C3 Stabilisation Project
The C3 stabilisation project was tasked with the construction of a propylene feed stabilisation facility.

This included the fabrication and installation of six of the largest pressure vessels ever fabricated in South Africa, consisting of one de-propaniser drum and five propylene storage bullets. The five bullets measure approximately 60 metres in length and six metres in diameter, weighing in at a hefty 500 tons.
The C3 stabilisation project will stabilise the C3 valve chain at the Sasol Secunda plant by de-linking the extremely tight integration between the upstream synthol reactors, propylene extraction units and the downstream chemical plants with the appropriate buffer and storage facilities.

This involved the construction of new process structures, equipment, vessels and piping on the site, new off-plot pipe racks, piping to the new buffer storage facilities and tie-ins at the existing plant.
The main objective of the project was two-fold: To increase the extraction of propylene and increase the availability of propylene feed for beneficiation in the downstream units.

With this new capacity, Sasol aims to reach 85% extraction and monetise an additional 58 000 tons per annum propylene.
Safety

- Total Hours Worked: 2,078,440.

- Total RC Free Hours: 1,130,740.

- Manpower Peak: 1,001 people on site.

- RCR: 0.19.
Overall Progress

» TCCC (Total Care Custody and Control): 7 April 2014.

» Ready for Commissioning (RFC): 30 May 2014.


» Beneficial Operation (BO): 27 June 2014 (Board Commitment: 30 June 2014).
The project made history on a number of fronts. The team installed five of the largest pressurised vessels ever constructed on South African soil and the foam glass fire proofing on the bullets has never been applied on this scale before.
Group Technology Project of the Year 2014

C3 Stabilisation Project

better together ... we deliver