

## Custom Engineered Low Pressure Pipe Clamps

### DESCRIPTION

Low Pressure Pipe Clamps Type GLC and PLC combine the permanency and dynamically predictable characteristics of Kinetics Type S fiberglass or high strength Flexoply, completely sealed with a moisture impervious coating as an isolation media. The formed steel clamp and the load-bearing plate can be hot-dip galvanized, electro-zinc plated, painted, or ZRC coated for corrosion resistance as required by the specifications. A Teflon® liner is bonded to all steel surfaces which come into direct contact with the piping. This provides protection against corrosion or galvanic action and decreases friction for easier pipe movement. Isolation washers, full thread bolts, nuts, and locknuts are also provided to assure a complete decoupling from the structure.

### APPLICATION

Low Pressure Pipe Clamps Type GLC and PLC are used to support and clamp pipe or tubing having internal system pressures, up to 5,000 psi. These clamps reduce the transmission of shock, vibration or noise which can be caused by fluid or gas pulsations in the piping or by the equipment used to convey these products through the lines. These pipe clamps are recommended for the support and isolation of piping or tubing in industry, such as oil, petrochemical, chemical, and manufacturing, as well as in other types of construction where it is necessary to provide isolation as well as better pipe alignment.

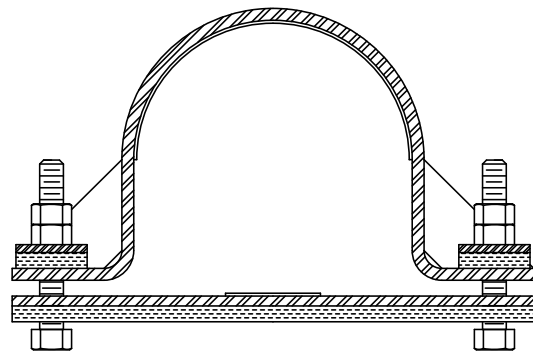
Kinetics Noise Control Low Pressure Clamps are designed for:

- Temperature range: - 40° to +350° F. For higher temperatures check home office.
- Recommended Loads: Fiberglass – 200 psi, Flexoply – 500 psi
- Deflection: 4% at above loads.
- Mounting: Either on structural steel or concrete.

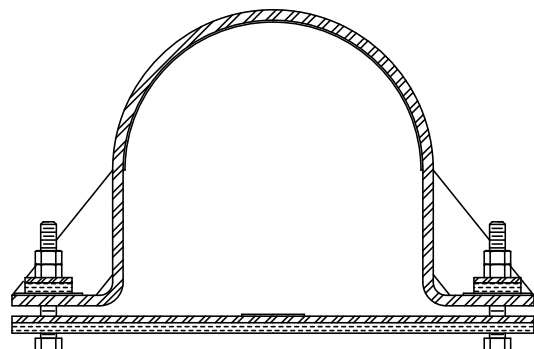
It is recommended that each pipe run or riser incorporate Kinetics Noise Control Low Pressure Clamps at structural contact points. These locations should be spaced by the designer to insure against possible resonant vibration in the unsupported runs.

### The clamp system is available in two designs:

Type GLC-1 and PLC-1 clamps have drilled holes, and are complete with steel clamp bracket, isolated bottom plate, washers, full thread bolts, nuts, and elastic stop nuts. These clamps are used where the accuracy of the bolt-down system is critical, or where all holes are field drilled.



Type GLC-2 and PLC-2 clamps have slotted holes and are complete with steel clamp bracket, isolated bottom plate, washers, full thread bolts, nuts, and elastic stop nuts. These clamps are used where lateral adjustment is required for alignment.



## Custom Engineered High Pressure Pipe Saddles

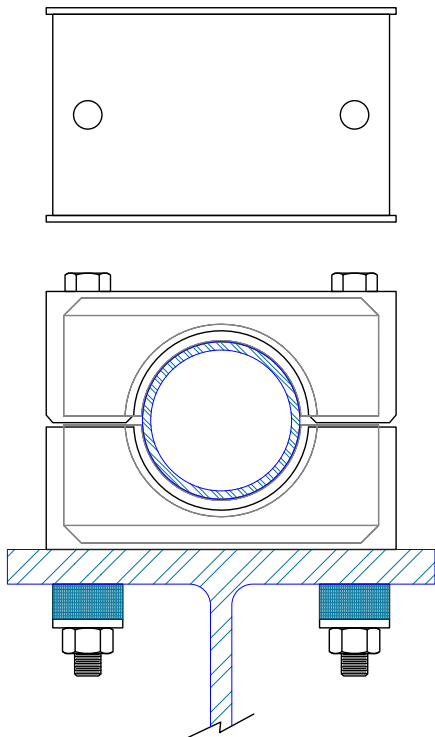
### DESCRIPTION

Kinetics Noise Control Model HPS High Pressure Pipe Saddles combine the permanency and dynamically predicable characteristics of Kinetics Noise Control Type “F” fiberglass isolation media, completely sealed with a moisture resisting coating. To provide a low friction-free surface against the pipe and to provide a barrier against moisture, a Teflon® liner is bonded to the inside diameter of the fiberglass sleeve. A molded high density polyurethane back-up member provides full support to the fiberglass sleeve, and the entire unit is encased in a galvanized welded steel housing.

### This system is available in two arrangements:

**Type I Saddles** are through-bolted and designed to clamp the pipe rigidly against lateral motion, but still permit sliding along the pipe axis without scoring.

**Type II Saddles** are fabricated with all the Type I features, but incorporate a hold-down bracket which permits lateral pipe motion, along with friction-free sliding along the pipe axis.



### APPLICATION

Kinetics Noise Control Model High Pressure Pipe Isolation Saddles are used to support high pressure piping and to reduce the transmission of shock, vibration and noise, which are caused by fluid or gas pulsations in the piping. Typical applications are for the support of petrochemical piping, particularly LD (low density) polyethylene systems. Kinetics Noise Control Pipe Saddles are designed to withstand temperatures of  $-40^{\circ}$  to  $+350^{\circ}$  F and can be mounted on either concrete or structural steel supports.

Kinetics Noise Control Model HPS Pipe Isolation Saddles are used in a variety of applications to reduce pipe failures due to pulsations, shock and vibration, as well as direct pipe-to-structure contact. In addition, the High Pressure Pipe Isolation Saddles substantially reduce stresses in the piping supports and anchor bolts.

Because of stringent requirements to reduce piping stress concentrations and corrosion failures, scoring of the pipe surfaces cannot be tolerated. To maintain constant support and alignment and to reduce maintenance of the structural support system, the Model HPS Saddles incorporate a liner of glass-filled Teflon®, providing a low friction clamping surface. The patented Kinetics Noise Control isolation media permits controlled movement of the piping system while providing a high degree of vibration isolation.

Each pipe run or riser should incorporate a Kinetics Noise Control Pipe Isolation Saddle before and after each elbow or heavy fitting, and should be spaced no greater than 6'0" on center along all horizontal or vertical pipe runs.