INFLATABLE SPHERES: 3” and above

IK-UK’s Spheres are specially compounded for optimum resiliency, wear resistance and long life.

During sphere production, each moulded hemisphere is subjected to an intensive physical inspection.

Following assembly and post-curing, every sphere is inflated to a specific increased diameter for 24hrs. This critical step is taken to ensure that every sphere that leaves our factory will fulfill the exacting demands of the task for which it was designed.

USE OF SPHERES

Spheres have the following uses:
- Liquid displacement in Meter Prover lines
- Liquid product separation
- Signal actuating device
- Two-phase flow
- Hydrostatic testing
- Liquid removal in gas lines

SPHERE ADVANTAGES

The Spheres will pass through short bends, properly designed tees and fully-opening conduit type valves. They will pass through out-of-round pipe, will wear evenly, and can be wear-compensated by adjusting the diameter by inflating.

SPHERES FOR MECHANICAL DISPLACEMENT METER PROVER

The efficiency of IK-UK spheres in the evacuation or displacement of liquids in the pipeline is well proven by the fact that they are the most popular spheres used for mechanical displacement meter provers.

LINE TESTING AND CLEANING

During the hydrostatic testing of pipelines, spheres are inserted ahead of the water column. As the sphere moves through the line, being pushed by the water, they purge all air from the line. During the testing phase the sphere remains in the line and is unaffected by the test pressures. Following the test, the sphere can return to the starting point, evacuating the test water. In addition, if the line must be freed from all traces of moisture, the same spheres can be used to contain a slug of alcohol between them, absorbing all remaining traces of moisture as they travel through the line. In cleaning pipelines, the use of spheres to confine the batch of cleaning solution permits moving the solution back and forth through the line by alternately applying pressure at each end of the line.

LIQUID BATCH SEPARATION

IK-UK spheres are used for batch separation in lines carrying two or more products. The use of multiple spheres is one of the methods of decreasing the potential of mixing of product batched. Spheres are used between different grades of gasoline, crudes and other liquid petroleum products. Arrival of the spheres at check points is registered by detectors. The signal from the detectors may be used to activate the operation of various types of valves to accomplish a variety of functions.

LIQUID FILLERS

Inflatable spheres must be filled with liquid and sized to the proper diameter. Recommendations are a guide only, experience will allow more accurate sizing for any given line under actual operating conditions.

REQUIRED TOOLS AND ACCESSORIES

- Pressure Pump
- Sphere Inflation Tools
- Sizing Adaptor
- Core Extractor

OPTIONAL TOOLS, PARTS AND ACCESSORIES

- Replacement valve core
- Replacement valve
- Replacement caps
- Sizing Ring
- Storage Net