# OIL AND GAS EQUIPMENT

## Inflatable Bridge Plugs

IPI design and manufacture a range of inflatable bridge plugs which provide a permanent plug with the advantages of small relative run-in diameter, large setting range and the ease of installation which is typical of IPI inflatable packers.

These bridge plugs were specifically designed for plugging of wells prior to abandonment as part of usual cementing procedures.

## Features include:

- · Suitable for setting in open hole or casing.
- Available to suit standard casing sizes of 13 3/8" and 30" diameter.
- Factory set spring check and relief valve systems assure positive pressure shut-in and prevent over-inflation.
- · Shear valve inflation protection system to prevent premature inflation.
- · Lifting points provided on both ends of all plugs to facilitate handling.

Although normally use din conjunction with a cement grout plug set on top of the packer these bridge plugs can also support considerable differential pressure unsupported from either above or below.

### Standard Plugs

The standard range of plugs are principally designed for setting in casing. They employ a fixed end inflatable packer element with synthetic cord and steel wire reinforcement. Specifications for standard 13 3/8", 20" & 30".

## Bridge Plugs are as follows:

NOMINAL SIZE	O.D MM (IN)	RUBBER LENGTH MM (IN)	INFLATION VOLUME LITRES (GAL)	DIFFERENTIAL PRESSURE CAPACITY	
				SUPPORTED KPA (PSI)	UNPSUPPORTED KPA (PSI)
13 3/8"	270 (10.63")	600 (35")	22 (5.8)	6500 (950)	2500 (300)
20"	434 (17.1")	800 (32")	36 (10)	6500 (950)	2500 (300)
30"	434 (17.1")	2000 (79")	400 (103)	2000 (300)	800 (115)

#### Large Expansion Plugs

These plugs are originally designed to enable running through BOP restrictions and set in larger diameter casing.

Owing to their large expansion capability they are also useful for open hole applications.

They employ a sliding end, fully steel wire reinforced, inflatable packer element.

Specifications for Large Expansion 20" & 30" Bridge plugs are as follows:

NOMINAL SIZE	O.D MM (IN)	RUBBER LENGTH MM (IN)	INFLATION VOLUME LITRES (GAL)	DIFFERENTIAL PRESSURE CAPACITY	
				SUPPORTED KPA (PSI)	UNPSUPPORTED KPA (PSI)
20"		1600 (63")	145 (38)	4500 (650)	2500 (300)



	300 (11.8")				
30"	434 (17.1")	2000 (79")	400 (103)	2000 (300)	800 (115)

IPI have recently developed a unique open hole bridge plug.

This plug uses a fixed end inflatable packer element that combines full length slat reinforcement to offer higher temperature and pressure integrity with IPI's standard synthetic and wire reinforcement system.

The standard tool is 168mm (6.614") OD with an element rubber length of 1500mm (59"). It is designed to set at 1000psi in up to 254mm (10") diameter open hole and support at least 7000kg (15,000lbf) in either direction.

Other sizes and capacities are available on request.

