



# CARPENTER & PATERSON USA

## UPDATE MAY 2022



### C&P SUPPLIED LARGE CONSTANT & VARIABLE EFFORT SPRING SUPPORTS TO A POWER STATION IN HONG KONG



C&P has designed and manufactured some large constant and variable effort spring supports to be supplied to a power station in Hong Kong.

The constant effort spring supports were designed to accommodate pipes loads of over 160,000N and vertical pipe movements of over 290mm.

The supports will be attached to vertical pipes via the use of a riser clamp and to horizontal pipes via a trapeze/u-bolt arrangement.

The installed heights of these assemblies reach up to 7 meters.

### C&P SUPPLIED CONSTANT SUPPORTS TO A POWER PLANT IN CANADA

Constant supports provide a constant supporting effort throughout the total travel of the unit.

The larger supports are base mounted 'CA55' supports which support the pipe from underneath. These supports are more than 2 meters tall.

The smaller constants seen in the right side photo are also base mounted but have a different configuration – known as CA54 supports.

### C&P SUPPLIED SPECIALLY DESIGNED CRYOGENIC SUPPORTS FOR A FPSO VESSEL AS PART OF A LARGE LNG PROJECT



C&P has supplied special cryogenic supports for a Floating, Production, Storage and Offloading (FPSO) vessel as part of a large LNG project.

These supports were specially designed by C&P due to the heavy loads acting on the supports as well as upload loads.

Furthermore, the supports had to fit within very confined spaces.

### C&P SUPPLIED OVER 230 PRE-INSULATED SUPPORTS, KNOWN AS 'HOT SHOES', TO SUPPORT HOT PIPING IN A POWER PLANT



The hot shoes are being supplied to a power plant where piping reaches temperatures of over 500c.

The hot shoes, which will support pipe sizes between 0.5" and 16", are pre-insulated with high density calcium silicate which has low thermal conductivity and high mechanical strength (to bear load) even at high temperatures. The calcium silicate is also resistant to moisture and chemicals and is asbestos free.

