

GRUNDORAM offers more power

When pushing steel pipes up to ND 4000 an extremely rugged machine technique is required. GRUNDORAM has been designed and constructed to work in these toughest of conditions - plus many other operational advantages.

1 **ADVANTAGE** **Casing**

The one-piece casing (head and casing are one part) is made out of a solid block of alloy steel, which offering minimum wear and tear and material fatigue. Advantage: extremely good anti-corrosion properties, long life expectancy, minimal maintenance.

2 **ADVANTAGE** **Control stud**

The control stud is held centrally in an elastic shock absorbing housing which automatically aligns itself inside the main piston. The recoils from the piston impacts are cushioned and therefore protect the Component parts from overload. The robust control stud is plated in the same way as the piston to guarantee good anti-corrosion properties.

5 **ADVANTAGE** **Piston**

Being the main moving part of the hammer, the piston is subject to incredible stress from impact power blows and Grundoram's increased stroke frequency. Therefore, it has to be particularly resilient. Due to the special heat treatment, the piston and material properties are optimised with the highest possible anti-corrosion protection together with the combined strength and durability.

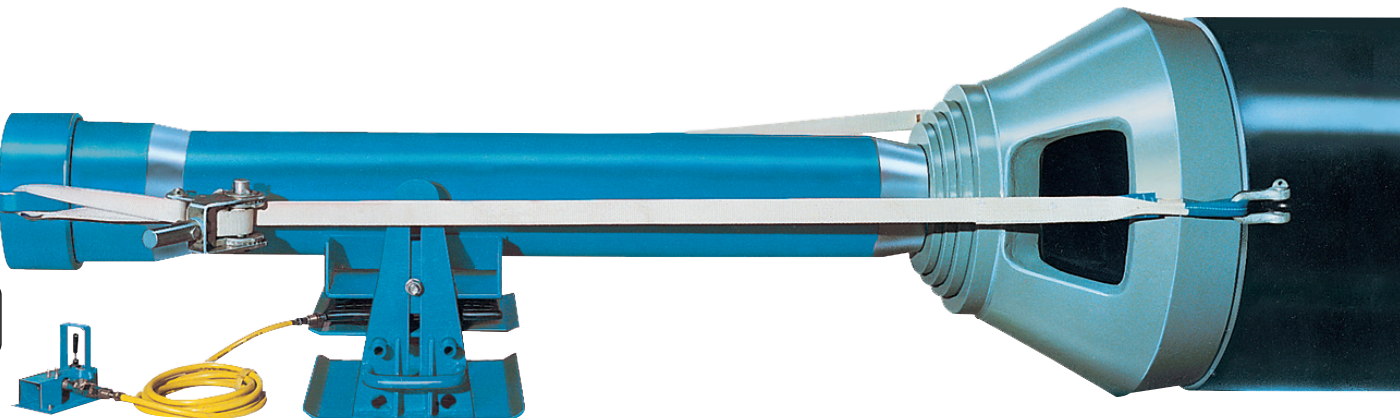
The robust piston has interchangeable teflon seals thus abrasive metal to metal friction and subsequent internal wear is avoided, whilst keeping the air consumption to a minimum yet maintaining the full efficient impact power. Advantage: high impact power, with plenty in reserve, e.g. after standstills or when overcoming high resistance.

8 **ADVANTAGE** **Soil removal**

The safest and easiest way of removing spoil from inside the pipe after completing the ram job is by using a pressure plate, which is connected to the compressor and the spoil can be removed with a combination of compressed air and/or water. Special design high pressure pumps are available for these purposes.

9 **ADVANTAGE** **Ram cones, soil removal adaptors, cotter segments**

The machine can be adapted to match the diameters of most steel pipes which are required to be installed. The window openings in the removal adaptor enable the soil to escape (patented) whilst ramming process. Pipes can be butt-welded together when using the set of cotter segments. Advantage: adaptable to



3 **ADVANTAGE** **Compressed air hose**

The connection hose can easily be exchanged. Advantage: hoses can be simply screwed on with no weak connections and easily be removed whilst in transit.

4 **ADVANTAGE** **Ratchet**

Flexible and extremely tough fabric straps and ratchets for securing the machine behind the pipe - important for easy alignment and stability during the bore.

6 **ADVANTAGE** **Air cushion**

Special adjustable cradle (patented) air cushions can effortlessly raise and lower 3 tons of weight. The machine can be aligned exactly behind the pipe. Advantage: takes out the effort and saves time when aligning heavier machines.

7 **ADVANTAGE** **Ask for our regular certified free training courses available from our own trained technicians.**

all common pipe diameters, optimum control of the impact power.

10 **ADVANTAGE** **Interested in our steerable boring systems?**

If so, we could send you our latest brochure and/or a video tape.

The unmistakable.



THE ONLY CHOICE FOR PERFECT PIPE INSTALLATIONS

