



INNOVATION 2025–2026

WAREHOUSE 2030: BEYOND THE BELT



Warehouse 2030 Beyond the Belt



As we step into a new phase of warehouse evolution, it's no longer just about moving material from A to B. It's about how a warehouse can sense, read, and route flow while keeping energy under control.



The "Logic" Behind the \$5 Trillion Economy

Dear Readers,

*As we close the 2025-2026 fiscal year, looking back at our journey fills me with immense pride. In just 12 months, Dhanvanthri Engineers has successfully dispatched over **200+ projects**, delivering more than **700 meters of precision-engineered conveyors** across **18 diverse sectors**. We've supported the EV hub boom and redefined cold-chain standards.*

But looking forward to 2026-27, our focus is shifting. India is racing toward a massive logistics goal, but a revolution without ROI is just expensive chaos. We are moving from "selling hardware" to "selling intelligence."

*To support this vision, we are scaling. Our new **Paudh Facility** is now operational, giving us **5x the growth capacity** to handle larger, more complex B2B infrastructure. Furthermore, I am pleased to announce our strategic alliance with **Toppy S.r.l. (Italy)**, bringing world-class Italian load-inversion technology to the Indian market.*

The future warehouse will not be defined by how many belts it has. It will be defined by how well each moving part contributes to productivity and energy discipline.

*Best regards,
Anil Athri,
Managing Director*

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Precision at Scale: *Inside our New Paudh Facility*

Our capacity to deliver must match our vision for the future. Our new facility at Paudh is not just a factory; it is our hub for high-precision engineering.



5x Growth Capacity

Designed specifically to handle high-volume B2B projects and heavy-duty assembly like our 1.5-ton Engine Docking Units.



Technological Edge

By centralizing our high-precision laser cutting and CNC machining operations here, we have reduced lead times significantly.



Manufacturing Standards

Paudh allows us to move from simple fabrication to high-tech assembly, ensuring every component from a single roller to a complex spiral meets international quality standards.



Warehouse 2030: Beyond the Belt

The conveyor belt has always been the visible symbol of material handling. But by 2030, the most effective warehouses will not be judged by conveyor speed alone. They will be measured by **System Logic**.

The Problem: Sorting Fatigue & The Unread Label



Currently, hundreds of warehousing companies in India struggle with "Dispatch Friction." A single unread barcode or a misaligned label can trigger a misroute, leading to manual corrections and total system delays. At DEPL, we solve this through **OCR-Integrated Logic**. Our systems don't just "see" a carton; they validate product identity against your WMS in real-time. This eliminates the hundreds of manual interventions that slow down your dispatch.

The First Layer: Sensory Awareness



Sensors are the "eyes" of the 2030 warehouse. We are implementing presence detection, jam monitoring, and motor health indicators that allow a warehouse to respond before a problem becomes downtime. A warehouse that detects variation early protects its throughput and lowers the burden on maintenance teams.

The Evolution of the Warehouse Brain



To understand "Beyond the Belt," we must look at the data-layer. In a traditional setup, a conveyor is a "slave" to a manual switch. In the 2030 vision, the conveyor is an "intelligent agent." By integrating **IO-Link sensors**, we aren't just detecting boxes; we are measuring distances, pressure, and thermal variations in real-time.



The ROI of OCR:



Why is OCR a game-changer for the Indian market? Because it removes the "human-error tax." When a system validates a destination label at 2 meters per second, the probability of a misroute drops to nearly 0.01%. For a high-volume FMCG client, this saves thousands of man-hours spent on "rectification loops."

Sustainable Logic:



Our "Energy Giveback Dividend" logic acts like a modern start-stop engine in a car. By calculating the "Gap-Logic" between products, the VFD (Variable Frequency Drive) ramps down the motor speed when the line is sparse. This doesn't just save electricity; it extends the mechanical life of the belt and bearings by 30%, drastically reducing your **Total Cost of Ownership (TCO)**.

The "Energy Giveback" Dividend



The most innovative part of our 2026 roadmap is the shift toward **Energy-Aware Design**. In a high-cost power market like India, a conveyor should know when to "rest." Our systems use logic to sleep when empty and wake up only when a load is sensed. This "Energy Giveback" isn't just a green initiative, it's a direct boost to your P&L.

By 2030, your material handling system won't just move products; it will manage your energy, your data, and your peace of mind.



Industry Insights

Building Warehouses That Think Before They Move

To be a leader in 2026, you cannot just be a "provider of equipment." You must be a **Leader in Logic**. At Dhanvanthri, we believe that true leadership in material handling is built on four pillars:

The "Logic-First" Framework: We calculate the "travel-to-pick" ratio before we tighten a single bolt. The layout must dictate the speed, not just the motor.

Material Science: In cold storage, we focus on "thermal bridge mitigation" at structural joints where most warehouses lose 15% of their energy efficiency.

Maintenance as a Predictive Strategy: We move from "fix-on-fail" to "predict-and-prevent" by embedding vibration analysis into our systems.

Human-Centric Automation: We design for **Ergonomic Throughput**, ensuring the machine works with the operator to reduce fatigue and increase safety.

Why Lead through Logic?

In the past, being a "leader" meant having the biggest factory. Today, leadership is defined by the **Physics of the Layout**. At Dhanvanthri, we've shifted from being a vendor to a consultant because we realized that our clients' biggest problems, land cost, labor scarcity, and power tariffs cannot be solved by steel alone.

The Strategy of the Four Pillars:

These pillars aren't just marketing terms; they are our engineering DNA. By prioritizing **Ergonomic Throughput**, we ensure that automation serves the human, not the other way around. By focusing on **Thermal Bridge Mitigation**, we solve the sub-zero challenges that generic fabricators don't even see. This "Intelligence-First" approach is why global leaders are choosing Dhanvanthri as their strategic bridge to the Indian market.



Conclusion:

Leadership isn't about the size of the machine; it's about the accuracy of the flow. As India moves toward a \$5 Trillion economy, the winners will be those who invest in systems that think before they move.

Italian Precision meets Indian Engineering: The Toppo Alliance

We are proud to announce that Dhanvanthri Engineers is now an **Authorized Strategic Partner for Toppo S.r.l. (Italy)**.



Toppo is the global benchmark for Pallet Exchange and Load Inversion technology. Through this partnership, we now offer:

- **Hygienic Load Inverters:** Ideal for Pharma/Food clean rooms where wooden pallets must be exchanged for plastic/sanitized ones.
- **Fully Automated Pallet Magazines:** Continuous, non-stop exchange cycles that integrate into your "Warehouse 2030" flow.
- **Zero-Stress Fragile Handling:** Technology that exchanges pallets for extremely fragile products without tilting or mechanical stress.

Employee spotlight

This section is dedicated to showcase stories and thoughts that are close to our employees' hearts



Varad Mahadik

Sr. Designer
Dhanvanthri Engineers Pvt. Ltd.

Design Intelligence: The "80-to-6" Manpower Revolution

True innovation doesn't just happen on a computer screen; it happens when an engineer looks at a chaotic site and says, "There's a better way."



The Problem: At Roquette India (Gokak), unloading a 21-ton truck of maize was a chaotic process. It required **80 workers** an entire hour to clear one truck. The costs were high, and the safety risks were constant.

The Thought Process: Our designer, **Varad**, looked at construction cranes for inspiration. He envisioned a **Telescopic Boom mechanism** that could reach 4 meters inside the truck. But the real "Jugaad" was the **Carousel Logic** at the end of the belt.

The Solution: Varad designed a 4-station rotating carousel synchronized with the telescopic reach. Workers now simply place bags on the belt, and the carousel handles the "stitch-cut" and material discharge automatically.

The Result: Manpower was slashed from **80 workers to just 6 operators**, while maintaining the same 1-hour unloading speed. That is the power of Dhanvanthri's design intelligence.

Maintenance Tips



5 Signs Your Conveyor Motor is Drawing Too Much Power

A machine rarely fails overnight; it signals its struggle early. If you see these indicators, your OEE is already at risk.

- Schedule a weekly "Silent Hour" walk-through. Listen for high-pitched squeals (bearing fatigue) or rhythmic thumping (belt splice failure).
- Audit your lubrication frequency. Over-greasing creates a "heat trap" and attracts abrasive dust, which acts like sandpaper on the rollers.
- If a belt is mistracking, don't just tighten it. Check for **Material Buildup** on the tail pulley or a **Structural Settling** of the floor.
- Look for "Hot Spots" on terminal blocks and VFDs. In the Indian summer, ambient heat combined with a loose electrical connection is the #1 cause of control-logic failure.
- Don't just wipe the sensor lens. Check the **Mounting Rigidity**. High-speed conveyors create vibrations that can micro-shift a sensor's alignment over 3 months.

Quarter That Was

Mindset Transformation Workshop (April 15th)

We gathered to align on our 2026-27 goals.



Women's Day

Honoring the women who drive our progress. Thank you for being such an important part of the Dhanvanthri Engineers family.



Quarter That Was

Cricket Tournament:

High-speed teamwork
on and off the field.



New Beginnings at Paudh Factory

Seeking divine blessings for
our journey of expansion
and manufacturing
excellence.



Quarter That Was



Exh - IWE Exhibition Highlights

Engaging with industry leaders and partners to drive the next generation of smart material handling solutions.



2025–2026 at a Glance



**Projects
Completed**

209



**Industries
Served**

18



**Average Client
ROI**

18-24
Months



**Logic-Driven
Installations**

85%
of Projects

Looking ahead to 2026, we remain focused on building smarter, more energy-aware, and future-ready material handling systems.

With every project, our goal is not just to move material, but to improve productivity, reduce waste, and create lasting operational value for our clients.

Thank you for your continued trust and partnership. Together, we look forward to shaping the warehouses and factories of tomorrow.



Dhanvanthri Engineers