





# **DUCTUS INFODOT**







# Welcome to Ductus Infodot...

Ductus Infodot is a pioneering diagnostics provider in India, committed to enhancing infrastructure safety and efficiency. In partnership with Mobile Diagnostic Systems LLC (MSD) from Russia, we bring world-class diagnostic technology for Indian infrastructure, especially in railways and tram lines.

As part of the Make in India initiative, Ductus Infodot is dedicated to localized innovation and development, with Hotspot Infodot holding a 50% stake in this collaboration. Our goal is to transform infrastructure maintenance with advanced diagnostic systems designed to withstand all weather conditions and improve operational reliability.





# Management Profile

Narender Kumar founded Jai Singh & Company (JSC), a group that is currently one of the largest Highway Infrastructure Management companies in North India and business interests in Mining (Minor Mineral) & Railways Signaling Sector. JSC's growth can be directly attributed to its ability to adapt, endure and remain credible with all stakeholders. Narender Kumar was also on the board of directors and still an investor in Kernex Microsystem; a listed company building Railway's mobility solutions, that also built India's first train collision avoidance system called "Kavach" for Indian Railways. He is also an investor / advisor to many successful startups working to overcome real life challenges which includes Fintech company helping D2C companies with higher conversions and reduced RTO, Agritech company using IoT to automate operations, AI company using ANPR to build next generation Tolling System for the country, Indian cloud storage company, OTC platform for electricity to bring Green Energy Transition and an EV startup building charging infrastructure.

Viraj Bansal is a dynamic Electrical and Electronics Engineer with a proven track record of entrepreneurial excellence. As the founder of a trailblazing company specializing in the manufacturing of medium and high voltage switchgear, he has set industry benchmarks by delivering India's first fully typetested products for the 2x25 kV electrification system in Indian Railways' traction sector. In addition to his groundbreaking work in switchgear technology, Viraj leads a state-of-the-art Class A foundry, producing critical components for locomotives and LHB coaches. His unwavering commitment to innovation and quality has propelled his ventures to the forefront of industrial manufacturing. A tech enthusiast with a keen eye for emerging trends, Viraj is deeply engaged in fostering foreign collaborations and spearheading multiple startups in the EV infrastructure space. His passion for revolutionary solutions drives his work to transform industries with innovative products, emphasizing predictive maintenance as a vital tool to prevent accidents and enhance operational safety. Viraj Bansal's forward-thinking approach and dedication to excellence make him a leader committed to shaping a sustainable, technologically advanced future.



# **Advanced Diagnostics** for Rail and Tram Infrastructure

Ductus Infodot's advanced diagnostic systems offer automated, real-time monitoring for rail and tram networks, ensuring safe and efficient operations in all weather conditions.

#### **Core Functions:**

- Contact Network Geometry & Wire Wear Measurement: Ensures precise alignment and timely maintenance.
- High-Resolution Archiving: Records detailed, historical data for analysis and compliance.
- Thermal & UV Inspections: Detects faults with thermal imaging and monitors insulator degradation with UV control.

#### **Monitoring Solutions:**

- Grounding & Cargo Monitoring: Real-time video for enhanced safety.
- Railway Switch & Track Monitoring: Tracks switch conditions and detects path distortion.
- Contact Wire Retainer & Structure Control: Ensures correct retainer placement and monitors structural integrity.









# Benefits of Automated Diagnostics

Ductus Infodot's automated diagnostic systems deliver multiple benefits that enhance infrastructure stability, reduce maintenance costs, and prevent potential emergencies.

# **Early Detection of Risks**

Automated diagnostics identify potential issues before they escalate, helping prevent costly repairs and safety incidents. 1

# **Resource Optimization**

Reduces labor costs and time spent on manual inspections by automating diagnostic processes.

2

# **Predictive Maintenance**

Stores data in specialized databases and applies algorithms to forecast deviations from standards, enabling proactive maintenance.

3





# Quality Assurance, Compliance, and Full-Service Support



#### State-Certified

Our products are listed in the State Register of Measuring Instruments and comply with rigorous metrological standards.



### Patent Protection & Licensing

All products are patented, and our educational division is fully licensed to provide professional training.



### Research & Development

Innovative and customized solutions for the Indian market.



## **Design & Production**

Quality-controlled manufacturing ensures durable and reliable products.



## Installation & Maintenance

Dedicated support to maximize system performance and lifespan.



### Staff Training

Comprehensive training programs to equip your team with the skills needed to operate our systems effectively.



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