



IPU Starting Case Study

Underground Mining

Hydraulic Start Packages –

APPLICATION: Underground Mine
LOCATION: Worldwide
ENGINE: Various

SOLUTION:

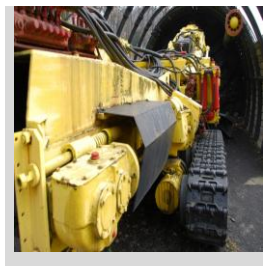
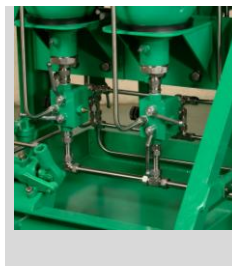
In most parts of the world, underground “fiery” mines have long prohibited the use of any aluminium components because of the potential for thermite reactions. All IPU hydraulic start systems are completely aluminium free; made from cast iron.

Thermite is a pyrotechnic composition of a metal powder and a metal oxide that produces an exothermic oxidation-reduction reaction known as a thermite reaction. Aluminium, when in contact with “rusty steel”, can under some conditions produce a burst of extremely high temperature, which although not explosive, can ignite any flammable gases in the mines such as methane.

Many underground vehicles, for example the free steer vehicles and bucket loaders, lend themselves easily to hydraulic starting systems as the vehicles will be hydraulically powered and will allow simple integration of a hydraulic start system as most of the necessary components are already in place. Using the hydraulic start system from IPU guarantees an aluminium and spark free (non-electric) start system; simple and easy to maintain alongside other existing hydraulic systems.

The benefits of a hydraulic start system in this environment also extend far beyond safety and legislation; the life expectancy of a hydraulic system in comparison with an electric system is remarkable and in itself, cause for a change.

For more information contact a member of our Starting Sales Team on +44 (0) 121 511 0400



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