

MECHANICAL AND ENERGY DIVISION

DESIGN AND MANUFACTURING OF CHEMICAL INJECTION SKIDS

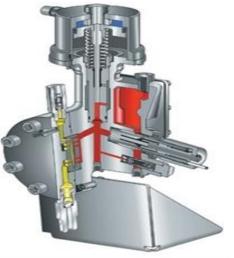




MAIN CONTENTS

- Purpose of the chemical injection system
- Main components of the chemical injection system
- Design of the chemical injection system

• Fabrication of the chemical injection system







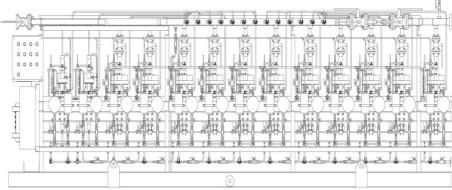


1. PURPOSE OF THE CHEMICAL INJECTION SYSTEM

The chemical injection system ensures the transfer and treatment of various chemicals required during oil and gas production, processing, and transportation:

- •Chemical transfer: transporting additives, stabilizers, and other chemicals required in oil and gas production and treatment.
- •Support for production and processing: chemicals are injected into production and treatment processes to adjust and improve the properties of oil, gas, and related products (e.g. cleaning, viscosity reduction, chemical property adjustment).
- •Maintenance and servicing: supplying chemicals to pipeline and oil & gas equipment systems, such as scale and rust removers, and corrosion inhibitors.



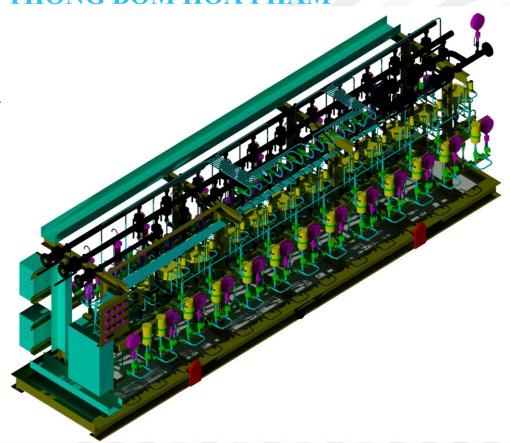


Trách nhiêm



1. MỤC ĐÍCH CỦA HỆ THỐNG BƠM HÓA PHẨM

- Some chemical injection skids currently used in Vietsovpetro's oil & gas facilities:
 - Pour Point Depressant Injection Skid (PPD Skid):
 - Demulsifier Injection Skid (DI Skid) :
 - Corrosion Inhibitor Injection
 Skid (CI Skid)
 - Methanol Injection Skid (MI Skid)





2. MAIN COMPONENTS OF THE CHEMICAL INJECTION SYSTEM

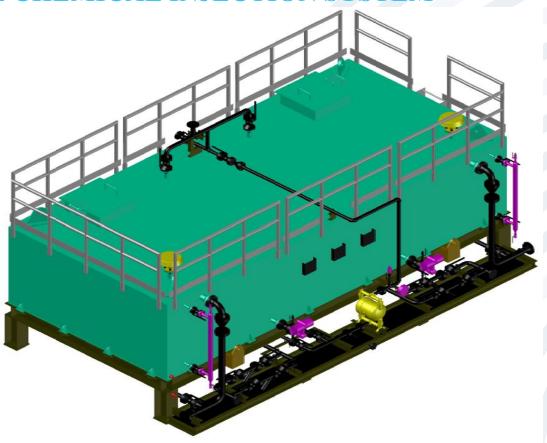
- Main components of the chemical injection system
- Chemical storage tanks
- Chemical injection pumps
- Piping system
- Electrical and control system
- Safety system





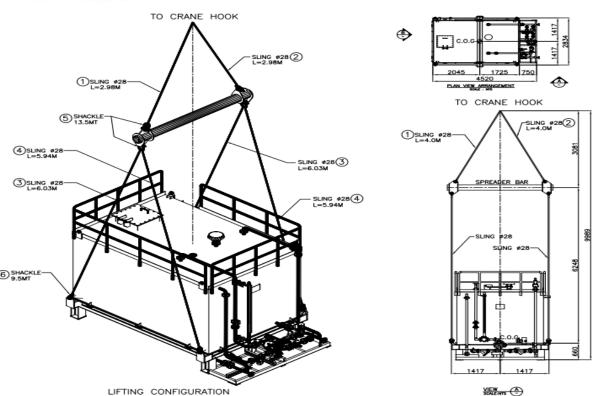
3. DESIGN OF THE CHEMICAL INJECTION SYSTEM

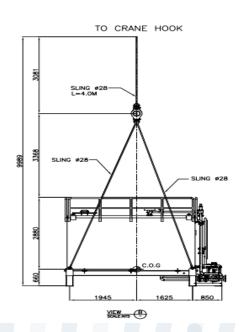
- Design of the chemical injection system
 - Storage tank calculation
 - Circulation system calculation
 - Structural design calculation
 - Electrical and automation design calculation
 - Piping size calculation
 - Calculation and solution for lifting/handling





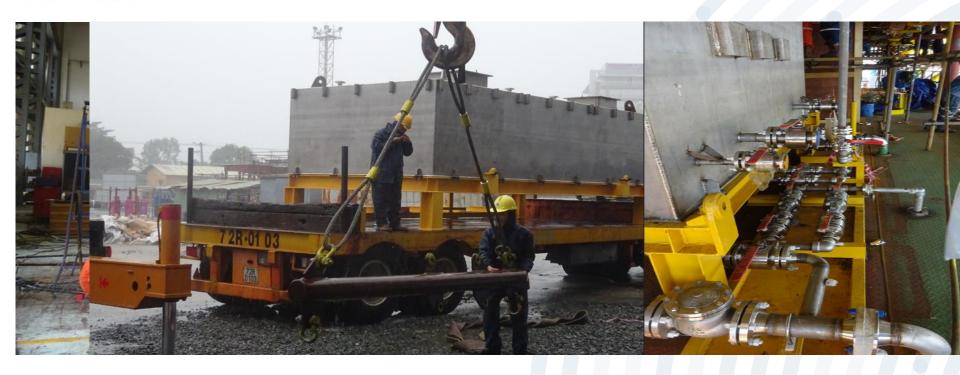
3. DESIGN OF THE CHEMICAL INJECTION SYSTEM







4. FABRICATION OF THE CHEMICAL INJECTION SYSTEM





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4.1 QUALITY CONTROL DURING FABRICATION

- Control of input materials and spare parts:
 - Follow material delivery procedure number: QT-VT-006
- Quality control during construction and assembly:
 - ☐ Perform system CL check according to procedure: MED-BK22-CIS-PRO-06- FAT PROCEDURE
- Weld Control:
 - ✓ According to the procedure: MED-BKXX-CIS-PRO-03_A-NDT Procedure
 - ✓ Welding joints comply with the welding map: BKXX-ISOMETRIC_ SK0701-PI04-01-WM, BKXX-SKID SK0701- WM
 - ✓ Anti-corrosion quality control Painting according to process: MED-BKXX-CIS-PRO-02-PAINTING



4.2 Measures to control construction and product completion to ensure product quality and industrial aesthetics

- Comply with procedures to ensure product quality
- Regularly check, monitor, ensure full implementation of FAT steps.
- Construction unit, QA, QC, Inspection closely coordinate throughout the design process, material procurement, construction, commissioning and putting into operation to ensure compliance with technical requirements





Thank You For Your Attention!

Any Questions

