Goltens

Oslo AS

INSTRUCTION MANUAL AND SPAREPART LIST

FOR GOLTENS HIGH PRESSURE PUMP TYPE G 2800 HP

Technical information	
Weight:	34 Kos.
Dimension:	370x330x500
Max intermittent output pressure	2930 bar
Max continuous output pressure	2069 bar
Nominal ratio air: oil	1 : 300
Displacement pr. cycle	2.3 ml.
Output flow against 2100 bar	0.21 l/min.

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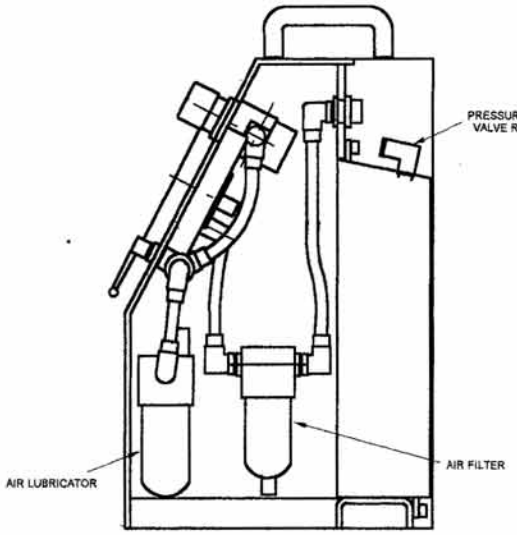
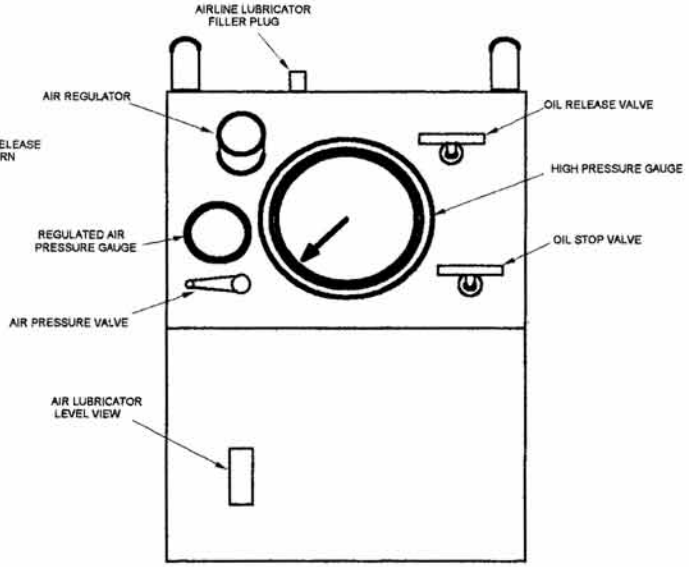
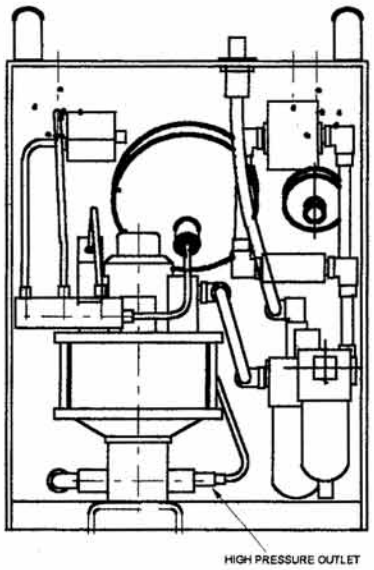
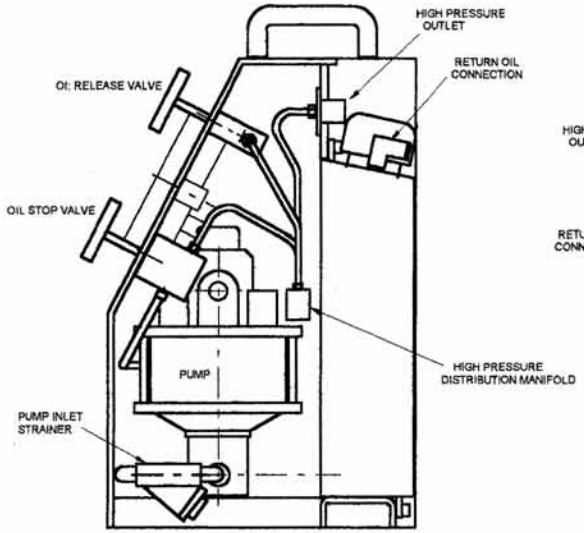


VIEW WITH SIDE OMITTED
SHOWING PNEUMATIC ARANGEMENT

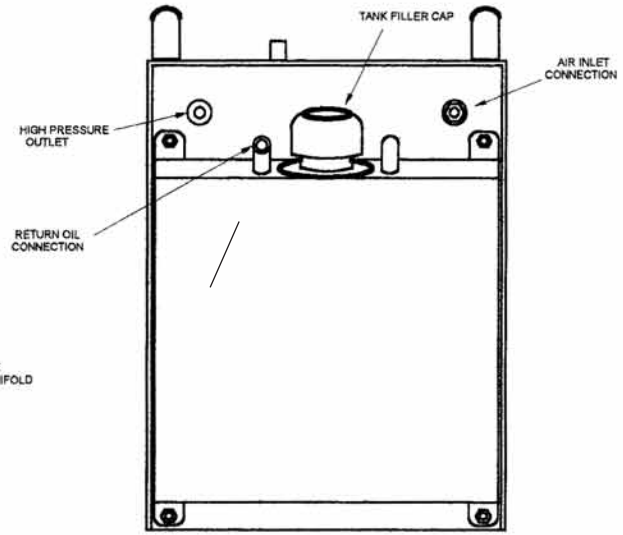




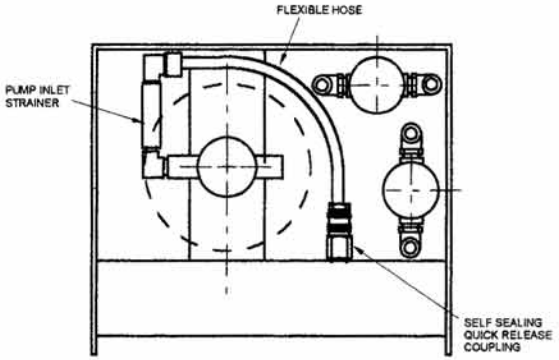
REAR VIEW WITH TANK AND CROSS MEMBER OMITTED



VIEW WITH SIDE OMITTED
SHOWING HYDRAULIC ARRANGEMENT



VIEW ON REAR

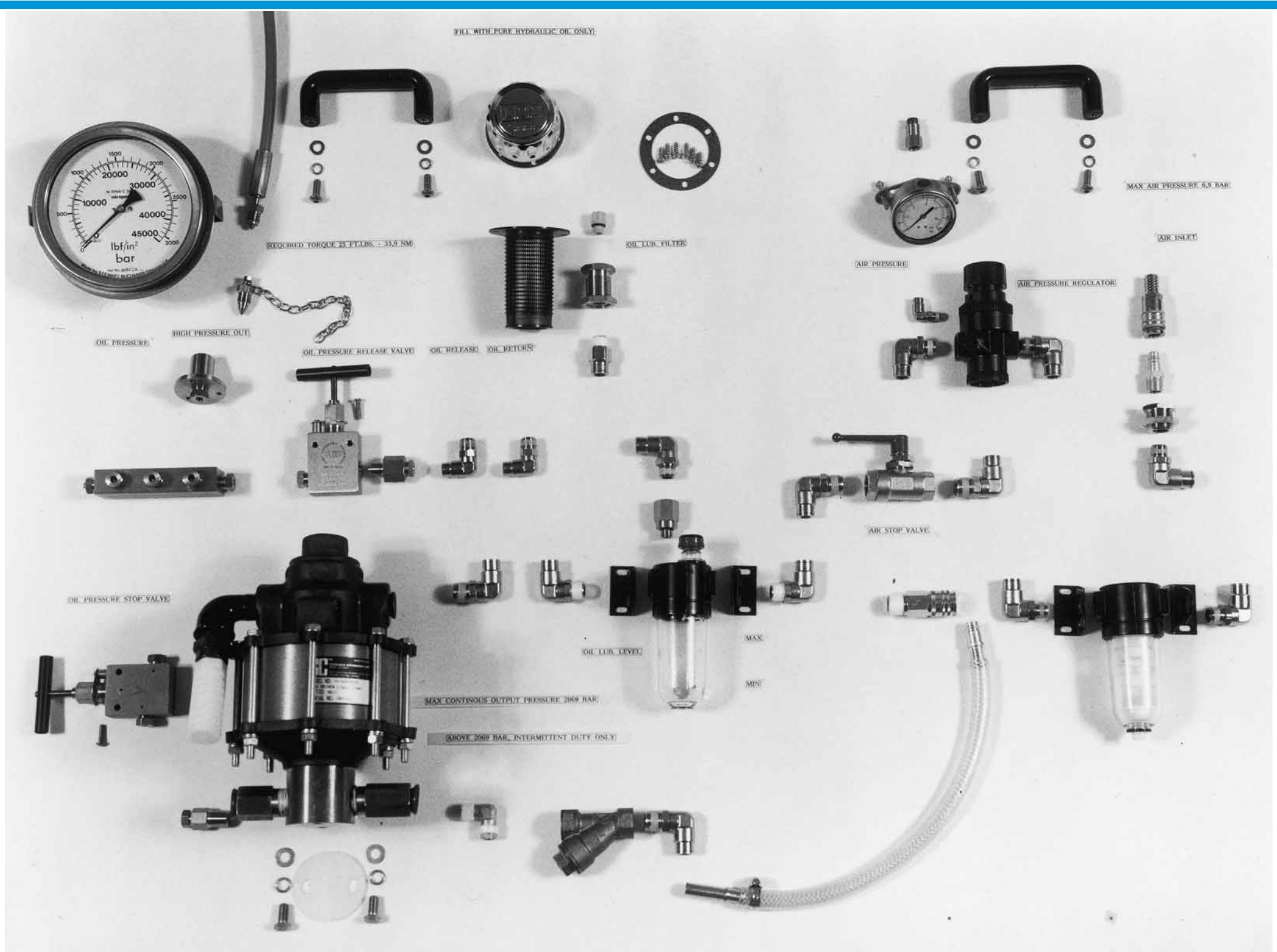


PLAN VIEW SHOWING PUMP SUCTION ARRANGEMENT

ISSUE

1 20-9-97 FIRST ISSUE

2 31-10-97 VIEW ON REAR ADDED SHOWING TANK AND CONNECTIONS


FILL WITH PURE HYDRAULIC OIL ONLY!
lbf/in²
bar
REQUIRED TORQUE 25 FT.LBS. - 33,9 NM
OIL LUB. FILTER
MAX AIR PRESSURE 6,9 BAR
AIR INLET
AIR PRESSURE
AIR PRESSURE REGULATOR
OIL PRESSURE
HIGH PRESSURE OUT
OIL PRESSURE RELEASE VALVE
OIL RELEASE
OIL RETURN
AIR STOP VALVE
OIL PRESSURE STOP VALVE
MAX.
OIL LUB. LEVEL
MIN.
MAX CONTINOUS OUTPUT PRESSURE 2069 BAR
ABOVE 2069 BAR, INTERMITTENT DUTY ONLY!

PARTS LIST

ITEM	DESCRIPTION	PART NUMBER	QTY
1	CABINET	2888-1	1
2	TANK	2888-2	1
3	ADAPTOR	2888-3	1
4	MANIFOLD	2888-4	1
5	PUMP	10-5OOOW250	1
6	SILENCER		1
7	HIP VALVE	60-11HF4	2
8	HIP ADAPTOR	30-21HF4NMC	1
9	HIP GLAND	60-2HM4	5
10	HIP COLLAR	60-2H4	5
11	1/4" O.D. TUBE	60-9H4-304	1.5 M.
12	6" PANEL MTD. VIBRAGAUGE 524	0-45.000 PSI HF4 CON.	1
13	63mm PANEL MTD GLYCERINE FILLED	MGS-10 0-160PSI 1/4" BSP	1
14	G3/8 FILTER AUTO DRAIN	F73G-3GN-AT3	1
15	MOUNTING BRACKET	4424-50	2
16	G3/8 REGULATOR	R73G-3G-RMN	1
17	G3/8 LUBRICATOR	L73M-3GP-ETN	1
18	BULKHEAD	160290038	1
19	BALL VALVE	LEGRIS 0446 13 21	1
20	PUSH IN FITTING ELBOW 1/2" BSP 1/2" O.D.	12 1470 748	3
21	PUSH IN FITTING ELBOW 3/8" BSP 1/2" O.D.	12 1470 738	7
22	PUSH IN FITTING STRAIGHT CONNECTOR	12 1250 738	3
23	PUSH IN FITTING ELBOW 3/8" BSP 3/8" O.D.	12 1470 638	2
24	PUSH IN FITTING STRAIGHT CONNECTOR	12 1250748	2
25	ADAPTOR 1/2"UNF 3/8"BSP	2888-5	1
26	BULKHEAD ADAPTOR 1/2" UNF 3/8"BSP	2888-6	1
27	ADAPTOR HF4 3/8" O.D.		1
28	NYLON TUBE 1/2" O.D.	PA 0057050C	1 M
29	NYLON TUBE 3/8" O.D.	PA0056050C	.15M
30	NYLON TUBE 1/4" O.D.	PA0054050C	.10M1
31	ADAPTOR 1/4"BSPF 1/4" O.D.	STK	1
32	PUSH IN FITTING ELBOW 1/4"BSP 1/4" O.D.	12 1470 428	1
33	STRAINER	'Y' TYPE FIG12 3/8" BSP	1
34	MALE MALE ELBOW 3/8"	150400038	1
35	MALE FEMALE ELBOW 3/8"	150430038	1
36	QUICK CONNECT COUPLING	10-411 1155	1
37	QUICK CONNECT PROBE	10-410-5005	1
38	QUICK CONNECT COUPLING	10-320-1005	1
39	QUICK CONNECT PROBE	10-320-5154	1
40	HANDLE ELSA M.243/140	36601	2
41	FILLER BREATHER	UC-AB-1163-10	1
42	HF4 BLANKING PLUG	2888-7	1
43	RETAINING CHAIN		.10M
44	BULKHEAD LOCK NUT	34 0223 06	1
45	'O' RING	BS 013	1
46	3/4" AIR CLAW CONNECTION		1
47	BLANKING PLUG	HF4	1

Operating instructions

1. Check pack reservoir is filled with hydraulic oil. New packs are dispatched with reservoir drained. BP HLP 10 or other manufacturers equivalent is recommended. Reservoir capacity is approximately 2 gallons (9L) and is filled via filler cap.

2. Check the air lubricator bottle is filled (use any light grade lubricating oil – SAE 15). To top up undo screw on top of bottle and top up. N.B. Disconnect air supply when filling bottle. The lubricator is factory set to deliver approxomately 1 drop per 25 strokes of the pump. The red knob is used to effect this setting.

3. Connect and supply 70-100 psi compressed air to the pack inlet. (1/2" BSP) min recommended pipe size 1/2" bore. Air recuirement is 28 S.C.F.M.

   The item requiring hydraulic pressure sonnection may now be fitted to the outlet block. N.B. Use only fittings and tubing suitable for the higher pressures attainable by the pump.

4. When initally starting pump, have the pressure release open and allow pump to cycle for approximately 2 minutes to bleed of any air. The pump is started by turning the air on/off valve on and adjusting the air pressure regulator valve such that the pump cycles at a steady speed around 100 cycles/minute.

5. To apply hydraulic pressure:
   a) Stop the pump by closing air valve
   b) Close the pressure release valve
   c) Open the pressure regulating valve fully
   d) Open air on/off valve and gradually increase air pressure by closing the pressure regulating valve. This will allow hydraulic pressure to build up.

   The hydraulic outlet pressure is directly proportional to the air inlet pressure to the pump.

6. When releasing hydraulic pressure, it is important todo so slowly to prevent possible damage to the hydraulic pressure gauge.

   Check the lubricator feed is approximately 1 drop per 25 strokes of the pump and adjust as nessesary. Refer to operating instructions.

Important notes for safety

1. Before operating the pack always make sure pipe connections are clean and fully tightened up.

2. Never tighten connections while they are under pressure.

3. The pack cannot be pressuriced without beind connected to an item to be pressuriced or blanking plug supplied with pack being refitted.

4. Onlyuse tube and fittings suitable for maximum working pressure of pump in conjunction with the pack.

5. Should any black oil be visible around the pump air motor exhaust, it should not give rise to concern as lubricated air is fed to the pump, and excess oil will be discarded via the exhaust.

Trouble shooting

1. **The pump will not start**

a) Check mains air supply.
b) Check regulated air pressure is available via air pressure gauge mounted on air regulator.
c) Check that air valve is turned on.

If pump still will not work it will require checking.

2. **Pump will not build up pressure**

a) Insufficient air pressure causing pump to stall.
b) Pressure release valve not closed – close to build up pressure.
c) Insufficient hydraulic fluid available from reservoir check and rectify nessesary.
d) Tube connection loose somewhere in system – check and rectify.
e) Strainer in pump suction blocked – check and clean as nessesary.
f) Fault in pump: check for – dirt in check valve seat – hydraulic piston seal leaking. Signified by excssive oil emission from air exhaust.

Servicing

The pack is designed for long and trouble free service in a rugged environment with a minimum of servicing.

Regular servicing is confined to:

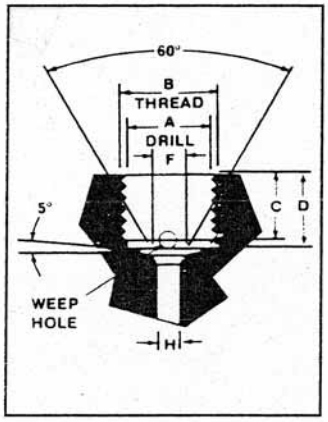
a) Topping up the air lubricator.
b) Regular draining of the air filter bowl.
c) occasional cleaning of the air filter bowl using warm soapy water only.

Caution Shut off air before removing filter bowl.

The pump is oly other item which may require servicing, servicing instructions for this follow.

High-pressure coupling

The pump is delivered with a HP-hose with male HP-fitting FC 250. The female connection on the tool or unit to be tested shall be machined according to the below sketch.



TUBE O.D INCHES (mm)	CONNECTION TYPE	DIMENTIONS: INCHES (mm)					
		A	B	C	D	F	H
1/4	F-250-C	33/64	9/16 -18	0.38	0.44	0.17	0.094
(6.35)		(13.1)	(14.3) -18	(9.65)	(11.2)	(4.32)	(2.39)

Menu

The services listed below are all carried out by in house equipment and expertise. Our management is capable and experienced in tying these services together in small and large projects to suit the owners needs. For other services not listed, we co-operate with specialized companies so the owner can select to have one main contractor to tie the project together.

specialized services

- Crankshaft Grinding
  - in Situ
  - in Workshop
- Line Boring of Engine Bed Plates in Situ or in Workshop
- Landing Surfaces in Situ
- Alignment and Chocking
- Laser based alignment
- Broken Stud Removal

reconditioning services

- Centrifugal Casting of White Metal Bearings
- Fuel Injectors and Pumps
- Connecting Rods
- Exhaust Valves / Seats
- Cylinder Heads
- Pistons
- Turbochargers
- Governors

trading/supply

- MKK and Alfa Laval Separator Spares
- Bearings
- Diesel engine parts
- Piston Rings
- Hydraulic Pumps
- Fuel equipment
- Miscellaneous parts
- Spare parts for Aker cranes

repair services *(including voyage repairs)*

- Diesel Engines
- Steam Turbines
- Shaft Lines
- Propellers & Rudders
- Winches
- Valves, Pumps, COW Machines
- Hatch covers
- Ro/Ro Equipment
- Automation Systems
- Electrical Systems
- Hydraulic Systems
- Steel Structures
- Pipelines
- Blasting & Painting
- Cleaning
- Staging
- Service on Aker cranes (and others)

Goltens

Group

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