



## Case Study

### 90mm Poly pipe fitting saves submersible pump

Golconda Management's Sand Queen Gold Mine is situated 100km north of Kalgoorlie.

During normal pumping operations at the mine, the submersible pump support rope became frayed and snapped, causing the pump to move. It then became wedged in the PVC casing at the bottom of the bore.

At the time of the incident, the mine was using a Grundfos SP 16-8 submersible pump in a 42 metre bore hole. The bore casing was 150mm class 9 uPVC pipe and the pump discharge was a 90mm class 6 polyethylene pipe. The pump was connected to the poly pipe with a 90-2 1/2" PLASSON polypropylene compression fitting for metric polyethylene pipe.

Attempts to retrieve the support rope failed and it was decided it was necessary to sacrifice the pump by pulling the poly discharge, breaking either the poly pipe or the PLASSON threaded connection to the pump.



A fork lift capable of 2.5 tonnes lifted the poly pipe and pulled the pump, discharge line and bore casing from the bore hole. The poly pipe necked severely from 90 to 25mm but didn't break.

**The PLASSON fitting held to both the pump and the pipe, saving the pump to pump another day! To replace the pump would have cost Golconda approximately \$10,000.**

#### **Setting a high standard**

PLASSON fittings far exceed the rigorous requirements of Australian Standard AS4129 which covers, amongst other things, pull out loads and pressure testing equivalent to 50 year life.

#### **Proven in extreme conditions across Australia**

PLASSON fittings are made from black food grade polypropylene containing 2.5% carbon black. They are highly chemical resistant and suitable for continuous outdoor use in snow or deserts; PLASSON fittings work effectively in daily temperatures ranging from -5°C to 60°C throughout Australia.

#### **Easy conversion from rural to metric**

PLASSON insert fittings for rural poly pipe can be readily converted to metric compression OD with a convenient conversion kit. Series fittings which do not require inserts and are capable of pressures up to 16Mpa (217 psi).

#### **The PLASSON range**

A complete range of fittings to suit both ID. and OD. series polyethylene pipes. Includes joiners, elbows, tees, reducers, flange adaptors, B.S.P. end connectors and a range of black polypropylene valves and tapping saddles. Insert fittings are available from 1/2" to 2" while the metric compression range is available from 16mm to 160mm.

**Plasson electrofusion fittings are also available for this application and are suitable in some sizes for operating pressures up to 2.0 Mpa. Talk to your local Plasson representative for details.**

**For sales information please contact Vinidex on 13 11 69 or visit their website, [www.vinidex.com.au](http://www.vinidex.com.au)**

**For technical advice, visit [www.plasson.com.au](http://www.plasson.com.au) or call 02 9550 2291**

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