**MIG 107 Strip and Re-build of an Air Operated Double Diaphragm Pump**

You will find it useful to read the manual on ‘Moodle’ for the Blagdon B15 and X15 pumps.

Take photos of the different stages of disassembly through to reassembly and testing

Make a note of any spare parts you think you may need (think about parts which may wear out).

What PPE did you require for this task?

What risks were there, and what action did you take prior to completing the job to mitigate them (this means to reduce the risks).

Make a list of the steps that you took to dismantle the equipment and reassemble and include an ‘exploded view’ of the pump.

Describe how a diaphragm pump works (sketches will help ).

Make a list of the benefits of a diaphragm pump and mention its limitations (why would you choose to use compressed air when it is an expensive power source?).

Describe the different types of seals in use, where they were, and how they work.

What were the moving parts, and how were they lubricated?

Define what is meant by the ‘head’ of a pump.

Copy and paste the performance curve for the B15 pump and indicate on it the air consumption that you would expect the pump to use if the air supply pressure was 4 bar, and the ‘head’ was 20m. How much fluid would the pump is pumping?

Do the same thing for an air supply of 6 bar and a head of 20m.

What governs the maximum ‘head’ of the pump?