

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 11:05:25
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:

The validation and duplication analysis presents a critical finding with significant business implications.

The high-confidence duplicate invoice, identified by an exact invoice number match from the same supplier across multiple instances, poses immediate and long-term risks.

Business Impact Assessment

1.

Financial Risk Level: HIGH

The identified duplicate invoice (Invoice 4) carries an amount of 1,208,075.0.

The fact that three prior instances (Invoice IDs 1, 2, ...) [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	3
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	■ DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197	■ DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197	■ DUPLICATE

Analysis Summary:

Invoice Analysis: SBD/25-26/197 Supplier: iSKO ENGINEERING PVT LTD Amount: ■ 1,208,075.00
Found 3 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) ■ CONCLUSION: This invoice appears to be a DUPLICATE.

AI Duplication Analysis:

This analysis clearly indicates a high-confidence duplicate invoice, posing a significant financial risk if not addressed.

1.

Patterns that Indicate Potential Duplicates

The duplication detection results present a very strong and unambiguous pattern of duplication:

- Exact Invoice Number Match: The most critical piece of evidence is the identical invoice number: "SBD/25-26/197".

This is the primary identifier for an invoice.

- Same Supplier: All matching invoices (Invoice 1, 2, 3, and the current Invoice 4) are from the exact same supplier, "iSKO ENGINEERING PVT LTD", confirmed by the "Same supplier company ID: 1". This eliminates the possibility of different suppliers using coincidentally similar invoice numbers.

- Match Type: The matchtype "EXACTINVOICENUMBERSAME_COMPANY" explicitly defines this pattern as the highest form of duplication.

Multiple Occurrences: The system found three* prior instances (Invoice IDs 1, 2, and 3) with the e...
[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 high-confidence duplicate invoice detection and its significant financial and process implications, here are 5 specific, actionable recommendations:
 5. 1. Immediate Payment Hold & Verification:

Business Impact Assessment:

The validation and duplication analysis presents a critical finding with significant business implications.

The high-confidence duplicate invoice, identified by an exact invoice number match from the same supplier across multiple instances, poses immediate and long-term risks.

Business Impact Assessment

1.

Financial Risk Level: HIGH

The identified duplicate invoice (Invoice 4) carries an amount of 1,208,075.0.

The fact that three prior instances (Invoice IDs 1, 2, and 3) with the exact same invoice number from the same supplier have been detected elevates the financial risk significantly.

- Direct Financial Loss: If Invoice 1, 2, or 3 were already paid, and Invoice 4 is processed, it would result in a direct, unnecessary outflow of 1,208,075.0 for each duplicate payment.

Given there are three prior instances, the potential cumulative loss could be up to $4 \times 1,208,075.0 = 4,832,300.0$ if all were paid.

This is a substantial sum that directly impacts the company's bottom line and cash reserves.

- Cash Flow Impact: Unnecessary payments tie up working capital that could be used for other operational needs or investments.

- Cost of Recovery: Recovering duplicate payments can be a complex, time-consuming, and often costly process involving legal or administrative efforts.

There's no guarantee of successful recovery, especially if the supplier is uncooperative or financially distressed.

- Fraud Risk: While not explicitly stated as fraud, repeated submission of the same invoice, especially with a high value, could indicate attempted fraud by the supplier or an internal actor, or at the very least, severe negligence.

- Financial Reporting Accuracy: Duplicate payments lead to overstated expenses and understated cash balances, distorting financial statements and potentially misleading stakeholders.

2.

Process Efficiency Impact: SIGNIFICANT

The detection of such a high-confidence duplicate, especially one with multiple prior occurrences, indicates inefficiencies and potential breakdowns in the Accounts Payable (AP) process.

- Increased Manual Effort & Rework: AP staff will need to dedicate significant time

AI Final Analysis:

Executive Summary: High-Confidence Duplicate Invoice Detected

This analysis confirms with 95% confidence that Invoice 4 is a duplicate of three previously submitted invoices from the same supplier, identified by an exact invoice number match. This presents a HIGH financial risk of direct loss (up to 1,208,075.0 per duplicate payment, potentially 4,832,300.0 cumulatively) and indicates significant Accounts Payable process inefficiencies.

Immediate action is critical: Place Invoice 4 on hold, verify payment status of prior instances, and investigate the root cause to prevent future occurrences and potential fraud.

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	4
Invoice Record	4
Supplier Company	1
Buyer Company	None

Processing Metadata:

- Processing Timestamp: 2025-11-08 11:05:25
- Source Filename: 1_1762580048262.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.