Hydrogen production plants – hydrogen generation and purification

Mahler AGS offers hydrogen generation systems using a variety of feedstocks such as natural gas, LPG, naphtha, methanol or hydrogen rich gases from several sources.

Mahler AGS has more than 60 years experience and know-how in designing and manufacturing hydrogen generation and purification plants. As one of the internationally leading suppliers of steam reforming and pressure swing adsorption technology, Mahler AGS provides proven and reliable systems which are exactly tailored to the customer’s requirements and can be easily integrated into already existing processes.

Hydrogen is an important utility for numerous applications in multiple industries. Users in a wide range of industries can benefit from operating a cost-effective Mahler AGS hydrogen plant and reduce their production costs significantly.

Applications for hydrogen plants

- Metallurgical and steel industry
- Petrochemical and refining industry
- Glass and float glass manufacturing
- Chemical and pharmaceutical industry
- Production of H2O2
- Food industry
- Electronics industry
- Technical gases

For customers with access to natural gas, LPG or naphtha on-site Hydrogen can be generated most economically using Mahler AGS hydrogen plants based on steam reforming. Mahler AGS offers plants up to 10,000 Nm³/h at purities up to 99.9999 vol.-%.

Methanol cracking is the alternative hydrogen production method at sites with limited access to hydrocarbons (e.g. natural gas). Mahler AGS hydrogen plants based on methanol reforming process meet hydrogen requirements up to 5,000 Nm³/h at purities up to 99.9999 vol.-%.

For the recovery of pure hydrogen from hydrogen rich gas resp. off-gas Mahler AGS can provide hydrogen purification system. These systems are based on pressure swing adsorption (PSA) technology using multiple beds to recover up to 50,000 Nm³/h pure hydrogen at purities up to 99.9999 vol.-%.