

KATALCO PERFORMANCE Gas heated reforming (GHR)

A Johnson Matthey (JM) GHR post reformer retrofit can be an effective way to:

- Increase plant capacity without needing to fire extra fuel in the primary reformer and without overloading downstream waste heat boilers
- Increase operational flexibility
- Improve energy efficiency
- Reduce emissions
- Reduce pressure drop

In the majority of cases, a JM GHR post reformer retrofit can be installed:

- Without adding extra coils to the primary reformer flue gas duct
- Without modifying the primary reformer itself
- Without replacing the existing secondary reformer
- Without needing a new fired heater
- Whilst the plant is in operation – with final break-ins during a short plant outage

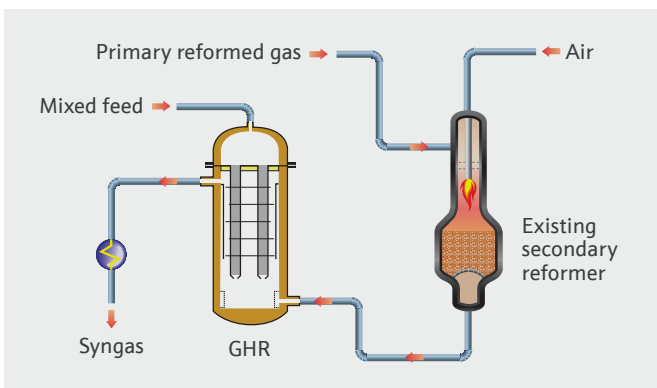


Figure 1: Flowsheet with GHR retrofit

This is achieved by using the energy from the process gas downstream of the secondary reformer to drive steam reforming reactions rather than using it to raise and/or superheat steam.

JM will work with you to develop a plant specific assessment of the benefits arising from the installation of a GHR post reformer on plant. This will consist of:

- A base case model of your plant
- The projected performance of your plant when retrofitted with a GHR
- The identification of constraints elsewhere within the plant
- A range of options for project delivery

Please contact Johnson Matthey to find out more about GHR retrofits