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 14:49:30
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 Invoice ID 11 as a HIGH-CONFIDENCE DUPLICATE (95% confidence) based on an exact match of invoice number ("SBD/25-26/197") and supplier ("ISKO ENGINEERING PVT LTD") across 8 previous instances, highlights severe risks and inefficiencies.
The invoice amount of 1,208,075.0 amplifies the potential impact.
Business Impact Assessment
1.
Financial Risk Level: HIGH
*Dire... [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 taxab...
Line Item 1 GST Calculation	184282.56	184282.56	±0.05	taxable_value × gst_rate/100 should equa...
Invoice Taxable Value Sum	1023792.00	1023792.00	±0.05	Sum of all line item taxable_values shou...
Invoice Tax Sum	184282.56	184282.56	±0.05	Sum of all line item taxes should equal ...

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...

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	8
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, Supplier Company	CONFIRMED_DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197, Supplier Company	CONFIRMED_DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197, Supplier Company	CONFIRMED_DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197, Supplier Company	CONFIRMED_DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197, Supplier Company	CONFIRMED_DUPLICATE

Analysis Summary:

Invoice Analysis: SBD/25-26/197 Supplier: iSKO ENGINEERING PVT LTD Amount: ■1,208,075.00
Found 8 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) ■ CONCLUSION: This invoice appears to be a
DUPLICATE.

AI Duplication Analysis:

This analysis focuses on Invoice ID 11 with invoice number "SBD/25-26/197" from "ISKO
ENGINEERING PVT LTD".
1.
Why this invoice is considered a duplicate
This invoice is considered a HIGH-CONFIDENCE DUPLICATE because it exhibits an exact match
on the most critical fields: invoice number and supplier identity.
The system has identified 8 previous instances of an invoice with the identical number
"SBD/25-26/197" from the same supplier, "ISKO ENGINEERING PVT LTD".
The core logic for duplication detection here is based on the principle that a legitimate supplier
should issue a unique invoice number for each distinct transaction.
When the same invoice number appears multiple times from the same supplier, it is a very strong
indicator of a duplicate submission.
2.
Patterns that indicate potential duplicates
The primary pattern indicating a duplicate in this case is:

• EXACTINVOICENUMBERSAMECOMPANY: This is the strongest possible match type. It means th... [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.
Immediately Reject Invoice ID 11 and Initiate a Comprehensive Audit of Past Instances:

Business Impact Assessment:

This analysis reveals a critical issue with significant business implications.
The identification of Invoice ID 11 as a HIGH-CONFIDENCE DUPLICATE (95% confidence) based on an exact match of invoice number ("SBD/25-26/197") and supplier ("ISKO ENGINEERING PVT LTD") across 8 previous instances, highlights severe risks and inefficiencies.
The invoice amount of 1,208,075.0 amplifies the potential impact.
Business Impact Assessment
1.
Financial Risk Level: HIGH
• Direct Financial Loss: The most immediate and severe risk is the potential for multiple payments for the same service or goods.
With 8 previous instances identified, if even one of these duplicates was paid, the company has already incurred a significant loss of 1,208,075.0.
If all 8 were paid, the total overpayment would be 9,664,600.0.
The current invoice (Invoice ID 11) represents an additional potential loss of the same amount.
• Cash Flow Impact: Overpayments directly drain working capital, negatively impacting cash flow and potentially hindering other operational or investment activities.
• Inaccurate Financial Reporting: Duplicate payments lead to inflated expenses and inaccurate balance sheet figures (e.g., overstated accounts payable if not yet paid, or understated cash if paid), distorting the true financial health of the company.
• Recovery Costs: If overpayments have occurred, the cost and effort associated with recovering funds from the supplier can be substantial, involving legal, accounting, and administrative resources.
• Reputational Damage: Repeated requests for refunds from a supplier can strain business relationships.
2.
Process Efficiency Impact: SIGNIFICANTLY NEGATIVE
• Wasted Resources: Each duplicate invoice requires processing time, from initial receipt and data entry to validation, review, and eventual rejection or investigation.
This diverts valuable Accounts Payable (AP) staff time from processing legitimate invoices.
• Manual Intervention: While the system identified the duplicate, a high-confidence flag still necessitates manual review and decision-making, adding a manual touchpoint to an otherwise potentially automated process.

• Delayed Legitimate Payments: The time spent investigating and resolving duplicate invoices can cause delays in processing and paying legitimate invoices, potentially leading to late payment penalties or strained supplier relationships.
• Lack of Automation/Control Gaps: The fact that 8 previous instances existed (and potentially were processed) before this 9th high-confidence flag suggests a weakness in the existing AP automation or control framework.
The system should ideally prevent such repeated submissions from even reaching a high-confidence duplicate stage without prior intervention.
• Root Cause Analysis Required: The repeated submission pattern indicates

AI Final Analysis:

Executive Summary: High-Confidence Duplicate Invoice Identified
This analysis identifies Invoice ID 11 ("SBD/25-26/197" from ISKO ENGINEERING PVT LTD) as a HIGH-CONFIDENCE DUPLICATE (95% confidence).
This assessment is based on an exact match of the invoice number and supplier, with 8 previous identical instances already detected.
This situation presents a HIGH financial risk, with a potential overpayment of 1,208,075.0 for this single invoice, and up to 9,664,600.0 if all prior duplicates were paid, alongside significant process inefficiencies and control gaps.
Key Action Items:
1.
Immediately reject Invoice ID 11.
2.
Conduct an urgent audit of the 8 previous instances, cross-referencing with payment records to identify and recover any overpayments.
3.
Implement enhanced duplicate prevention controls and perform a root cause analysis to prevent future occurrences.

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	11
Invoice Record	11
Supplier Company	1
Buyer Company	None

Processing Metadata:

- Processing Timestamp: 2025-11-08 14:49:30
- Source Filename: 1_1762593478054.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.