

SANKYO CAM INDEXER – APPLICATION CASE STUDY

Industry / Application

- **Industry:** Industrial Automation / Machinery
- **Application:** Automatic Spraying Application
- **Operation:** 2-stop automatic indexing with dwell for spraying

Project / Case Study Title

Replacement of Existing Tsubaki Cam Indexer with Sankyo 15AD Series for Automatic Spraying Application

Client Name & Location

- **Client Name:** SMR Automotive Systems India Limited
- **Location:** Walajabad Taluk, Kancheepuram District, Tamil Nadu.

Challenge / Problem

- The customer required replacement of the existing Tsubaki RI 152F cam indexer with a suitable Sankyo cam indexer.
- The new indexer had to match the existing indexer height and mounting arrangement to minimize modifications to the existing machine.
- The application required to-and-fro (forward and reverse) rotational movement between two stations instead of continuous unidirectional indexing.
- Due to the spraying application and potentially hazardous operating environment, an ATEX-certified motor was required to meet the required safety and explosion-protection requirements.

Solution Provided

A **Sankyo 15AD Series cam indexer** was selected as a replacement for the existing Tsubaki cam indexer.

The solution was designed to match the existing machine arrangement and included:

- Height-matched Sankyo cam indexer
- Base plate
- Motor support
- Timing cam
- Sensor mounting plates
- ATEX-certified motor

The complete arrangement was designed to support the required **2-stop forward and reverse indexing operation with dwell for spraying**.

Products / Equipment Supplied

- **Sankyo Cam Indexer:** 15AD-02338R-S3VW1
- **Motor:** ATEX-certified motor
- **Motor Power:** 0.2 kW
- **Base Plate**
- **Motor Support**
- **Timing Cam**
- **Sensor Mounting Plates**

Key Results / Performance Improvements

- Successfully replaced the existing **Tsubaki RI 152F cam indexer** with a Sankyo 15AD Series indexer.
- Achieved compatibility with the existing machine arrangement through **height matching and customized mechanical supports**.
- Enabled the required **2-stop forward/reverse indexing operation** for the spraying process.
- Provided an **ATEX-certified motor solution** suitable for the application environment.
- Reduced the need for major modifications to the existing machine structure.

Technical Specifications

Parameter	Specification
Cam Indexer Model	15AD-02338R-S3VW1
Number of Stops	2 Stops
Motor Power	0.2 kW
Reduction Ratio	i = 120–160
Input Speed	11 RPM
Expected Life	30,15,109 hours*
Motor Type	ATEX Certified
Existing Indexer	Tsubaki RI 152F
Replacement Indexer	Sankyo 15AD Series

* Expected life to be verified against the original Sankyo selection/calculation sheet before final publication.

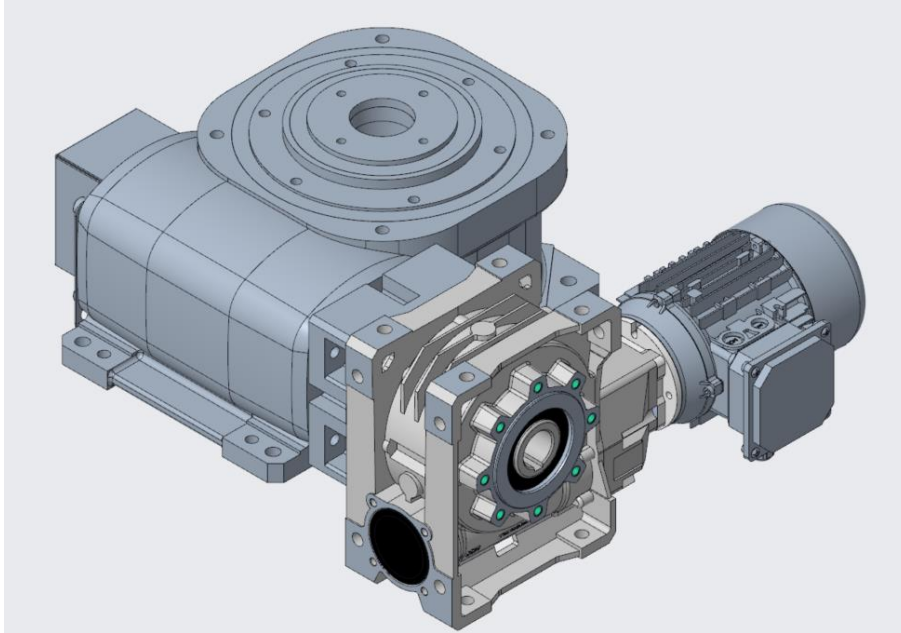
Relevant Project Images

The following images can be included:

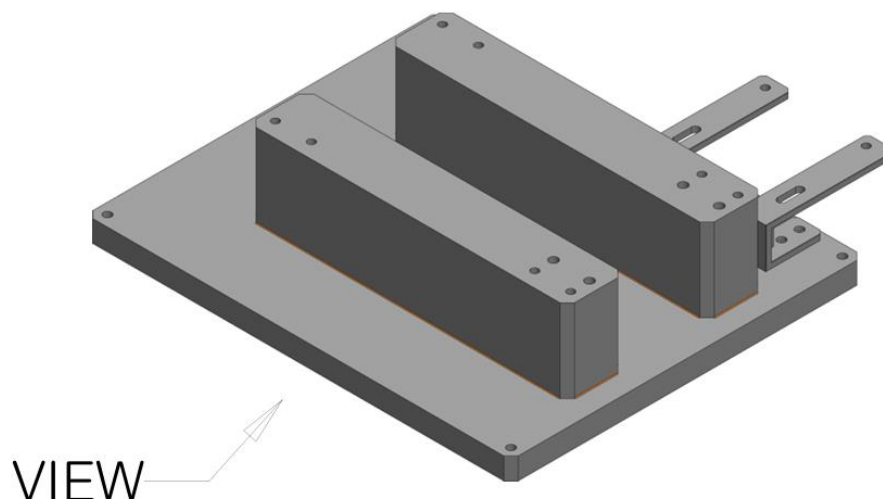
1. **Base plate, motor support**
2. **Existing Tsubaki RI 152F Cam Indexer**
3. **Sankyo 15AD Series Cam Indexer after replacement**

1. Base plate, motor support and indexer flange arrangement

- Sankyo 15AD Series + ATEX Gear Motor Mounting



- Base plate



2. Existing Tsubaki RI 152F Cam Indexer:



TSUBAKI RI 152F CAM INDEXER

3.Sankyo 15AD Series Cam Indexer after replacement:



SANKYO 15AD Series Cam Indexer with ATEX Gearmotor, Base Plate, and Supporting Accessories

Customer Testimonial

Not available .