

Technical Specifications of Vaccine Delivery Van (2WD/4WD)

Description	Technical Particulars
Use	<p>Immunization programme requires vehicle to distribute vaccine, supplies to CHC/PHC/UHC with properly frozen and conditioned ice-packs and other supplies. A Vaccine delivery van is meant to protect cold boxes and its contents from hot and cold weather, thus help maintain their hold-over period.</p>
Body Structure	<p>A pickup vehicle is to be used to support an FRP cargo chamber with standard fabric coated insulating plastic mould to provide a temperature difference of 8 degree C or more between outside and inside at an ambient temperature of 43 deg. C.</p> <p>The cargo chamber comprises of FRP outer shell, with inner lining made of fabric coated plastic mould to provide desired temperature drop.</p> <p>Outer shell and door should prevent heat transfer to and from inside of cargo box.</p> <p>The cargo box should be reinforced appropriately to manage structural integrity and can handle a maximum 700 kg pay load.</p> <p>Proper lighting should be provided inside the cargo box.</p> <p>Two drainage points one in front and another at the back with screw type cap at outside and removable plug insert from inside.</p> <p>The FRP shell and insulated lining shall be suitable for the climatic conditions prevailing in the country. It should be painted with appropriate white paint to reflect sunlight/keep inside temperature low.</p> <p>Two panel doors with plastic inner panel and rubber gasket to provide full width access to cargo chamber. Hinge and lock should lock the door at two points, using catch bar cam lock.</p> <p>The cargo box area should allow storage of minimum 10 cold boxes (71 x 55 x 50 Cms) of approximately 40 kgs each.</p> <p>Floor should have strong base with minimum 5 mm checkered plates to support payload and its movement by two people. Racks should have a fixture with tying leather belt/strap for vaccine carriers so that the vaccine carriers shall remains fixed during travelling of the vehicle.</p> <p>Rear compartment separated from driver's cabin by full partition.</p> <p>Spare wheel mounting on rear side.</p> <p>Seating capacity for driver plus one person's i.e.1+1. IEC information for immunization and child health will be painted on all three outside walls of the box.</p> <p>The material for IEC information will be communicated to the supplier at the time of supply order.</p> <p>The body should be in the aerodynamic shape from the front, Tapered/sloped roof of cargo box to dispense rain water.</p> <p>Corners of the cargo box should be smooth without sharp edges. Footsteps and hand grips at the back for climbing in the cargo box to be provided.</p>
Engine	<p>Diesel Engine Direct Injection</p>
No. of Cylinder	In Line 4 Cylinder 4 Stroke Direct Ignition
Capacity	1900 CC and above
Minimum HP/RPM	Minimum 45 KW @ 3200 rpm

Transmission	5-4 Forward, 1 Reverse
Clutch	Dry Plate
Brakes	Tandem Master Cylinder with Vacuum Assisted
Frame Section	Rectangular /Tubular/Hollow Section/ ladder Type/Monocoque
Battery	12V, 70 AH or more, of reputed make
Fuel Tank	Min.-55 Ltrs.
Suspension	Semielliptical leaf spring and Hydraulic Double Acting Telescopic
Steering System	Power steering
Wheel Base	2800 mm – 3200 mm
Cargo Box	Length and width to match the pick-up chassis and height not less than 1350 mm.
Weight carrying capacity (wt. of vaccine, cold box, icepacks and two persons, excluding weight of cargo box).	700 Kgs or more.
Ground Clearance	Minimum 180mm when fully loaded
Wheel Drive	2 Wheel Drive/4WD as per requirement
Turning radius	Max. 9.0 meters
Emission norms	As per prevailing Government norms and CPCB guidelines at the time of supply.
Tool kit and user/ service manual	Standard tool kit such as lifting jack, wheel spanner, screw driver etc with user/ service manual.
Testing requirement	
Certificates of inspection and testing	To meet the requirement of road worthiness to be provided by ARAI. and emission standard certificate to be provided by CPCB.

(Mohd. Ameer)
For NHSRC

(Manjari Sharma)
for MOHFW

(Ramkumar G Nair)
For HLL Lifecare

(Alok Kumar)
For HLL Lifecare

(Manish Gangal)
UNICEF

(Dr. Jitendra Sharma)
NHSRC

(Gagan Shrivastava)
SSO, Imm

(B.K.Jain)
Dy. Director (Proc.)

(Dr. M.K. Agarwal)
Dy. Commissioner (UIP)

(Dr. S.Y. Kothari)
Spl. DGHS, MOHFW

Proposed Specification of Tika Express (4WD)

Description	Technical Particulars
Use	Immunization programmes require vehicles to distribute vaccine, supplies provide outreach immunization services specially for hilly terrain and hard to reach areas.
Body Structure	The non-insulated close body must be suitable for the climatic conditions that exist in the country. It should be painted white to reflect sunlight. Single non - insulated access door in the rear of the body. Door openings must also be fitted internally with a clear plastic flexible strip curtain. The floor of the compartment should be supplied such that the at least 10 vaccine carriers having external dimensions of 26x25x28.5 cm ³ and two cold boxes having external dimensions 80X60X60 cm ³ can be stacked on pallets. A suitable steel rack fixed in the side walls of the body should be provided to stack vaccine carriers along with tying leather belt for vaccine carriers so that the carriers may be fixed during traveling of the vehicle. Rear compartment separated from driver's cabin by full partition. Spare wheel mounting on rear side. Seating capacity for driver plus one persons i.e.1+1. IEC information for immunization and child health will be painted on all three outside walls of the box. The material for IEC information will be communicate to the supplier at the time of supply order.
Engine	Diesel Engine Direct/indirect Injection
No. of Cylinder	In Line 4 Cylinder 4 Stroke
Capacity	1000 CC and above
Minimum HP/RPM	Suitable
Transmission	4 Forward, 1 Reverse
Frame Section	Rectangular /Tubular/Hollow Section/ ladder Type/Monocoque
Cooling	Water Cooled
Voltage	12V
Battery	12V, 70 AH or more
Fuel Tank	Min.-30 Ltrs.
Suspension	Semi Elliptical Leaf Spring suitable for rural and rough road
Shock Absorbers Telescopic	Hydraulic Double Acting Telescopic
Wheel Base	Minimum 2000 mm
Cargo Box	Minimum Length 2000 mm X Width 1400 mm and Max. Height 1800 mm from the ground.
Weight carrying capacity (wt. of vaccine, cold box, icepacks and two persons, excluding weight of cargo box).	500 Kgs or more

Ground Clearance	Minimum 160mm
Wheel Drive	4Wheel Drive
Turning radius	Max. 9.0 meters
Emission norms	As per prevailing Government norms at the time of supply.
Tool kit	Standard tool kit such as lifting jack, wheel spanner, screw driver etc.
Testing requirement	
Transverse racking Test	Transverse tracking test should be conducted by placing thermal container on four level support, one under each bottom corner fitting, and should be restrained against lateral and vertical movement by means of anchor devices acting through the bottom apertures of the bottom corner fittings. Lateral restraint shall be provided only at a bottom corner fitting diagonally opposite to and in the same end frame as a top corner fitting to which force is applied. When testing the two end frames separately, vertical restraint should be applied only at the end frame under test. The minimum test load should be 1.0 ton.
Certificates of testing	All above mentioned test should be conducted through an approved laboratory by the Government of India and the equipment should be supplied along with the test certificates.

PS: Physical dimensions mentioned above in the specifications should be approximated to +/- 5% variation.