



**HEXAGON**  
PPM



**PETROCHEMICALS CASE STUDY**

# Showa Denko Oita Complex

## The Objectives

- Digitized business operations
- Technology transfer to younger staff
- Robust stable operations

## The Benefits

- Visibility of information
- Workflows for human processes
- Efficient and reliable Shift Handover
- Knowledge repository
- Continuous adaptation and extension of j5 Operations Management Software

The Showa Denko Oita Complex is the main manufacturing base of their petrochemicals division and is equipped with a naphtha cracker.

The Showa Denko Oita Complex has a well-balanced demand structure and the basic materials manufactured are supplied to the producers of plastics, synthetic rubber and styrene monomers.

These customer plants are operated by other companies within the premises, as well as the acetyl derivatives plant operated by Showa Denko itself.

## The Problem

The degradation of experience and knowledge due to rapid generation change was attracting the following problems:

- Operations management methods and levels were different in each department, and best practices were not shared
- It took time to prepare and transcribe paper-based orders, activating the creation of these orders was difficult
- Leakage / missing data has occurred in the Shift Handover and Work Instructions processes, which is a concern for stable operations



## How j5 International Provided the Solution

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j5 International has implemented the following solutions at Showa Denko Oita Complex since 2017:

- **j5 Operations Logbook**
- **j5 Shift Handover**
- **j5 Work Instructions**
- **j5 Standing Orders**
- **IndustraForm® Templates**

j5 Shift Handover produces reports for operators, boardmen and supervisors with relevant data, events and instructions for each unit and area of the refinery. It ensures a consistent, visible and accountable process.

j5 Work Instructions enables planners to schedule ad hoc and recurring tasks for operations team members. Tasks are marked off as complete and summarised in the j5 Shift Handover reports.

j5 Standing Orders allows for the controlled dissemination of important communications within the plant.



### Customer Quote

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*"We were fascinated by the ease of use of the j5 Operations Logbook.*

*We introduced j5 Operations Management Software to maintain and improve the on-site capabilities and to upgrade the work processes.*

*We think that this is a communications tool that can be utilized not only for the operations management at a production site but also for field management in general."*

**Production Engineering**

Showa Denko Oita Complex

## Benefits of j5 to Showa Denko Oita Complex

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A common Operations Management System has been established for each department, enabling standardization across the Showa Denko Oita Complex.

Improvement in work efficiency was realized, and a significant reduction in business hours was achieved.

By utilizing electronic information, Showa Denko Oita Complex have succeeded in enhancing operator skills and supporting technology inheritance.

Reduction of leakage / missing data by using j5 Shift Handover and j5 Work Instructions has enabled a more robust stable operation.

Finally, j5 Operations Management Software provides an advanced business operations and technology transfer to young staff.



**Contact j5 International for more information**

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