DRILLTEC ECONO-RAP™

DRILLTEC Patents & Technologies Co. Inc. 10875 Kempwood Drive Suite 2 - Houston, Texas 77043 - U.S.A. Tel: (713) 895-9852 - Fax; (713) 895-7616 - Internet; www.drilltec.com & e-mail: drilltec@drilltec.com







The ECONO-RAP™ packaging system developed in 1988 is the most affordable solution to efficient pipe handling, transportation and storage.

The ECONO-RAP" packaging system makes pipe packaging economical even for the least expensive tubulars ranging from 2 3/8" through 9 5/8".

The ECONO-RAP™ packaging system is constructed with high density polyethylene segments reinforced with galvanized rectangular steel tubing.

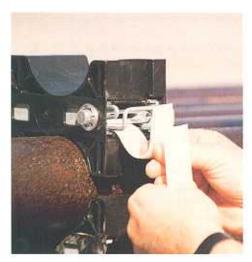
Each joint of pipe is placed in its own matching diameter recess. This feature reduces the risk of corrosion and impact damage.

Assembly of the ECONO-RAP" packaging system is fast and efficient. After assembly, the package is secured by a polyester band passing through the bottom and top segments of each frame. The band is tightened by applying a torque of 60 ft-lb (81 Nm) to the built-in tightening device. This is accomplished by using a properly calibrated torque wrench, not by estimation.

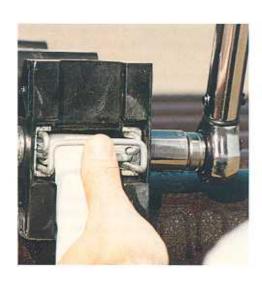
The package is lifted either by forklift or slings.

The unique design of the system allows the individual packages to interlock for optimum safety when stacked.

Assembly is Fast and Efficient







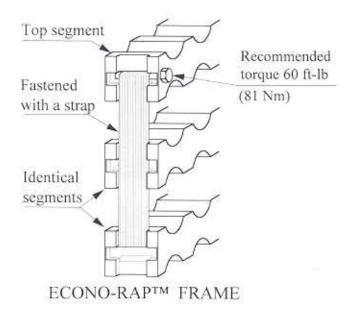


ECONO-RAP™ Pipe Packaging System



The purpose of pipe packaging systems is to secure the pipe in packages for easier and safer handling, transportation and storage between the pipe mill and the end destination.





1 - Description of the ECONO-RAP System

The ECONO-RAP* packaging system consists of an assembly of High Density Polyethylene segments (beams) reinforced by encapsulated galvanized rectangular steel tubing.

The segments are designed to prevent contact between the individual joints of pipe and other metallic objects.

The segments contain a specific number of moulded semicircular recesses which match the pipe diameter to be packaged. Spacing of the recesses is designed to accommodate the size of all known couplings.

All segments for a given pipe diameter are identical and are fully interchangeable. Only the top segment has a specific location; it is easily identified since it carries the strap tightening device and it must therefore be positioned as the top segment of the package.

The segments are placed in a vertical plane between the layers of pipe to maintain separation. Each group of segments in the same plane is designated by the term "frame".

After assembly of the package, the frames are held together by polyester straps which are tightened using the tensioning bolts located in the top segment. Use of a steel strap or any other than the specified polyester strap is absolutely not recommended.

Four frames are required for optimum stability of the pipe package. (See assembly instructions for recommended spacing).

2 - Safety -

After assembly, the package rests on bottom segments which have pipe recesses facing downward; when packages are stacked, the bottom segments interlock with the pipe of the lower package for optimum stability.

3 - Application -

The ECONO-RAP* system is available for all API Tubing and Casing sizes from 2 3/8" through 9 5/8".

It is recommended for packaging of any pipe to be transported by either land or sea and whose final destination is either onshore or offshore.

It is also recommended for packaging corrosion sensitive pipe such as chrome alloy material.

The ECONO-RAP* system can also be used for packaging pipe inside wooden crates or as containerized cargo.

4 - Operation -

The ECONO-RAP^{\infty} system is designed to form packages of approximately 6 metric tonne for the most popular nominal weights of each pipe size.

The ECONO-RAP* system can be lifted by forklift, slings or endless slings.

Packages can be stacked as high as practicable in accordance with local safety considerations.

5 - Reclamation and recycling -

ECONO-RAP* segments can be reused many times. However, the polyester straps must be replaced each time a frame is reused.

Plastic and steel reinforcement can be separated for recycling at the end of the life cycle of the segments.

Contact your local Drilltee office for information on worldwide reclamation services.