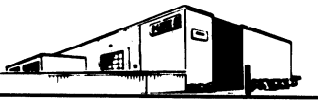

TELEDYNE HYSON

What is a DYNE-A-LUBE™ Nitrogen Manifold System?

A DYNE-A-LUBE™ Nitrogen Manifold System adds Dynamic Lubrication to a standard nitrogen manifold. Dynamic Lubrication literally sprays oil on the cylinder wall with every stroke of the press.

Who Should Use DYNE-A-LUBE Systems?

The DYNE-A-LUBE Nitrogen Manifold System was designed for use in higher production stamping applications. High production includes:

- Higher speed applications including stroke length and stroke-per-minute considerations
- Longer run applications

Why Use DYNE-A-LUBE Systems?

Higher Productivity / Less Downtime

Initial DYNE-A-LUBE system applications have yielded in excess of 10 times normal seal wear. Although increased productivity depends on several factors such as housekeeping, die lubricants, die design, etc., a system usually pays for itself by eliminating one downtime due to seal wear, over the life of the system. The reasons for the longer life are:

- The DYNE-A-LUBE System sprays oil on the cylinder wall with every stroke, *reducing friction* on the seal and extending seal life.
- The Dynamic Lubrication prevents heat build-up in higher speed systems. Whatever heat does build is dissipated through the manifold.
- The Self-Aligning piston rod allows .030 inches of side movement to compensate for press and die misalignment. It will then realign itself at the top of the stroke. This feature prevents premature cylinder and seal wear.

Less Nitrogen Usage

The DYNE-A-LUBE System places a *barrier layer of oil* covering the U-cup and the interface between the U-cup and sidewall, greatly decreasing the rate of nitrogen leakage, which reduces nitrogen usage and downtime costs for filling.

Less Sensitive to Contaminants

Because seals and other wear components are always coated with oil, they are less susceptible to contamination around the manifold and cylinders.

How to Pay for DYNE-A-LUBE Manifolds

Downtime Savings:

_____ hours for removing the die and repairing manifold x $_____ per hour of press downtime = $_____ cost per downtime.

Labor Savings:

_____ hours to repair the leak x $_____ per hour of repair = labor cost per downtime.

Nitrogen Savings:

$_____ per bottle N^2 x _____ bottles used to fill the system = $_____ N^2 saved per repair.

Equipment Savings:

$_____ per seal kit x _____ number of seal kits per manifold = $_____ equipment savings per repair.

_____ Total Savings Repair