

# 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 10:52:52
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 has identified a critical issue with Invoice ID 3, "SBD/25-26/197" from "ISKO ENGINEERING PVT LTD" for ■1,208,075.00.

The high confidence score (95%) for an exact invoice number and same company match indicates a very strong likelihood of a duplicate.

This finding has significant business implications across financial, operational, and compliance domains.

Business Impact Assessment

1.

Financial Risk Level: High

The detection of Invoice... [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) = 1208074.56

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	2
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: ISKO ENGINEERING PVT LTD	CONFIRMED DUPLICATE
SBD/25-26/197	EXACT_INVOICE_NUMBER_SAME_COMPANY	95.0%	Invoice Number: SBD/25-26/197, Supplier Company: ISKO ENGINEERING PVT LTD	CONFIRMED DUPLICATE

Analysis Summary:

Invoice Analysis: SBD/25-26/197 Supplier: iSKO ENGINEERING PVT LTD Amount: ■1,208,075.00  
Found 2 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) ■ CONCLUSION: This invoice appears to be a DUPLICATE.

AI Duplication Analysis:

This analysis focuses on Invoice ID 3, identified as "SBD/25-26/197" from "ISKO ENGINEERING PVT LTD" for a total value of ■1,208,075.00.

1. Patterns That Indicate Potential Duplicates

The duplication detection results strongly indicate that Invoice ID 3 is a duplicate based on a highly specific and robust pattern: EXACTINVOICENUMBERSAMECOMPANY.

Logic Behind Duplication Detection:

The system identifies potential duplicates by comparing key identifying fields across all invoices. In this case, the primary logic is:

- Exact Invoice Number Match: The invoice number "SBD/25-26/197" for Invoice ID 3 is identical to the invoice numbers of two previously processed invoices (Invoice ID 1 and Invoice ID 2). Invoice numbers are typically unique identifiers issued by a supplier for each distinct transaction.
- Same Supplier Company: All three invoices (ID 1, 2, and 3) originate from the same supplier, "ISKO ENGINEERING PVT LTD," confirmed by "suppliercompanyid: 1".... [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 detection and the significant business risks identified, here are 4 specific, actionable recommendations:
5. 1.  
Immediately Reject Invoice ID 3 and Verify Prior Payments:

### Business Impact Assessment:

The validation and duplication analysis has identified a critical issue with Invoice ID 3, "SBD/25-26/197" from "ISKO ENGINEERING PVT LTD" for ₹1,208,075.00. The high confidence score (95%) for an exact invoice number and same company match indicates a very strong likelihood of a duplicate.

This finding has significant business implications across financial, operational, and compliance domains.

#### Business Impact Assessment

1.

##### Financial Risk Level: High

The detection of Invoice ID 3 as a duplicate prevents a direct and substantial financial loss.

- **Prevented Loss:** The most immediate impact is the prevention of a potential double or even triple payment of ₹1,208,075.00.

Had this duplicate gone undetected and been paid, the company would have incurred a direct, material financial loss.

- **Cost of Recovery (if undetected):** If the duplicate had been paid, the company would incur significant costs associated with recovering the overpayment.

This includes administrative time for finance and legal teams, potential bank charges, and the risk of not being able to fully recover the funds, especially if the supplier is uncooperative or faces financial difficulties.

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

A payment of over ₹1.2 million represents a notable drain on cash flow.

- **Fraud Potential:** While it could be an error, repeated submission of the exact same invoice number from the same supplier raises a red flag for potential fraudulent activity.

Investigating this possibility is crucial to protect company assets.

- **Opportunity Cost:** Funds tied up in duplicate payments cannot be utilized elsewhere, leading to missed investment opportunities or increased borrowing costs.

2.

**Process Efficiency Impact:** Significant Negative (if undetected), Significant Positive (due to detection)

The presence of duplicates, if not caught by automated systems, severely impacts process

efficiency.

The current detection, however, significantly improves efficiency by preventing downstream issues.

- Negative Impact (if undetected):

- \* Wasted Resources: Manual processing of duplicate invoices (data entry, routing for approvals, payment initiation) consumes valuable time and resources from Accounts Payable (AP) and finance teams.

- \* Rework and Reconciliation: If paid, significant effort would be required to reconcile accounts, reverse entries, and manage the recovery process, leading to

## ***AI Final Analysis:***

Executive Summary: High-Confidence Duplicate Invoice Detected

Analysis confirms with 95% confidence that Invoice ID 3 (SBD/25-26/197 from ISKO ENGINEERING PVT LTD for ■1,208,075.00) is a high-confidence duplicate.

It precisely matches two previously processed invoices from the same supplier, indicating the same invoice has been submitted three times.

Concise Explanation for Business Users:

We've identified a critical duplicate invoice (Invoice ID 3) for over ■1.2 million from ISKO ENGINEERING PVT LTD, which appears to be the third submission of the exact same invoice.

Our system is 95% confident this is a duplicate.

This detection prevents a significant financial loss and highlights a potential fraud risk or process inefficiency.

Confidence Assessment:

The system's confidence in this duplicate detection is 95% (High), driven by an exact match on both invoice number and supplier company ID, which is one of the strongest possible indicators of a duplicate.

Key Action Items:

- 1.

Immediately Reject Invoice ID 3: Prevent processing and potential payment of this duplicate.

- 2.

Verify Prior Payments: Cross-reference Invoice ID 1 and Invoice ID 2 with payment records to confirm if either (or both) have already been paid.

- 3.

Investigate Root Cause: Determine why the same invoice is being submitted repeatedly by ISKO ENGINEERING PVT LTD (e.g., supplier error, internal process issue, potential fraud).

- 4.

Enhance Prevention Controls: Implement additional automated or manual controls to proactively prevent similar duplicate submissions from entering the payment workflow.

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	3
Invoice Record	3
Supplier Company	1
Buyer Company	None

Processing Metadata:

- Processing Timestamp: 2025-11-08 10:52:52
- Source Filename: 1\_1762579290898.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.