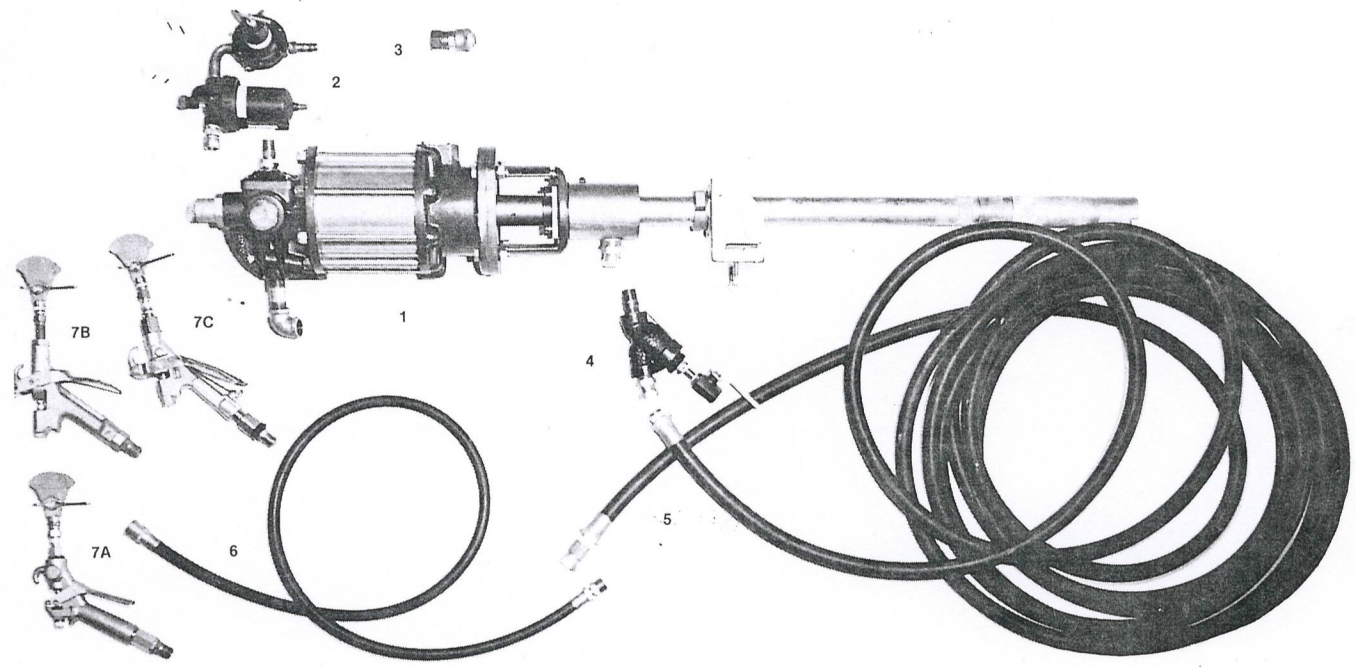




TECHNICAL BULLETIN

2/83

PRODUCT DATA: #202.1
SUBJECT: APPLICATION EQUIPMENT
FOR FLUID FILM® GEL



1. EQUIPMENT LIST

Unit:

1. Alemite Versatal Pump, 7896.
2. Air line lubricator, regulator and gauge.
3. Air line connector.
4. 3/4" Armstrong strainer with wire screen.
5. 50 foot lengths 3/4" double wire braid, oil resistant buna-n hose, 9,000 psi minimum burst pressure, 2,250 psi working pressure.
6. 6 foot length 1/2" single wire braid, oil resistant buna-n hose, 8,000 psi minimum burst pressure, 2,000 psi working pressure.
7. A - Flow gun, Alemite 3514, plus Rotoclean.
B - Flow gun, Alemite 7836, plus Rotoclean.
C - Flow gun, Lincoln 82905, plus Rotoclean.

A supply of air at 7 kg/sq. cm (100 psig) minimum with a volume capacity of 1.7 kiloliters/minute (60 cubic feet/minute) is required to operate the pump.

Also needed:

- Wiping rags.
- Solvents, such as kerosene.
- Two 12 inch adjustable wrenches.
- One 6 inch adjustable wrench.

2. ASSEMBLY OF EQUIPMENT

Remove all dust and dirt from drum cover (lid) and locking rings before opening. Remove all dust and dirt from pump and pump tube. (See photograph, unit #1). Insert pump in the FLUID FILM in the drum, mounting pump on drum rim by means of drum clamp on lower flange of pump. At all times avoid any contamination of the FLUID FILM by dust, sand, loose rust or scale or other such material.

Mount or connect air regulator, gauge, and oiler units to pump as indicated in photograph, unit #2. Fill oiler one half full with reefer oil, or other light oil without additives. Connect air pressure hose to air intake side of air gauge.

Connect strainer unit (photograph, unit #4) to material discharge part of pump. Material flow through strainer is in direction of the arrow on the side of the strainer. A 50 mesh (50 mesh to the inch) screen is used in the strainer.

Connect material hose (photograph, unit #5) to discharge side of strainer. One to four fifty foot lengths of material hose usually are used, depending upon the distance of application surface from the pump. Use as few lengths of material hose as possible. A 1/2 inch whip line (hose) is used between the 3/4 inch material hose and the airless-spray (flow gun). This 1/2 inch hose provides greater flexibility and ease with the use of the flow gun, (photograph, unit #6).

Note that in the material discharge line, the male end of each unit is on the pump side. Each unit is fitted with quick-connect couplings which should never be tightened with wrenches having serrated jaws.

3. OPERATION OF EQUIPMENT

After equipment has been connected as above, turn air pressure on, starting with 20 to 30 psig (1.5-2.0 kg/sq.cm.), with orifice in reverse position, returning FLUID FILM flow to drum. This allows the hose to be filled with material and hose line to be checked for loose connections and proper functioning. Close gun and reverse orifice. Open gun and gradually increase air pressure until pump delivers FLUID FILM at such a rate that a constant width airless spray fan is delivered from the tip. For this testing, usually the spray fan is directed into the top of the drum. An 8-Q orifice is used for application to large tank surfaces. For small confined areas, or to apply a thin coat, an 8-0 orifice may be used. Under average conditions, when using a hundred feet of 3/4 inch material hose and an 8-Q orifice, the required air pressure as indicated on the air pressure gauge will range from 60 to 80 psig (4.0-5.5 kg/sq.cm.).

If during operation of the equipment the spray tip becomes clogged, close the trigger, rotate the handle on the Rotoclean 180° and open the trigger to blow out any particles. Close the trigger, return the handle to the original position and resume spraying.

4. APPLICATION OF FLUID FILM

All loose or loosely adhering rust, scale, paint or bituminous residues and mud should be cleaned from all metal surfaces. All visible water must be removed. Check for water in rust scale by rubbing the surface with thumb. If water appears, the tank should be dried by circulating air.

<u>Recommended Rates of Application</u>	<u>Litres/Sq.M.</u>	<u>Thickness MM</u>
New steel or clean pitted steel	1.44 (3.5 gal/100 ft ²)	1.44 (0.056 in)
Steel with tightly adhering rust	1.64 (4.0 gal/100 ft ²)	1.64 (0.064 in)

A proven method of securing proper thickness is for the sprayer to hold the gun about one meter from the surface, make a horizontal pass, then drop the gun sufficiently to make a 50% overlap. Continue this procedure to cover a convenient area. Repeat the procedure with vertical strokes. Check the thickness with a FLUID FILM thickness gauge to determine if the proper depth of coating is achieved. If the coating is too thick, make a faster pass; if too thin, make a slower pass.

In covering the backs of stiffeners, keep the gun moving to prevent too heavy a deposition. Care must be taken to see that all hidden areas are covered.

Application of FLUID FILM is rapid and a one coat procedure. A 55 gallon (208 liter) drum may be applied in thirty-five minutes to one hour, depending upon the ease of availability of the surface to be coated.

In cold weather, drums and equipment should be stored in a warm place. A five to six foot (two meters) square trough containing water into which steam is bubbled will heat the material sufficiently to facilitate pumping. DO NOT heat drum with gas burner or electric heaters which will overheat the drum and permanently damage the material.

FLUID FILM does not need to be removed from the equipment, including hoses, during lunch breaks or overnight. Spilled material may be wiped up with rags and the surface cleaned with kerosene.

After the job is completed, all of the equipment should be well cleaned on the outside with rags and kerosene and repacked in the shipping crate for return to Eureka Chemical Company.

WARNING

THIS IS A HIGH PRESSURE SYSTEM AND NOT A CONVENTIONAL SPRAYING DEVICE. DO NOT AIM SPRAY GUN AT ANY PERSON OR ANY PART OF THE BODY. HIGH PRESSURE SPRAY CAN CAUSE SERIOUS INJURY BY PENETRATING THE BODY. IN CASE OF INJURY, SEEK MEDICAL AID AT ONCE.

MAKE CERTAIN THAT SPRAY PERSONNEL READ WARNINGS ON PUMP CRATE AND PUMP AIR MOTOR.