

Gas Dehydration

General Objectives:

The aim of this subject is to provide participants with supporting knowledge on gas dehydration methods used in the oil & gas installations. The contents will cover the capacity of natural gas to hold water, the problems which result from the presence of water in gas, the main methods used to reduce the water content of natural gas and regeneration.

Specific Objectives:

At the end of training the trainees will be able to:

- ✓ Quantify the amount of water in saturated natural gas under given conditions;
- ✓ List the problems associated with water in gas;
- ✓ Define the conditions that contribute toward hydrate formation;
- ✓ Define Adsorption and Absorption;
- ✓ Detail a simple two-tower desiccant dehydration process;
- ✓ Describe a basic glycol dehydration plant;
- ✓ List and explain the operational variables in the glycol dehydration process.

Audience:

Foremen and operators from the technical and process department who want to improve knowledge in this area.

Workload: 40 hours

CONTENTS:

Module I – Water in natural gas

Module II – Solid desiccant dehydration (mole sieve plant)

Module III – Liquid Desiccant dehydration (TEG plant)