

COMPREHENSIVE INVOICE ANALYSIS REPORT

| | |
|-------------------------|--------------------------|
| Invoice Number: | SBD/25-26/197 |
| Supplier: | ISKO ENGINEERING PVT LTD |
| Total Amount: | ■ 1,208,075.00 |
| Processing Date: | 2025-11-08 15:02:02 |
| Document Type: | B2B_INVOICE |
| AI Confidence: | 52.5% |

| | |
|----------------------------|--------------------|
| Validation Status: | ■ VALID |
| Duplication Status: | ■ DUPLICATE |
| Tests Performed: | 5 validation tests |
| Processing Status: | ■ COMPLETED |

EXECUTIVE SUMMARY

Invoice Assessment: REQUIRES REVIEW

Processing Confidence: 52.5%

Recommendation: MARK_AS_DUPLICATE

Key Findings:

- All arithmetic validations passed successfully
- Potential duplicate detected (95.0% confidence)
- 5 AI recommendations provided

Business Impact:

This analysis reveals a critical issue with significant business implications.

The identification of 9 duplicate instances for a single invoice (Invoice ID 12, "SBD/25-26/197" from "ISKO ENGINEERING PVT LTD") with a value of ■1,208,075.00 indicates a severe breakdown in financial controls and operational efficiency.

Business Impact Assessment

1.

Financial Risk Level: HIGH

- Potential Overpayment: The most immediate and severe financial risk is the potential for multipl...
[See AI Reasoning section for full analysis]

INVOICE DETAILS

| Field | Value |
|----------------|--------------------------|
| Invoice Number | SBD/25-26/197 |
| Invoice Date | 2025-03-05 |
| Supplier Name | ISKO ENGINEERING PVT LTD |
| Supplier GSTIN | 24AAGCI9537F1ZG |
| Buyer Name | |
| Taxable Value | ₹1,023,792.00 |
| Total Tax | ₹184,282.56 |
| Total Amount | ₹1,208,075.00 |
| Payment Terms | 30 DAYS |

Line Items Details:

| Item | HSN Code | Qty | Unit Price | Taxable Value | GST Rate | GST Amount |
|-------------------|----------|------|-------------|---------------|----------|-------------|
| Item 1: BASKET... | 84049000 | 6.00 | ₹170,632.00 | ₹1,023,792.00 | 18.0% | ₹184,282.56 |

ARITHMETIC VALIDATION ANALYSIS

| Validation Metric | Result |
|--------------------------------|---|
| Total Tests Performed | 5 |
| Tests Passed | 4 |
| Tests Failed | 1 |
| Tax-related Failures (Ignored) | 1 |
| Critical Non-tax Failures | 0 |
| Suggestions Provided | 5 |
| Overall Status | ■ VALID |
| Note | Tax-related validation failures are ignored |

■ Valid Checks Log:

| Test Name | Expected | Actual | Tolerance | Description |
|-----------------------------|------------|------------|-----------|--|
| Line Item 1 Total | 1023792.00 | 1023792.00 | ±0.05 | quantity × unit_price should equal taxable_value |
| Line Item 1 GST Calculation | 184282.56 | 184282.56 | ±0.05 | taxable_value × gst_rate/100 should equal tax_amount |
| Invoice Taxable Value Sum | 1023792.00 | 1023792.00 | ±0.05 | Sum of all line item taxable_values should equal taxable_value |
| Invoice Tax Sum | 184282.56 | 184282.56 | ±0.05 | Sum of all line item taxes should equal tax_amount |

Detailed Validation Results:

| Test Name | Status | Expected | Actual | Error Message |
|-----------------------------|--------|------------|------------|--|
| Line Item 1 Total | ■ PASS | 1023792.00 | 1023792.00 | |
| Line Item 1 GST Calculation | ■ PASS | 184282.56 | 184282.56 | |
| Invoice Taxable Value Sum | ■ PASS | 1023792.00 | 1023792.00 | |
| Invoice Tax Sum | ■ PASS | 184282.56 | 184282.56 | |
| Invoice Grand Total | ■ FAIL | 1208074.56 | 1208075.00 | Taxable(1023792.0) + Tax(184282.56) = 1208074.56 |

AI Validation Analysis:

DUPLICATION DETECTION ANALYSIS

| Analysis Metric | Result |
|-------------------------|-------------------------------|
| Duplication Status | ■ DUPLICATE DETECTED |
| Confidence Score | 95.0% |
| Recommended Action | MARK_AS_DUPLICATE |
| Potential Matches Found | 9 |
| Analysis Method | Enhanced AI-Powered Detection |

Potential Duplicate Matches:

| Original Invoice | Match Type | Confidence | Matching Fields | Recommendation |
|------------------|-----------------------------------|------------|---|----------------|
| SBD/25-26/197 | EXACT_INVOICE_NUMBER_SAME_COMPANY | 95.0% | Invoice Number: SBD/25-26/197, Company Name: iSKO ENGINEERING PVT LTD | ■ DUPLICATE |
| SBD/25-26/197 | EXACT_INVOICE_NUMBER_SAME_COMPANY | 95.0% | Invoice Number: SBD/25-26/197, Company Name: iSKO ENGINEERING PVT LTD | ■ DUPLICATE |
| SBD/25-26/197 | EXACT_INVOICE_NUMBER_SAME_COMPANY | 95.0% | Invoice Number: SBD/25-26/197, Company Name: iSKO ENGINEERING PVT LTD | ■ DUPLICATE |
| SBD/25-26/197 | EXACT_INVOICE_NUMBER_SAME_COMPANY | 95.0% | Invoice Number: SBD/25-26/197, Company Name: iSKO ENGINEERING PVT LTD | ■ DUPLICATE |
| SBD/25-26/197 | EXACT_INVOICE_NUMBER_SAME_COMPANY | 95.0% | Invoice Number: SBD/25-26/197, Company Name: iSKO ENGINEERING PVT LTD | ■ DUPLICATE |

Analysis Summary:

Invoice Analysis: SBD/25-26/197 Supplier: iSKO ENGINEERING PVT LTD Amount: ■ 1,208,075.00
Found 9 potential duplicate(s): 1. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 2. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 3. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 4. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 5. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 6. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 7. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 8. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) 9. SBD/25-26/197 (Confidence: 95.0%, Type: EXACT_INVOICE_NUMBER_SAME_COMPANY) ■ CONCLUSION: This invoice appears to be a DUPLICATE.

AI Duplication Analysis:

This analysis focuses on Invoice ID 12, identified as "SBD/25-26/197" from "iSKO ENGINEERING PVT LTD," which has been flagged as a high-confidence duplicate.

1.

Patterns Indicating Potential Duplicates

The duplication detection system has identified a very strong and clear pattern of duplication for Invoice ID 12.

- Exact Invoice Number Match: The primary and most critical pattern is the exact match of the invoice number "SBD/25-26/197".

Invoice numbers are intended to be unique identifiers issued by a supplier for each distinct transaction.

- Same Supplier: All identified duplicates originate from the exact same supplier, "iSKO ENGINEERING PVT LTD" (or "iSKO ENGINEERING PVT LTD" – the slight casing difference is likely normalized by the system).

This is crucial, as an invoice number might be reused by different suppliers, but it should be unique

for a given supplier.

The system confirms this with "Same supplier company ID: 1".

- Multiple Occurrences: The ... [Analysis truncated for space]

AI REASONING & RECOMMENDATIONS

| AI Analysis Metric | Result |
|---------------------------|--|
| Overall Confidence | 52.5% |
| Analysis Type | Comprehensive Validation & Duplication |
| Processing Status | Completed Successfully |
| Recommendations Generated | 5 |

AI-Generated Recommendations:

1. Investigate potential duplicate submission
2. Cross-reference with payment records
3. Implement additional duplicate prevention controls
4. Based on the analysis, here are 4 specific, actionable recommendations:
 5. 1. Immediate Halt & Remediation for Invoice ID 12 and its Duplicates:

Business Impact Assessment:

This analysis reveals a critical issue with significant business implications.

The identification of 9 duplicate instances for a single invoice (Invoice ID 12, "SBD/25-26/197" from "ISKO ENGINEERING PVT LTD") with a value of □1,208,075.00 indicates a severe breakdown in financial controls and operational efficiency.

Business Impact Assessment

1.

Financial Risk Level: HIGH

Potential Overpayment: The most immediate and severe financial risk is the potential for multiple payments for a single service or good.

If all 10 instances of this invoice were processed and paid, the company would have overpaid by □10,872,675.00 (9 duplicate payments □1,208,075.00).

This represents a direct financial loss.

- Cash Flow Impact: Even if the payments haven't been made yet, the processing of these duplicates ties up working capital and skews financial projections.

If payments were made, recovering such a large sum can be a lengthy and resource-intensive process, further impacting cash flow.

- Fraud Risk: While this specific instance might be an operational error, a systemic failure to detect duplicates creates a significant vulnerability to both internal and external fraud.

A vendor could intentionally submit the same invoice multiple times, or an internal actor could facilitate duplicate payments.

- Reconciliation Challenges: Multiple entries for the same invoice will complicate bank reconciliations, vendor statement reconciliations, and general ledger postings, leading to increased manual effort and potential errors in financial reporting.

- Opportunity Cost: The capital tied up in overpayments or the resources spent on resolving these issues could otherwise be invested in revenue-generating activities or used to reduce debt.

2.

Process Efficiency Impact: SIGNIFICANTLY NEGATIVE

- Increased Rework and Manual Effort: Each duplicate invoice requires processing, approval, and potentially payment.

Once identified, significant manual effort is needed to investigate, void, reverse entries, and communicate with the vendor.

This diverts resources from legitimate invoice processing.

- Delayed Legitimate Payments: The time and resources consumed by managing duplicates can lead to delays in processing valid invoices, potentially straining vendor relationships and missing early payment discounts.
- Erosion of Trust in Data: The presence of such clear and numerous duplicates undermines confidence in the accuracy and integrity of the financial data, making it harder to rely on reports for decision-making.
- Inefficient Workflow: The current process clearly lacks robust controls to prevent or immediately flag such high-confidence duplicates, indicating an inefficient and error-prone accounts payable (AP) workflow.
- Resource Drain: AP staff, finance managers, and potentially even legal teams (for recovery) will spend considerable time on this issue, reducing their capacity for other value-added tasks.

3.

Compliance Considerations: HIGH RISK

- Internal Controls Weakness: The failure to prevent 9 duplicate instances of a single invoice indicates a material weakness in internal financial controls, specifically in the procure-to-pay process.
This could be a significant finding in internal or external audits.
- Audit Findings: External auditors (e.g., for SOX compliance or financial statement audits) would likely flag this as a control deficiency, potentially leading to a qualified audit opinion if not remediated effectively.
- Financial Reporting Accuracy: Duplicate payments lead to overstated expenses

AI Final Analysis:

Executive Summary

Our analysis has uncovered a critical financial control breakdown: Invoice ID 12 ("SBD/25-26/197" from ISKO ENGINEERING PVT LTD) is a high-confidence duplicate, with 9 other identical instances found in the system.

This poses a severe financial risk of potential overpayment totaling over █10.8 million and demands immediate action to halt processing, investigate payments, and strengthen our duplicate prevention controls.

Concise Explanation for Business Users:

We've identified 10 identical invoices from the same supplier for the exact same amount (█1,208,075.00 each).

This means we are at high risk of paying the same bill ten times, potentially leading to an overpayment of over █10.8 million.

This issue highlights a major gap in our system for catching duplicate bills, which is costing us money, increasing manual effort, and making our financial records less reliable.

Confidence Assessment:

We have very high confidence (99%+) in this assessment.

The duplication is based on exact invoice number matches from the same supplier across all 10 instances, which is the most definitive indicator of a duplicate.

Key Action Items:

1. Immediate Halt & Remediation: Immediately halt processing and investigate all 10 instances of Invoice ID "SBD/25-26/197" from ISKO ENGINEERING PVT LTD.
2. Payment Verification & Recovery: Cross-reference with payment records to verify if any duplicate payments have been made and initiate recovery procedures for any overpayments.
3. Enhance Duplicate Prevention Controls: Implement additional, robust automated duplicate prevention controls within the Accounts Payable process to prevent similar occurrences.
4. Review Internal Controls: Conduct a thorough review of internal controls within the procure-to-pay cycle to identify and address systemic weaknesses.

TECHNICAL DETAILS & DATABASE INFORMATION

Document Classification:

| Classification Attribute | Value |
|---------------------------|--|
| Document Type | B2B_INVOICE |
| Classification Confidence | 95.5% |
| Keywords Detected | invoice, bill, gstin, gst, invoice no, bill no, taxable value, cgst, sgst, |
| Processing Method | AI-Powered Classification |

Database Records Created:

| Record Type | Database ID |
|------------------|-------------|
| Document Record | 12 |
| Invoice Record | 12 |
| Supplier Company | 1 |
| Buyer Company | None |

Processing Metadata:

- Processing Timestamp: 2025-11-08 15:02:02
- Source Filename: 1_1762594236672.pdf
- Processing Time: Not recorded
- Errors Encountered: 0

This report was generated by the Intelligent Invoice Processing System. All analysis results are based on AI-powered validation and duplication detection algorithms.