

# Petersen<sup>®</sup> Mechanical Hand Tightening Test Plugs

For Series:   141-       142-       143-0     143-3  
                  143-5     144-       146-9     149-

## Operation and Maintenance Instructions

*These instructions must be made available to all Plug users.*

*All workers on the job must be trained for proper use.*

*Read and understand instructions before using Plugs. Failure to comply may result in property damage, serious injury or death!*

### SAFETY IS EVERYONE'S RESPONSIBILITY!

*Very high forces are involved in many pipeline plugging situations. Forces increase dramatically as pressure and pipe diameter increase. Extreme care must be taken to assure the safe use of any Pipe Plug. If you do not understand these instructions or how to calculate the forces involved, consult a qualified professional engineer to advise you. Hydrostatic (water) Test method should always be used to insure maximum safety.*

#### I. Pipe Plug Operating Instructions:

- a. **Keep out of area in line with plug ends during use. This is any area near a line of sight to any part of the plug.** There are many unknown variables that determine plugging characteristics, including pipeline debris and coefficient of friction of pipe surfaces, especially when slippery substances are involved. Never use where failure may result in injury or property damage. Hydrostatic (water) Test method should always be used to insure maximum safety.
- b. **Insert plugs completely into the pipeline.** The maximum pressure on the Product Specification Pressure Tables assumes plugs are fully inserted in a clean steel pipe and is only an estimate. Pressures are influenced by many factors including the diameter of pipe, fluid in the pipe or plug, temperature, and the condition of the pipe wall surface. **Completely enclose** the plug within pipe so entire plug seal surface area is supported. Any plug torque tightening and pressure tables provided are only estimates and must be validated by the customer under actual conditions.
- c. **Tighten mechanical plug** to insure there is a tight seal and the plug is securely locked into the pipe.
- d. **Provide a mechanical blocking** system to prevent slippage when plugging a pressurized pipeline. The coefficient of friction will vary with different pipe materials and also with fluids and debris inside the pipe.
- e. **Release any pipeline upstream pressure before removing the plug. Deflate the plug after backpressure is relieved.**

#### II. Temperature and Fluid Compatibility For Plugs:

- a. **Do not use standard Petersen<sup>®</sup> Plugs with temperatures over 180°F or with chemicals that may attack nylon, neoprene or polyurethane.** Contact Petersen for custom configurations to meet specific temperature or chemical requirements.

#### III. Maintenance and Care:

- a. Carefully inspect before and after each use for abrasions, cuts, or damaged parts.
- b. Destroy the product if there are more than minor punctures, tears or abrasions that are not easily repairable.

**Call Petersen with any questions or suggestions relating to the use of any Petersen product. 800-926-1926**

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