

Bijur Lubricating Corporation has published detailed manuals on each of the following types of lubricating systems: Single Line Resistance, Progressive, Positive Displacement Injector and FluidFlex "Spraymist" Systems.

Each publication has been prepared to assist in designing, specifying and ordering a Bijur lubrication system for your equipment protection.



Progressive Systems Ask for Bulletin #166



Positive Displacement Injector Systems Ask for Bulletin #167



Single Line Resistance Systems Ask for Bulletin #162



Pressurized Dispensing System Ask for Form No. 24269

# APPLICATION DATA SHEET Vertical Milling Machine

FluidFlex "Spraymist" Cooling System for Cutting Tools





## **APPLICATION DATA SHEET**

### Vertical Milling Machine

FluidFlex "Spraymist" Cooling System for Cutting Tools

#### Description

Bijur's FluidFlex "spraymist" coolant systems are compact and rugged. All controls are self-contained in the pneumatic pressurized, solenoid operated system. Precise delivery jets allow the operator to direct a controlled water based coolant mix exactly where it is needed at the cutting edge to prevent heat build-up during machining operations.

"Spraymist" operation provides exceptional cooling characteristics because coolant mix in fine droplets evaporates right at the cutting edge in machining operations. The "spraymist" action provides improved work finishes and keeps cutting edges sharper longer. The system eliminates drag and prevents chip hang-up due to welding. The operator also sees work in progress at all times.

Dual hose assemblies and extension jets deliver air and coolant to a small jet tip where fine spray is formed and directed to application point. Various extension jet lengths (rigid and flexible) may be used with a single unit. Tips with various spray configurations can be used. Each jet has its own needle valve for individual control of coolant delivered.

For additional information on Bijur's FluidFlex "spraymist" coolant systems, refer to Form No. 24269 or individual Engineering Data Sheets. Contact your nearest Bijur representative for specific application assistance.

#### Installation and Mounting

Mount the FluidFlex unit on machine base or other convenient location. Complete assembly and electrical wiring are detailed on installation instructions. Then, connect shop air (125 psi max.) to inlet on left side of unit. Before energizing the electrical solenoid valve, fill reservoir with a water base coolant mix in a ratio of 30:1 to 50:1.

Use magnetic jet holder to locate and aim extension jet tip as close to the cutting or contact point of tool and work piece as practical.





#### **Recommended Operation**

Energize solenoid valve and adjust air regulator to recommended operating pressure (nominal 20 - 30 psi). Adjust needle valve until "mist" or "spray" covers entire contact area with driest discharge possible. Use a coolant/air mixture sufficient to cause a slight excess of moisture on the work piece. Add additional jets if greater coverage is required. See Typical Multi-Jet Installation figure.

#### **Ordering Information**

A FluidFlex "spraymist" coolant system suitable for most milling machine toolroom applications consists of a single jet and one gallon reservoir capacity. Specify Kit No. 1052. For larger installations, order individual components.

Illustrations and specifications are not binding in detail. Designs are subject to modification and improvement without notice.

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