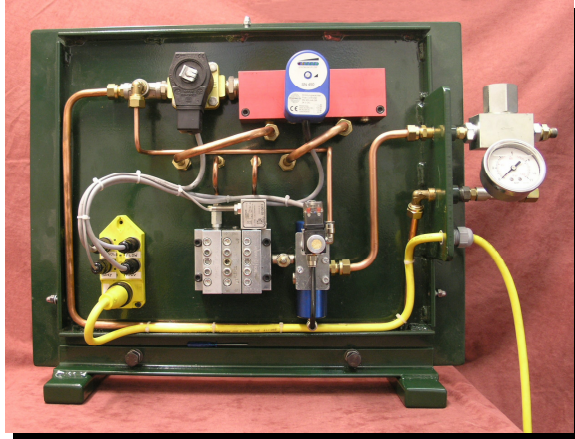


## SYSTEM SPECIFICATION

### 2 SPRAY-HEAD PANEL SERVING 330mm WIDE PINION



The panel is constructed from 6mm mild steel plate and is mounted in a bracket as illustrated and must be bolted or welded to the floor. When in operation the equipment is totally enclosed by a 3mm mild steel cover, ensuring protection from accidental damage and the environment.

Spray-heads should be mounted on a bracket (supplied by others) 150mm apart and 150mm from the driving face of the pinion.

Connection from the spray panel to the spray valves is by way of high pressure flexible hoses for both air and grease. Care should be taken to ensure the correct connection is made from the spray panel to the spray valve (air to air, grease to grease).

The positioning of the spray panel to the spray valves should be as short as is practical. The hoses which are assembled can be easily shortened by holding the outer furrel with a spanner and unscrewing the 6mm shank fitting and then removing the furrel; shorten the hose to the correct length and then re-assemble.

It is important to prime the grease pipes prior to putting the system to work. This can be achieved by utilizing the grease nipple secured in the tee piece in front of the progressive distributor.



Flexible hoses

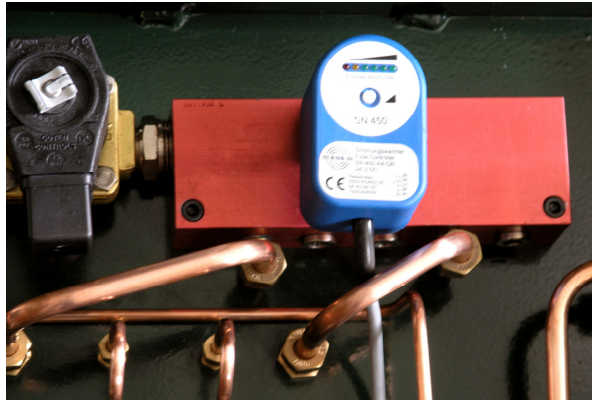


Lubricant (Lubrification)

Air (Aria)

## Air Side

Air enters via a heavy-duty glycerine-filled pressure gauge to a 24-volt DC 2-way solenoid valve. When the system is energized, air flows to a specially designed air manifold to which is secured an air flow monitor. Air flows for a period of 15 seconds to allow the monitor to set; once set it will accurately monitor both air flow and pressure ensuring that a spray pattern from all the spray-heads will be achieved. **Air pressure should be 6/7 bar (to the spray panel only).**



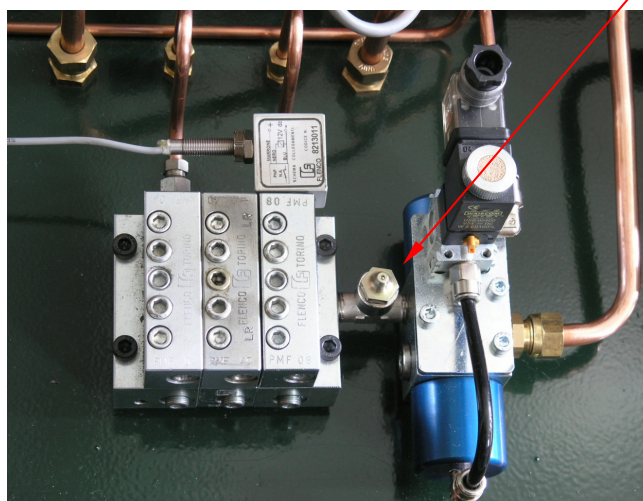
## Grease Side

Grease enters via a 125 micron grease filter after the 15 seconds has elapsed to allow the air flow monitor to set. The high pressure electro-pneumatic grease valve will open, allowing lubricant to flow to the progressive distributor. Secured to the progressive distributor is a proximity switch which both monitors grease flow and lubricant consumption.

The spray-heads are manufactured to accommodate all known lubricants. Lubricant flows down the centre of the valve body in the spray-head; air travels independently of the lubricant and meets at the spray tip where it is atomised. Under normal circumstances it is totally unnecessary to disassemble the spray-heads during any maintenance period as any contaminants that could cause the spray-heads to malfunction will have already been isolated at the progressive distributor, energizing the progressive distributor alarm function. The input for both air and grease have fittings complete with non-return valves.

## No Grease Flow Alarm

To assist in identifying the no grease flow alarm we have incorporated a grease nipple that will enable the feed line to bypass the high-pressure valve. By applying a grease gun to this nipple, we can determine whether the high pressure grease valve or the progressive distributor is malfunctioning.



## SYSTEM CONTROL PANEL



### The Control Panel is Manufactured from Sheet Steel to IP 65 and Comprises the Following:

The system is controlled by a Mitsubishi PLC, providing information of the system operation to the HMI unit which is secured to the panel door.

The information covers:

- ✚ Pump running,
- ✚ No lubricant,
- ✚ No grease flow,
- ✚ No air flow or pressure,
- ✚ Completed cycles/grease usage,
- ✚ Hours power to panel,
- ✚ Audible alarm for system malfunction and
- ✚ Reset Button

The reset button will reset system control after any malfunction. On start-up of the gear train depress the button 10 times for 15 minutes of continuous spraying; after this period it will return to the factory-set 6-minute cycle.

The system is completely tamper-proof and can only be altered after introducing the data access code.

Volt-free contacts are standard for remote monitoring of the system.

Electrical connections within the spray panel are plug and socket type ensuring incorrect wiring does not occur during site installation.

The on and pause times are set to provide the optimum lubricant requirements as determined by the gear train's requirements in this case; 408 grms per 24 running hours/3 cycles every 6 running minutes. These requirements are set at the factory and are subject to a 24-hour test procedure prior to dispatch.

The volume of grease sprayed should be monitored and adjusted if required in accordance with the actual operating conditions.

## PUMP AND HOIST ASSEMBLY

The Assalub totally empty concept is utilised for the pump station; it challenges conventional construction because the pump is supported on a floating follower plate. This follower plate/pump construction is designed as a complete closed grease handling system to totally empty a grease barrel. Only the grease remaining under the curved follower plate (about 1.5-1.9 kg) is left in the barrel.

### 1:65 Ratio Pneumatic Pump Suitable for Mounting Directly in 200kg/400lb Drum



Pump operating pressure	3-10 bar (required input air pressure 2 bar)
Pump output	1,200 grammes/ min at 6 bar pump inlet air pressure
Pump inlet and outlet ports for air and grease	¼" bsp
3 off connecting hoses	1.5 metre long x 2-wire braid construction for connecting to the air inlet of the pump, from the grease pump outlet to the grease mains and from the air main to the air gun.
Accessories	Drum lid, low level switch, follower plate, filter regulator, follower plate release air gun, and interconnecting hoses.
Pump hoist	The photograph illustrates the fixed model, the mobile version is what has been supplied

### Grease and Air Mains

We have **not included for the pipe-work within this supply**; however, these mains should meet the following specification:

GREASE MAINS SHOULD BE TO BS 1387 HEAVY OR SEAMLESS HYDRAULIC QUALITY TUBE OR SIMILAR; MUST BE PERFECTLY CLEAN AND FREE FROM SCALE PRIOR TO INSTALLING. ALL BENDS AND OFFSETS MUST BE COLD FORMED TO PREVENT THE DEVELOPMENT OF SCALE.  
AIR MAINS SHOULD BE GALVANISED OR STAINLESS STEEL.

Sizing of the pipe-work is vitally important - R J Mellor & Co Ltd will be delighted to assist in ensuring that this criterion is met and if required supply the pipe-work.