

CASE STUDY

Air Liquide – Dismantle of Air Separation Unit (ASU)

Plant and Rebuild of Plant at new site.



OVERVIEW

Air Liquide deliver gas solutions to a wide range of industries including metal fabrication, automotive, chemical, pharmaceutical, food, beverage and the offshore oil and gas industry. Air Liquide in the UK is represented in the energy transition sector with biomethane and hydrogen projects. The Air Separation Unit (ASU) plant initially situated at Eggborough uses a series of heat exchangers to cool atmospheric air at extremely low (around -185°) temperatures. This produces a number of liquified gases which are separated, drawn off and stored in separate storage vessels where they are then pumped into road tankers and distributed to customers.



AIMS AND OBJECTIVES

To manage the safe and precise dismantle of the plant at the Eggborough site, load in preparation for transportation to the new location at Coleshill, Birmingham and then carry out the rebuild of the plant to its original state at the new site.

WHAT WE DID

Hargreaves provided a dedicated site team to manage the dismantle of the following items of plant at the Air Liquide Eggborough site: –

- Rectification tower (50.7m in height)
- Cooling tower
- Water separator

- Refrigeration unit
- Air compressor and filter
- Storage tanks
- Water pump and water filtering and treatment area
- Water separator and catalyst reactor

Hargreaves facilitated the process of identifying all critical pipework and ensuring that it was purged with nitrogen and suitably blanked to prevent ingress of water and corrosion prior to shipping. Acting as Principle Contractor under CDM Regulations, Hargreaves had responsibility to manage the following elements: –

- Safety management of the work area
- Interface with other contractors III
- Produce a construction phase safety plan and quality plan
- Implement document control

Having gained an understanding of the plant during the dismantle period this enabled us to transfer our knowledge to effectively managing the rebuild at the new site.



LIFT OF RECTIFICATION TOWER IN PREPARATION FOR LOADING READY FOR TRANSPORTATION TO COLESHILL

OUTCOME

Hargreaves successfully carried out the safe and efficient dismantle and rebuild of the ASU plant working collaboratively with both the Client and a number of key contractors to deliver the project in line with the agreed programme. Where pipework, structural steelwork or a platform was out of tolerance due to new civil asset location, HIS used their considerable mechanical experience and knowledge to present suitable solutions whilst maintaining a time critical programme.