

## SA HIPPO FLAMEPROOF SUBMERSIBLE SLURRY PUMP GOES TO HOUSTON.

TARGA RESOURCES, with its headquarters in Houston, Texas, is a leading provider of midstream services in North America and is primarily engaged in the business of gathering, compressing, treating, processing gas, crude oil and the selling of refined petroleum products.

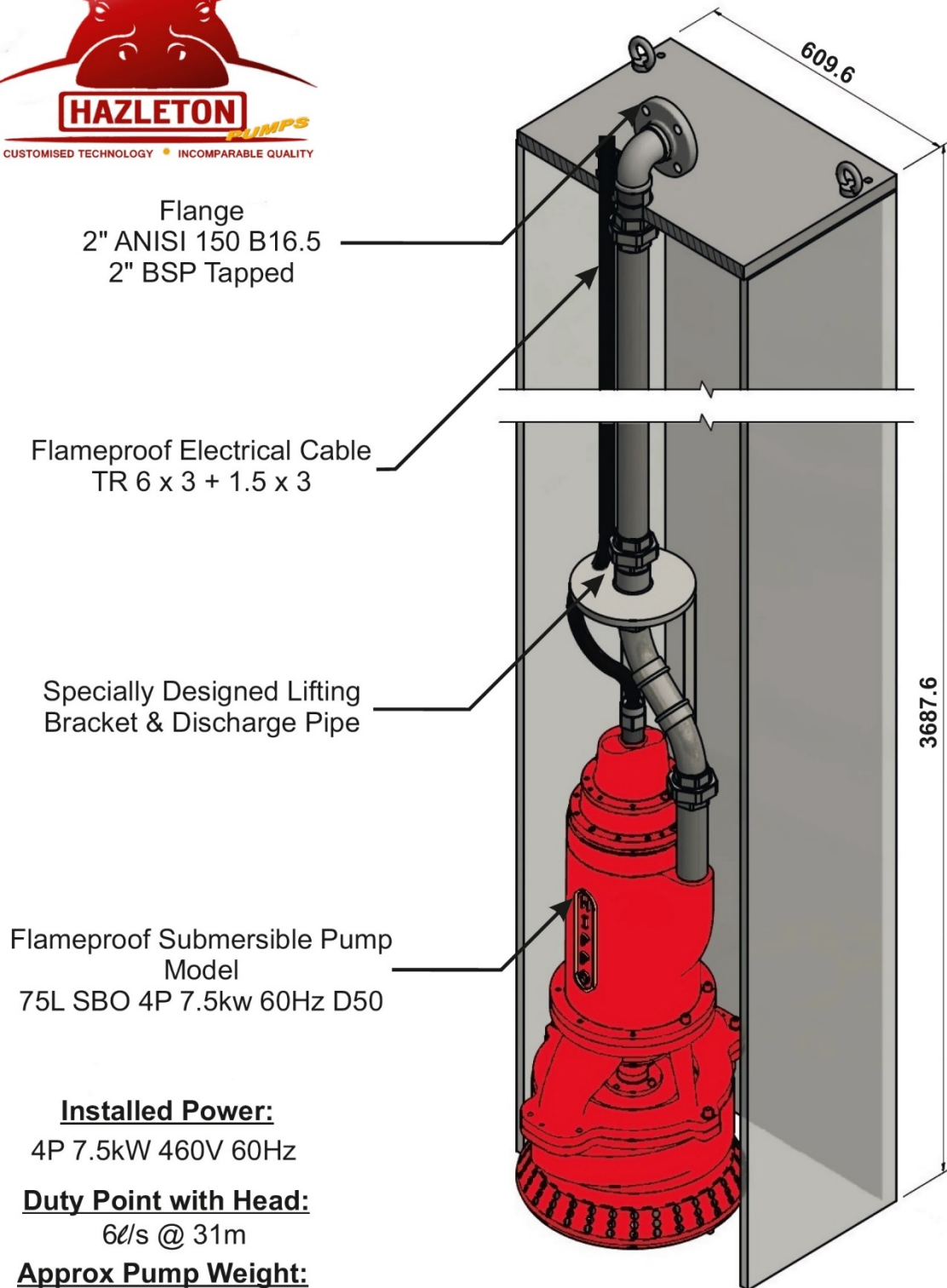
At the TARGA RESOURCES' refineries the maintenance cost of the long shaft vertical spindle pumps, used to pump the drainage from the refinery, was unacceptably high. On investigation it was found that due to the regular failure of the intermediate shaft bearings used on the long shaft vertical spindle pumps - with a shaft length of 3,8 meters - the use of these vertical spindle pumps was not an economical option.

TARGA RESOURCES therefore decided to replace the long shaft vertical and various options were considered including the possibility of using a submersible slurry pump. The challenge, however, was that these pumps were operating in an explosive environment and the submersible pumps would need to comply with the IEC 60097/1: 2005 Flameproof specifications.

HAZLETON PUMPS was approached to supply a suitable Flameproof Submersible Slurry Pump to accommodate a duty of 6 litres per second at a head of 31 meters with an installed power not exceeding of 7,5kW using a 60 Hz power supply. The new pump system had to be able to use the existing overhead lifting system which was installed to facilitate the often replacement of the long shaft vertical spindle pumps.

Since a pump with the specific duty according to the above-mentioned specifications was not already part of the existing HIPPO Flameproof Slurry Submersible pump range HAZLETON PUMPS, therefore, designed a flameproof submersible slurry pump specifically to the client's specifications.

# Flameproof Hippo Submersible Slurry Pump



## Installed Power:

4P 7.5kW 460V 60Hz

## Duty Point with Head:

6ℓ/s @ 31m

## Approx Pump Weight:

300 Kg.



**Marius Sunkel and Frans Nkonyane flanking the 75L SBO HIPPO Bottom Suction  
Flameproof Submersible Slurry Pump**



**The 75L SBO HIPPO Bottom Suction Flameproof Submersible Slurry Pump crated ready to be exported to Houston, Texas in the USA.**

The quotation was forwarded to the client on 13 October 2016 and the order received on 2 March 2017. The design and manufacture of the pump was completed within a record period of 6 weeks due to the urgency of the client's requirements and the pump was dispatched on 20 April 2017 arriving in Houston on 26 May 2017. The pump was installed immediately upon delivery and the feedback received from the refinery is that the HIPPO Flameproof

Submersible Slurry pump is performing to specification and to their satisfaction.

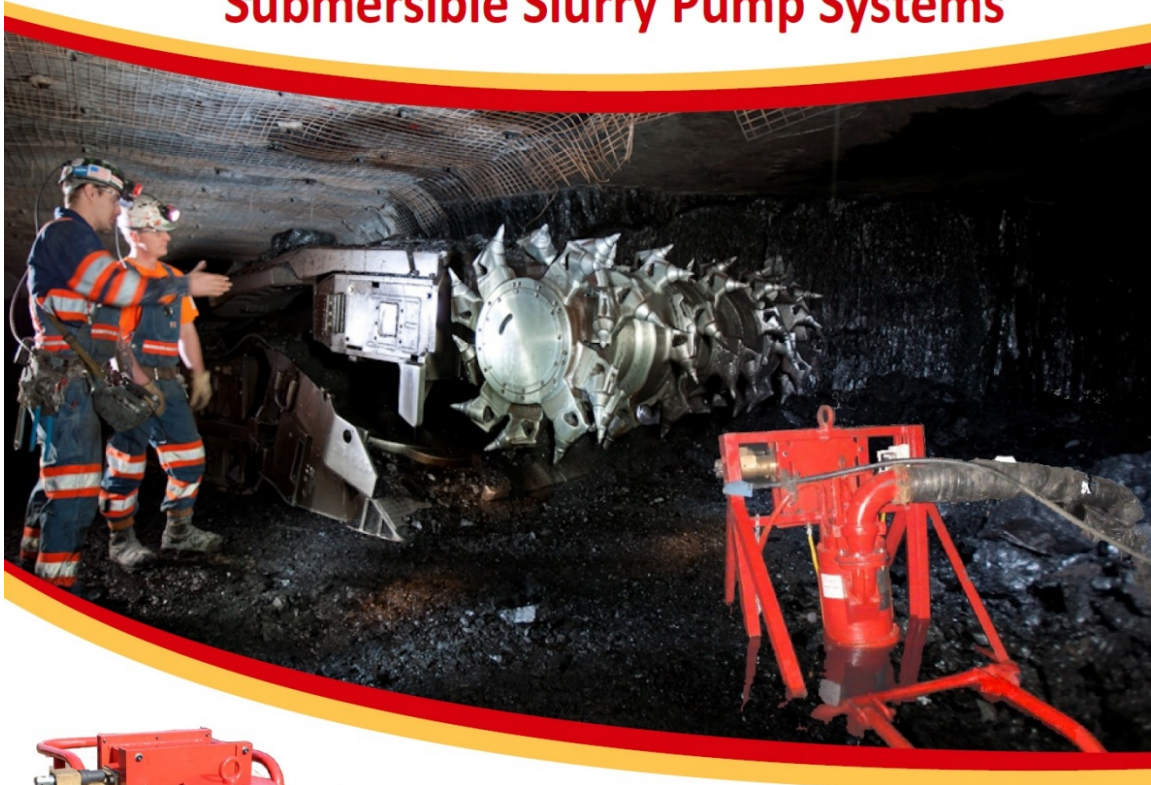
With the increase in the international demand for coal and in particular in the USA, HAZLETON PUMPS have received a large number of enquiries for the HIPPO Flameproof submersible pump system.



# Hippo

## Flameproof

### Submersible Slurry Pump Systems



**60 Hz Power Supply**

**Overcoming the transport obstacles  
of Pumping Liquids out of Confined  
Underground Flameproof Areas**

The HIPPO Flameproof System consists of a robust heavy duty Submersible Pump, protected with flameproof switchgear and mounted on either a rugged Skid or a Trolley to be moved around when it is required to quickly and efficiently remove excess liquids containing solids in underground mining areas.

In order to move the HIPPO Flameproof Submersible Slurry pump effectively around underground a Flameproof Submersible Pump System was developed. This system consists of a HIPPO Flameproof Submersible Slurry pump mounted

on a skip that can be moved around with a tractor to reach the various places where nuisance liquid is present that needs be removed.



The skid mounted HIPPO Flameproof Submersible Slurry Pump System

In areas where a tractor cannot be utilised to move the skid mounted HIPPO Flameproof Submersible Slurry pump system a trolley mounted Flameproof Submersible Slurry pump system could be provided which can be moved around by hand.

Due to the major increase in volume of liquids that have to be pumped from underground in coal mines directly to surface HAZLETON PUMPS has successfully designed and manufactured the world's first High-Volume; High-Head; Medium/High Voltage Flameproof Submersible Slurry Pump. This pump has specialized protective features to ensure that the stator winding would never burn out due to overheating or the failure of the mechanical seals.



HIPPO Flameproof Submersible Pump range control panel

HAZLETON PUMPS is expecting the demand for underground coal mining equipment as well as for coal mining processing equipment to be more than double over the next year.