

The Benefits of Off-Site Manufacture (OSM)

The Problem / Challenge

As part of an environmental project to recover and reuse solvents a new tower was required to house the distillation columns, re-boilers, pipe work, flooring levels and associated control systems. During the pre-sanction phase of the project whilst considering various process solutions the project team were also considering how to design out major construction risks in line with CDM requirements. The tower was estimated at 20m high X 4.5m². A traditional site build would have required significant working at height to install steelwork, permanent flooring, temporary platforms, guard rails and equipment installation within the tower.

The Risks

In line with the decision tree within the Working at Height Regulations 2005 (WAH) the team were looking to eliminate working at height where feasible and chose OSM to significantly reduce this hazard by building the complete structure including mechanical equipment, flooring, guard rails, pipe work and control systems before lifting into place as a complete unit.



Module Being Delivered



Module Being Erected

The Solution

The unit was built on its side in a fabrication shop facilitating appropriate lighting, weather protection, fixed overhead cranes for lifting and easy MEWP access.

This modular construction also delivered a reduction in timescales with all components being manufactured in parallel before being installed with no delays due to weather or lighting conditions.

The Benefits

- Minimal time working at height.
- Reduced overall site time.
- No weather delays.
- Safer Construction.



Module During Assembly

For Further Information Contact Martin Edwards (AstraZeneca) Tel 01179 385 626