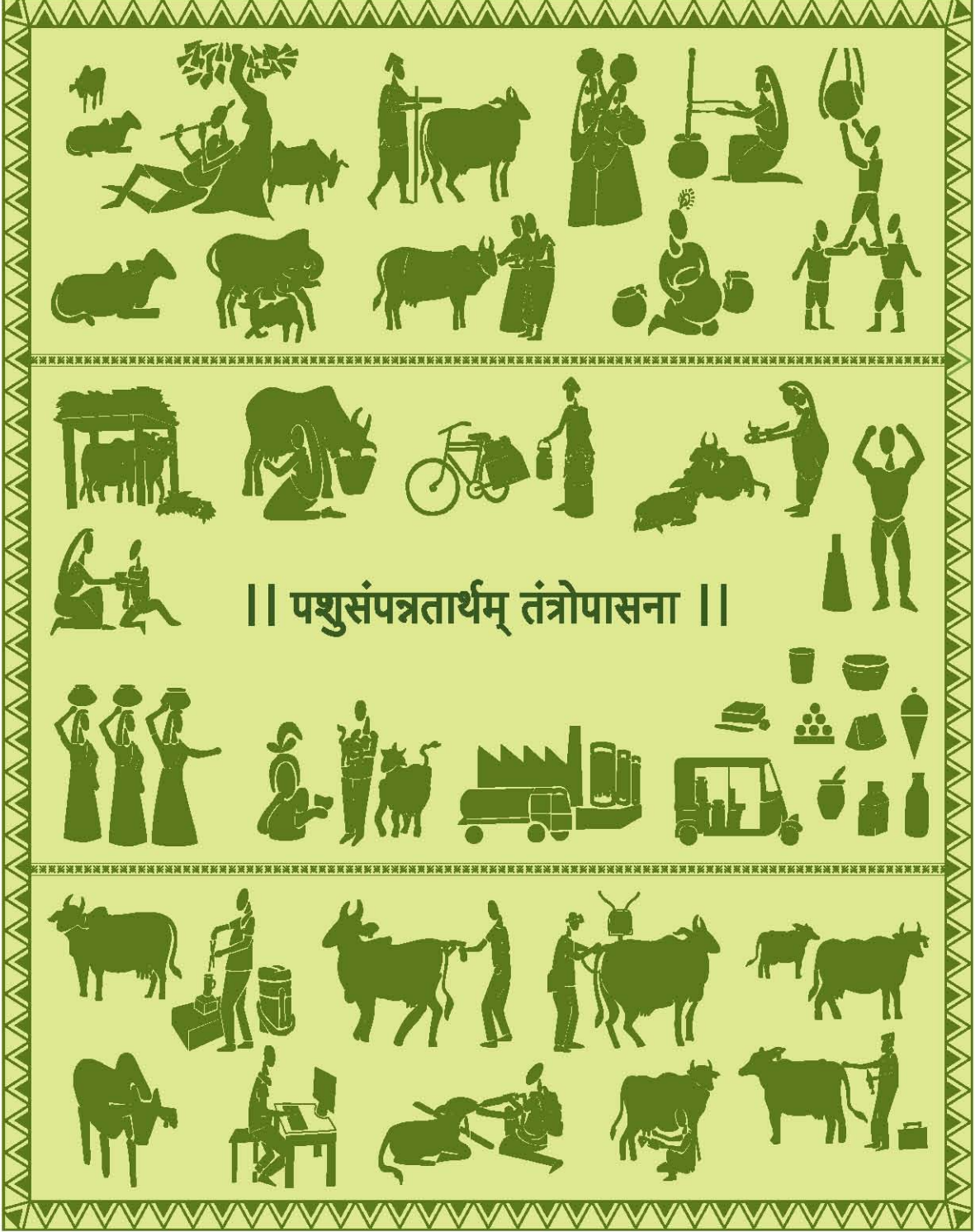




LK Vet Care Pvt. Ltd.

॥ पशुसंपन्नतार्थम् तंत्रोपासना ॥



**LK Vet Care** Private Limited, is established with a vision to provide end-to-end cutting edge technology in dairy automation, which enhances the productivity & brings transparency in the dairy industry. Over the past two decades, we are contributing significantly to the progress of the Indian dairy Industry, with the adoption of new indigenous and innovative technologies.

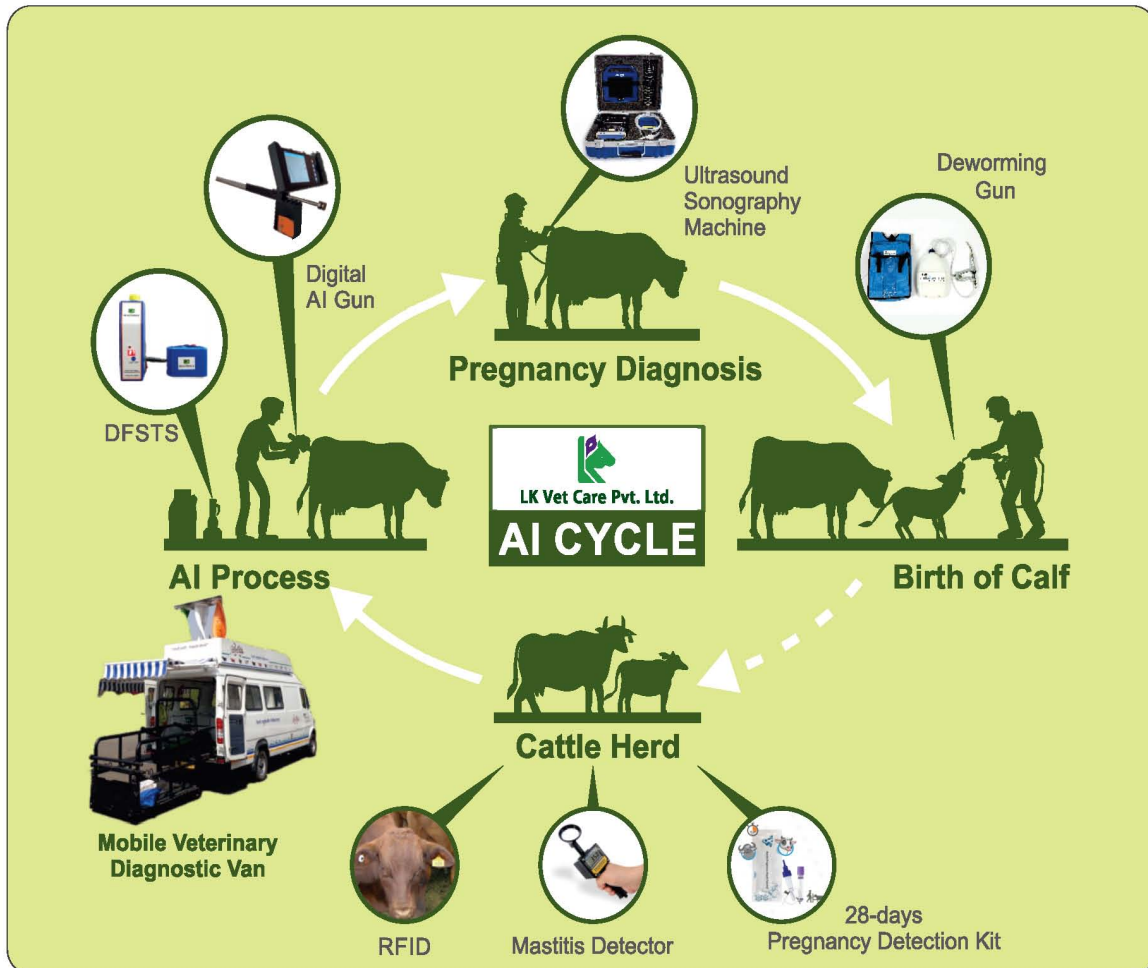
We, **LK Vet Care** Private Limited, are manufacturer & suppliers of dairy automation equipment's suitable in the entire Milk Chain and Animal Husbandry Chain. One of such product offerings of technological solutions is for the "Digital AI-Cycle" which helps in increasing success ratio of AI in cattle along with increase in milk production and make the farmer/milk producer self-sustainable, and can be a catalyst to technologically address the problem statements of the stake-holders in the entire hierarchy of those involved in the Artificial Insemination Cycle of cattle's.





LK Vet Care Pvt. Ltd.

## Artificial Insemination (AI) Chain



Animal Husbandry Solutions from Artificial Insemination (AI) to Animal Health & Performance Monitoring!

We, at **LK Vet Care**, believe in 'continual research for growth of milk business, animal husbandry & revolution in rural life', based on our two decades of experience & dedication.

So, delivering the products based on the latest technology, for Rural India, is our Motto!





**3-in-1 Combo Kit**

- Able to execute the test & read the results on the field itself.
- Quick results are available in 10-15 minutes.

- Simple & easy to use.
- Does not require Blood/Serum transportation to Veterinary Lab.
- Requires no instrumentation or any respective capital investment.



Patented

**Digital Artificial Insemination Gun (DAIG)**

- Beneficial for detailed evaluation purposes.
- Clear visibility of cervix opening & discharge, indicating Cattle is in heat-cycle.
- Thorough visual evaluation of vaginal tract.
- Visibility of any swelling or infection

- around the cervix.
- Best use in case of the kinked cervix.
- Special 'LKVC Mobile App' for visual inspection.
- In-built Wi-Fi for android support.

**Brucella/FMD/TB Combo Test**

**Visual Heat Confirmation Test**

**Rumen Temperature Bolus**



**Rumen Temperature Bolus**

- Medically safe, 24x7 rumen temperature monitoring of a cattle/herd.
- Instant 'cattle heat alert'

- to 5 persons at a time, to do in-time AI.
- Sends temperature variation at regular intervals to Cloud Server.
- Informs regarding cattle health, water intake, rumination, movements too.
- Geo-fencing feature (up to 10 Km coverage using Router)
- Low-Frequency Radio Signal & LoRa Technology.
- 5 years battery life.

**Digital Semen Thawing**

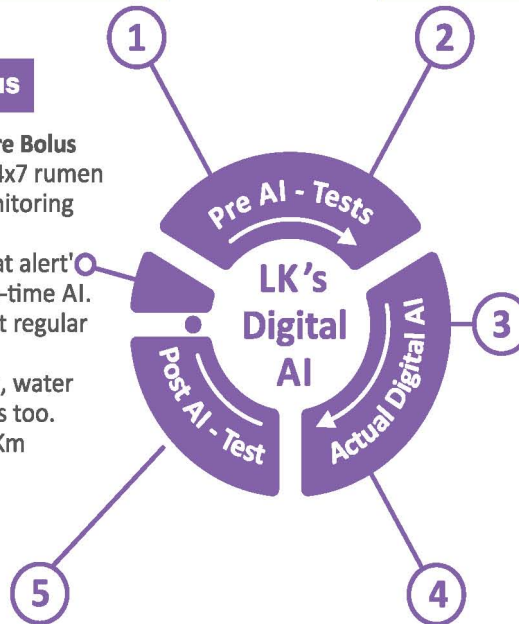


Patented

**Digital Frozen Semen Thawing System (DFSTS)**

- Maintains perfect thawing temperature (37°C) of semen.
- Vertical methodology

- & water thawing (40 ml) in only 30 secs.
- Uniform homogeneous distribution of sperms in semen straw after digital thawing, as compared to conventional manual thawing.
- Compact, lightweight, portable, easy to use.
- Operates on vehicle battery & mains power supply.



**28-days Pregnancy Test**



Patented, USFDA approved

**28-days Pregnancy Kit**

- Detects Pregnancy Associated Glycoprotein (PAG's) in blood/milk samples.
- No ELISA instrumentation is required.
- Maintains high levels of sensitivity & specificity in the test from day 28 of post-breeding & throughout gestation.
- Shortens calving intervals & helps to improve the conception rate.
- Able to execute the test & read the results on the field itself.

**Digital AI Process**



Patented

**Digital Artificial Insemination Gun (DAIG)**

- Helps in accurate placement of semen drop into the cervix.
- Less invasive procedure for AI.
- LED auxiliary array source with adjustable brightness.

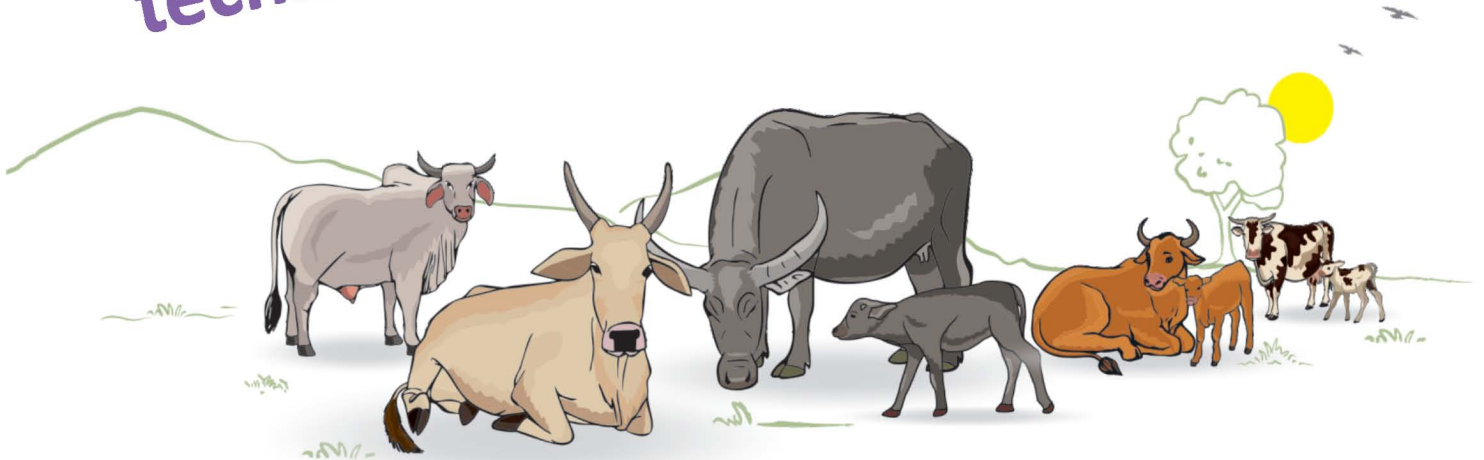
- Operates on inbuilt battery with battery charger & power bank.
- Photo-video capture facility.
- Photos, videos can be shared via WhatsApp for remote assistance.
- Cattle specific design with a speculum.





LK Vet Care Pvt. Ltd.

Let's prosper  
through  
technology-enriched AI!



*For the very first time in India for Cow & Buffalo*



**LK's DIGITAL AI**

Prosperity through Excellence

- Over-rides typical challenges in conventional AI
- Enhances AI success ratio
- Avoids unnecessary expenses
- Assists in analysing, interpreting and decision making in Pre and Post AI stages
- Possibilities of more AI in lesser time
- Helps in faster genetic improvement
- Reduces the possibility of infection and pain to the Cattle
- More scientific and hygienic AI process
- Digital technology products are being manufactured at the Central Government PSU facility with QC assurance.

#### LK's Digital AI Offerings:

Complete LK's Digital AI services at the doorstep (For Bulk Herds only)

Independent LK's Digital AI technologies & products with training

Awareness & education of LK's Digital AI along with its benefits



**LK Vet Care Pvt. Ltd.**

For the very first time in India for Goat & Sheep



**LK's DIGITAL AI**  
Prosperity through Excellence



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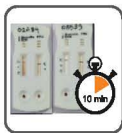
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**Digital Semen Thawing**

3

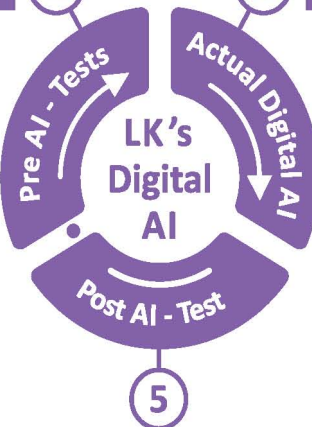
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1



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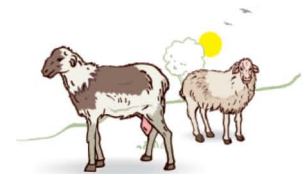
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# DFSTS (Thaw Monitor) Design Patent



## General Technical Specifications:

<b>Size:</b> Height of device - 178 mm; Flask Diameter - 62 mm; Flask Height - 140 mm
<b>Weight:</b> 0.5 kg; 0.9 Kg (With adaptor)
<b>Enclosure Body:</b> ABS Body (External); Aluminum tube inside for Straw
<b>User Operation:</b> Easy operation by using 2 keys (Up & Down Arrow Key); Built-in Vibrator for uniform distribution of Semen.
<b>Device Indicators:</b> Seven segment display for temperature and set-point indication, unit default; Audio indication (buzzer) while Unit Chi/OFF and thawing cycle completion.
<b>Temperature Sensor:</b> PT 100 or equivalent; 1 001°C to 1 002°C
<b>Thawing Details:</b> Programmable heating cycle from 4 minutes to 6 minutes (Factory default : 4 minutes); PID control action for accurate temperature control;
<b>Thawing Methodology:</b> Water as a medium for thawing (40 ml); Vertical thawing methodology
<b>Power Supply:</b> DFSTS has inbuilt feature to connect the device with the motorcycle battery via a battery cable
<b>Operating Temperature:</b> + 5 to +50 degree centigrade
<b>Temperature Set Points for Thawing of Straw:</b> 37/38 degree centigrade for Cow; 39/40 degree centigrade for Buffalo; or fixed temperature as per requirement
<b>Accessories:</b> Battery Cable for connecting to vehicle (motorcycle) battery; Soft bag for carrying device
<b>Packing:</b> Bubble Sheet & Carton Packing

Features	Advantages	Benefits
Vertical Water Bed	Vertical Thawing	Better results compared to horizontal thawing
Microprocessor based temperature controller with built in PID Algorithm	Temperature accuracy of $\pm 0.1^{\circ}\text{C}$ to $\pm 0.2^{\circ}\text{C}$ of measured value	The most Precise temperature control.
	Operating temperature range + 5 <sup>o</sup> C to 50 <sup>o</sup> C	Wide range of temperature availability
Ultrasonic Vibrator	Uniform Temperature on all sides of Frozen Semen Straw.	Uniform thawing of Frozen Semen & helps in activating the sperms.
Programmable heating Cycle	Heating cycle ranges from 4 mins to 6 mins. (Factory default: 4 Mins)	Convenience in operation.
Seven Segment Display	Simplicity & ease in operation	Skilled person is not required for this operation.
Audio Indication (Buzzer)	Simplicity & ease in operation	Skilled person is not required for this operation.





# DFSTS (Thaw Monitor) Design Patent

  
LK Vet Care Pvt. Ltd.





# Digital AI Gun Design Patent

## Technical Specification

General Technical Specifications :	
Auxiliary Light Source	6 LED auxiliary bright adjustable array
Battery Charger	Input: 110-240V~50/60Hz, 0.5A / Output:5V/3.5A
Battery Charging Indication	4 LED light display
Battery Charging Time	Between 1 - 2 hours upto full charge
Battery Type	In-built Li-Ion 950mAH with atleast 2 hours backup
Camera Type	2.0 MP HD housed in SS Pipe 316 medical grade
Camera Intensity	Adjustable via thumb on the handle slider during the viewing process
Camera OD	8-9 mm dia
Camera Protection	IP-67 waterproof
Camera Resolution	1280*720
Focal Distance	Between 3 - 10 cm
Hollow Pipe Covering	ABS food grade pipe of to be provided for insertion in vaginal tract with length between 220 to 240 mm
Housing	To be housed in a waterproof bag with ease of carrying on a motorcycle for field operations
Lens F/NO	2.8
Photo and Video Capture	Supported Photo format (JPEG) and Video format (MP4); MJPG
Power Supply	3.7 Volts
Universal SS AI Gun	23 inches for proper insemination of semen straw
USB Support	Internal 2.0 micro USB
Viewing Angle	60 degree
Wi-Fi Module	In-built Wi-Fi and support Android, IOS platforms
Wi-Fi Connectivity	Can be connected via LKVC mobile app through Wi-Fi for photo and video capture. Provision to share the photo and/or video via WhatsApp in the LKVC app
Wi-Fi Distance	Between 5m - 10m

## Difference between Conventional AI Method & New Digital AI Gun Technology :

Criteria	Conventional AI	AI with Digital AI Gun
Process Nature	Crude	Easy & Sophisticated
Need of specialized person for AI Success.	Yes! Success depends on diagnostic capability of Veterinary doctor/ AI Worker/LSS (livestock supervisor)	No! Even LSS (livestock supervisor) / AI Worker does successful AI with normal training.
Need of inserting the hand	Yes! To check whether the cervix is open or not.	No! Only device probe, covered with disposable plastic cover, is inserted.
Use of Hand Gloves & Gel	Yes! To maintain the hygiene while inserting the hand	No! Saves extra cost on Gloves & Gel.
Visual of Cervix (Open or closed)	No! Checking only by Hand.	Yes! Video Seen in the Camera mounted on the Probe Tip.
	Cervix may be open because of any other health issues also. Here AI fails.	One can easily notice Cervix on the external display.



# Digital AI Gun Design Patent



LK Vet Care Pvt. Ltd.



# Blood-based Pregnancy Test



## Expand your reproductive service offerings

- **No ELISA instrumentation required**  
Read results visually, without the need to invest in an ELISA plate washer or reader
- **Ultrasound-level accuracy**  
Identify open animals as early as 8 days post-breeding with a highly sensitive and specific test
- **Results in less than 30 minutes**  
Cattle, goat, sheep, water buffalo





LK Vet Care Pvt. Ltd.

## Product Characteristics

- Name: Rapid Visual Pregnancy Test
- 2-plate kit, 1x8 strip plates
- Shelf life 12 month
- Whole Blood (EDTA) or Plasma (EDTA) or Serum
- For cattle, goat, sheep and water buffalo
- 21 minutes assay to result (7-7-7) all at room temperature (18-26°)
- 1 well Negative Control, 1 well Positive Control
- 4 reagents labeled "Reagent 1-4"  
(Detector Solution, Conjugate, TMB Substrate N.12, Stop Solution)  
Always 3 drops of reagent per well
- Accessory pack : 1 plate cover, 1 wash bottle, 1 precision pipette





## Blood Sampling Tools (Not Provided)

- Whole Blood & Plasma:
  - Use EDTA sample tubes (purple top)
- Serum:
  - Red top tubes
  - Blood quickly clots after collection.
- Needles:
  - Ideally vacutainer system
  - 18G x 1.5 "(1.2 x 38 mm)

Purple top  
tube  
(EDTA)

Red top  
tube for  
Serum





LK Vet Care Pvt. Ltd.

## WHAT IS गोरथ™?

- गोरथ™ - आमची प्रमंती, गोदयाची श्रीमंती, is a mobile veterinary diagnostic van, to be operated by a driver-cum-LSS, AIT and a doctor
- गोरथ™ is a custom-built offering on a 13/17/21/23-foot long robust vehicle (e.g. Force Motors, TATA), with good ground clearance and a smooth turning radius, ideally suitable for typical rural road conditions
- गोरथ™ body fabricated by ISO certified and a NSIC and ARAI approved company
- गोरथ™ is equipped with air-conditioned diagnostic laboratory and utility medicines
- गोरथ™ is equipped with different digital and electronic diagnostic tools and equipment's/products typically used for Digital Artificial Insemination, Digital Endoscopy, Infertility Diagnosis, Post calving extension services, calf rearing, minor and major surgery, extension services cattle camps and other preventive services
- गोरथ™ incorporates an electronic weighing scale with a mounted traxis of 2" pipe
- गोरथ™ has a unique hydraulic traxis with 1 ton capacity electronic weighing scale
- गोरथ™ equipments are operated on UPS and/or battery power for enhanced working product life
- गोरथ™ is mounted with one-of-its kind patented Solar and Windmill to generate and store power
- गोरथ™ houses a water tank and an antiseptic tank, with nozzles
- गोरथ™ is equipped with utility gadgets like PA system, GPS tracker, Refrigerator
- गोरथ™ has a TV installed to impart educational knowledge and conduct awareness training programmes to farmers meetings and/or cattle camps for extension services
- गोरथ™ is provided with two-side awning, under which it enables to diagnose cattles in all seasons
- गोरथ™ is installed with adequate lighting system to enable to do cattle diagnosis during night time
- गोरथ™ will offer animal nutritional and healthcare products as a value added service
- गोरथ™ is equipped with portable X-Ray machine and Computer Radiography unit





LK Vet Care Pvt. Ltd.







LK Vet Care Pvt. Ltd.

# AI Chain Products

Design Patent



DFSTS (Thaw Monitor)

Design Patent




Digital AI Gun



Ultrasound Sonography Machine



28-days Pregnancy Detection Kit



Mobile Veterinary Application



Mobile Veterinary Diagnostic Van



**VISION :** **LK Vet Care** carries a vision which serves as the standard against which we weigh our thought process and convert them to result-oriented actions and accurate decisions, to create a value and make a difference.

**MISSION :** **LK Vet Care**, would like to become a small contributor to the movement of fulfillment of dreams of a strong rural India. In doing this, we want to bring about a socio-economical change in the fabric of rural India through use of Make-In-India, Indigenous Technological Innovations, Skill Development and Rural Empowerment.

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## LK Vet Care Pvt. Ltd.

॥ पशुसंपन्नतार्थम् तत्रोपासना ॥

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