

## Coordinated final inspection of process plants

### Introduction

[Information within brackets in this document refers to local regulations]

This document provides directives for coordinated final inspection and commissioning of process plants.

Coordination shall take place between process, mechanical, piping, electrical, instrument/control and industrial safety personnel.

The purpose of final inspection is to facilitate the commissioning of a production unit and to safeguard its continuous operation by eliminating problems due to mechanical, electrical or instrument engineering shortcomings. Final inspection is carried out after completion of erection and immediately prior to commissioning.

In modern process plants, automation and supervisory functions are becoming increasingly complex. Very strict demands are therefore made that the various persons involved should carry out the final inspection and commissioning work in a methodical and qualified manner, and that this work should be documented.

Successful commissioning presupposes that the documentation on which electrical and instrumentation project design are based, such as process flow diagrams, interlock diagrams, machine lists, operating instructions and operating descriptions, have been thoroughly reviewed and examined. Faults that occur during final inspection or commissioning due to incorrect basic documentation cause unpredictable delays and are often also costly.

SSG 4850E gives detailed instructions for final inspection and commissioning of electrical and control systems.

SSG 5280E gives instructions for "Factory Acceptance Testing (FAT) of control systems". SSG 4700E gives instruction for technical specification for electrical equipment included in machinery and mechanical equipment

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