

# Lift of 450 Tonnes Cold Box, Gresik Air Separation Unit, Indonesia.

Engineering Designers: BOC Process Plant

Client: P T Gresik Gases



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The lift arrangement comprised of a pair of 36 metre high triangular format Towerlift supports. An L300 jack was mounted on a cantilever beam at the top of each tower, with the tie-back forces provided by an L50 jack for each beam. The L300 jack cables were then attached to the lifting trunnions by the use of fabricated link plates.

Using an L2/70D power pack, the 30 metre lift from horizontal to vertical took less than two hours, with tailing provided by an American 11320 crawler crane. The final task was to lower the Cold Box onto the foundations, and to plumb it using our Flat Jacks.

**Below:** Detail of tower base and L2/70D power pack.



Fagioli PSC were awarded the contract to lift a 65 metre long Cold Box weighing 450 tonnes, and a 25 meter long Heat Exchanger Box weighing 180 tonnes, during the construction of an Air Separation Unit to supply oxygen to the Copper Smelting Plant being built at Gresik, near Surabaya. The first stage of the contract was to lift this 450 tonne Cold Box.

The low centre of gravity of the Cold Box meant that the lifting trunnions were at the 30 metre level. The Towerlift system was engineered by Fagioli PSC to allow a completely un-guyed system.