

# PIPE HANGERS & SUPPORTS

We are a leading supplier for Pipe Hangers & Supports in Korea, and have supplied high quality products for many kinds of power plants, steel, paper mills and ship building. We have acquired the ASME NA, NPT, NS certification for Pipe Hangers and Supports. In addition, we have obtained the ISO 9001 for Quality Management and the ISO 14001 Environment Management certification for all of our products.

## Hydraulic Snubber

The cylinder hydraulic snubber is composed of an oil tank and a check valve. When the heat displacement of a pipe moves slowly under normal conditions, the hydraulic snubber has little resistance so that the pipe can move freely. But with sudden impact, such as an earthquake, the check valve of the hydraulic snubber closes, the piston stops, and the snubber delivers the occurred impact load to the steel structure to protect the pipe.

## Mechanical Snubber

The mechanical snubber is composed of a ball screw axis, a ball screw, a fly wheel, and a disk brake. When the heat displacement of a pipe moves slowly under normal conditions, the ball screw of the mechanical snubber rotates slowly so that the pipe can move freely. But when the pipe gets sudden impact, such as an earthquake, the disk brake is activated and the ball screw axis stops rotating because the fly wheel cannot execute a sudden rotary motion. As a result, the mechanical snubber delivers the occurred impact load to the steel structure to protect the pipe.

## Cold Support

Cold support is used in LNG, LPG and other petrochemical constructions and can be used in low temperatures of -190°C. The cold support is made mainly of polyurethane and of compressed and shaped wood to cut off heat conduction in extremely low temperatures. It protects the pipe by maintaining its intensity.

## Constant Spring Hanger

The constant spring hanger has a compressed spring in the cylinder. When the pipe moves up and down, the constant spring hanger controls internal stress against the force acting on the pipe to remain constant by specially devised mechanisms. The constant spring hanger is used on the main pipe line that needs the minimum value of fluctuation in stress.

## Variable Spring Hanger

The variable spring hanger has a compressed spring in the cylinder. When the location of the pipe moves up and down due to heat displacement, the amount of the spring's own repulsive force changes accordingly. This hanger is used when the amount of heat displacement is low.

## Sway Brace

The sway brace constricts the vibrations of a pipe, absorbs impact loading, guides or constrains the motion of the pipe, and holds the sway of the pipe.

## Sway Strut

The sway strut constrains the displacement of a pipe in one direction while letting it move freely in another direction. Since a spherical bearing is attached, this product can correspond to a somewhat angular motion as well.