The 10 Key Elements of TLS v The Others

1.) On TLS pumps the piston in the pump element is actuated in both directions by the desmodromic cam. On Lincoln and other pumps the piston has a spring return.

2.) The TLS pump system does not require the bleeding of the grease lines.

3.) The TLS Pumps are fully and quickly serviceable with easy changeover parts unlike others where the entire pump may need to be replaced if a timer fails.

4.)The TLS piston pump has a hollow to form a natural seal against leakage and have a stainless steel check valve on the pump element.

5.) TLS Pump motors develop 48 Nm the others are 9-10 Nm,

6.) We have a filtered grease nipple for filling the grease reservoir.

7.) TLS pumps are made of die cast aluminium for robust strength not plastic like other systems and do not deform or twist when working in high temperatures.

8.) TLS distributor blocks can be assembled to suit with a selection of different displacement segments.

9.) TLS has the option of a grease nipple on the distributor and over pressure indicators on the outlets to verify quickly the operation of the progressive distributor ,

10.) TLS uses a progressive system unlike the Groeneveld so if there is any blockage on a point you are aware of it and can fix it before the part fails unlike the groenevelds.

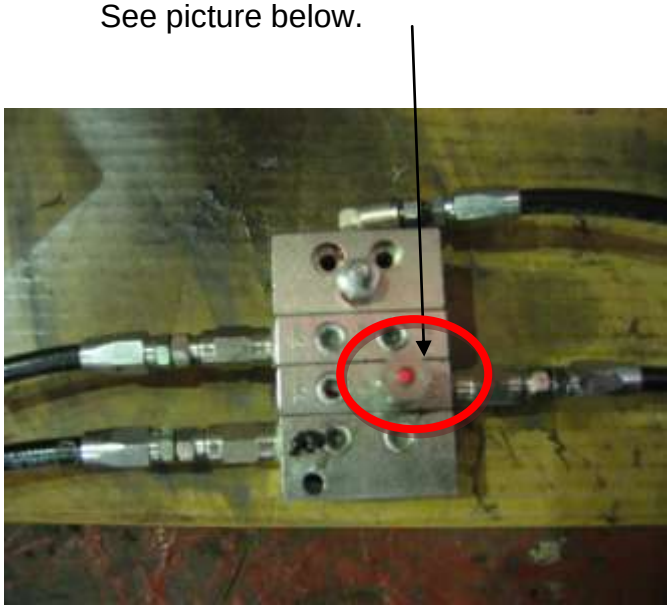
TLS Lubrication System

The TLS system ulilizes progressive distribution blocks.
With the progressive system there are a number of ways that failure to grease points can be identified.

1.) As the system is progressive each point must be lubricated individually before the next point can. Failure to grease a point would most likely be due to a blockage at the delivery end such as dirt in the point or very tight seals on the bearing. This is easily identifiable as any blockage will cause the whole system to stop.

2.) 1st point of identification is at the pressure relief valve on the pumping element see below. If Grease is coming out from here it is a sure sign of a blockage or flow obstruction.

3.) On the master divider we can install over pressure indicator buttons when pressure is over 150BAR pressure the red indicator will pop out. See picture below.



4.) Gauges and Pressure indicators can be added to distributor blocks to quickly and economically inform the operator or service personnel where a bearing may be lacking grease or a problem in the distribution system has occurred, making troubleshooting easier.

Advantages of the TLS TP1 unit over some other brands

Feature	TLS "TP1"	Beka Max "EP-1"	SKF "KFGS"	Notes
Diecast aluminium motor housing and reservoir lid	✓	✗	✗	
100 mesh filter on grease inlet nipple	✓	✗	✗	
Auto purge pump elements	✓	✗	✗	
Polycarbonate reservoir	✓	✓	✗ (plastic)	
Desmodromic pump actuation	✓	✓	✗	1
Grease output per minute per pump	3 cc	1.8 cc	0.8 – 5 cc	
Divider valve displacement options	0.04 – 0.165 cc	0.025 – 0.105 cc	0.04 – 0.36 cc	2
Optional ports on divider valve inlet for burst disc overpressure valves and grease nipples	✓	✓	✗	
Maximum pressure output	300 bar	300 bar	300 bar	
Up to four separate pump elements	✓	✗ (3 only)	✗ (3 only)	
Simple control interface	✓	✓	✗	

Notes:

1 *Desmodromic* – piston plungers do not rely on spring actuation on return stroke rather positive mechanical action.

2 Larger displacement divider valve sections have lower risk of becoming blocked from contamination. TLS divider valve displacements are available in very similar ratio sizes to Beka Max.

Warranty

TLS guarantee all their components for 24 months and test each pump that leaves their works. A copy of their warranty is attached.

Major's standard "General Conditions of Sale" also include a 12 month warranty against defects resulting from faulty materials or workmanship for products manufactured by us.