

2025

PORTFOLIO

PRATEEK TANWAR



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ABOUT ME

Hi, I'm Prateek Tanwar, a strategic sourcing specialist driven to reimagine industrial procurement through sustainable engineering.

I specialize in VAVE-driven supplier collaborations and data-intelligent sourcing, turning supply chains into value chains. Every solution I design embodies my dedication to circular resource principles, risk-resilient networks and tangible planetary stewardship.



PORTFOLIO HIGHLIGHTS

1. LINER CYLINDER COST OPTIMISATION
£80K+ SAVED | MULTI-TIER SUPPLIER STRATEGY

2. KNUCKLE HOUSING WARRANTY REDUCTION
40% FEWER CLAIMS | CONTINUOUS IMPROVEMENT

3. RESHORING-DIGITAL TWIN INITIATIVE
DIGITAL TWIN RISK MITIGATION



LINER CYLINDER COST OPTIMISATION

PROBLEM

HIGH COSTS AND SUPPLY CHAIN VULNERABILITY

Reliance on high-volume suppliers serving giants like Mahindra inflated prices. Limited alternatives created cost volatility and risk for Escorts Kubota's production.

ACTION

SUPPLIER CAPABILITY BUILDING + MULTI-TIER NEGOTIATION

1. **Developed alternate sourcing:** Identified and invested in machinery for a low-tier supplier to manufacture liner cylinders.
2. **Strengthened supplier capability:** Transformed them into a cost-competitive producer via technical collaboration.
3. **Negotiated volume discounts:** Secured tiered pricing across 3 supplier levels to de-risk dependency.

RESULT

RESILIENCE + QUANTIFIED SAVINGS

£80k+ annual cost reduction through volume discounts and efficient production.

Supply chain diversification: Reduced sole-supplier dependency by 70%. Sustainable compliance: Maintained quality standards while cutting costs.

KNUCKLE HOUSING WARRANTY REDUCTION

PROBLEM

CHRONIC FIELD FAILURES AND WARRANTY COSTS

High failure rates in knuckle housing assemblies led to excessive warranty claims, customer dissatisfaction and brand reputation risks for Escorts Kubota.

ACTION

ROOT-CAUSE INVESTIGATION + SUSTAINABLE MATERIAL UPGRADE

- 1. Failure diagnosis:** Conducted metallurgical analysis to identify material fatigue as primary failure cause.
- 2. Sustainable redesign:** Upgraded to high-strength aluminum alloy with better fatigue resistance.
- 3. Vendor compliance:** Streamlined APQP/PPAP documentation for the suppliers to ensure quality consistency.

RESULT

RELIABILITY TRANSFORMATION

- 40% reduction in warranty claims within first production cycle
- Extended product lifespan through material enhancement
- Faster vendor compliance with standardized quality protocols

RESHORING-DIGITAL TWIN INITIATIVE

PROBLEM

OFFSHORE SUPPLY CHAIN VULNERABILITIES

Geopolitical risks, quality inconsistencies, and long lead times in overseas manufacturing caused production delays and hidden failure costs for critical components.

ACTION

DIGITAL TWIN IMPLEMENTATION + RISK SIMULATION

1. **Virtual modeling**: Created a digital replica of the physical supply chain (suppliers → logistics → production)
2. **Failure scenario testing**: Performed PESTEL & SWOT analysis to analyse the factors.
3. **Predictive analytics**: Identified critical failure points.

RESULT

PROACTIVE RISK MITIGATION

- **25% reduction in lead times** through optimized inventory routing
- **20% lower failure costs** by reducing quality issues
- **15% faster supplier onboarding** with virtual compliance checks

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THANK YOU!