EPC Group is a specialist in process engineering and industrial plant construction with a successful track record of having completed over 1,000 projects in more than 40 countries.

EPC is offering its CHDM Hydrogenation Technology for the production of high-quality PETG, PCT, PCTG, PCTA.

Our Technology for Turnkey CHDM Hydrogenation Plants

EPC Group is certifying its CHDM Hydrogenation Technology for the production of high-quality CHDM. This highly efficient and flexible continuous hydrogenation process ensures the economically feasible production of CHDM.
CHDM- Hydrogenation Plants
Combination of Flexible Plant Design and Formulation Know-how

CHDM is used as a co-monomer for the production of various polymers e.g. PETG, PCT, PCTG and PCTA.

As a comonomer in polyester production it enhances:

- The reactivity in polyester compounds
- The hydrolytic stability, plasticity
- Gloss, transparency and the processability of polyester

Added as a comonomer for the production of glycol-modified PET (PETG), the polymer offers:

- Excellent melt strength
- Easy processing combined with optimal mechanical properties
- Inability to develop crystalline haze — high transparency
- No yellowing in molding due to high thermal stability
- Superior chemical resistance

The intermediate DMCD (Dimethyl 1,4-Cyclohexanedicarboxylate) can also be sold on the market.

Additionally it enhances thermal stability, corrosion resistance of the resin in chemical intermediates, polyester resins for coatings and unsaturated polyester applications.

EPC’s engineering work provides the most efficient concept that integrates:

- High production flexibility
- Consistent product quality at the highest level
- Capacity range from 50 % to 100 % of rated capacity ensures high flexibility for the market
- Optimized catalyst system
- Compact plant design including high automation grade
- Efficient energy and material consumption
- Independent cooling systems for accurate control of reaction temperature
- Environmentally friendly design, compliant with current and future EU standards

Advantages of EPC’s CHDM Hydrogenation Technology:

- High quality CHDM guaranteed
- Optimal cis/trans ratio isomers
- Recycling of process methanol available
- Low cooling water consumption
- Reduced process conditions compared to existing technologies
- Optimized ratio of CHDM / Catalyst
- High efficiency in energy consumption
- Easily available base catalyst
- Sophisticated process control
- No restrictive license terms

CHDM in the Production of PETG:

Services offered by EPC for CHDM Hydrogenation Technology:

- Technology Licensing
- Extended Basic Engineering
- Key Equipment Delivery
- Supervision of Installation
- Supervision of Commissioning & Start-Up
- Recipe Development & Product Optimization