg. m/s ²
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²

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