

## HD INFLATABLE RINGS

The High Definition (HD) series of rings has been developed for applications where higher sensitivity and resolution are required. Such applications typically include interface penetrations, testing under supports and localised pitting.

Localised defects (such as pits) will be easier to detect at higher frequencies, however, erosion and certain patches of general corrosion are usually easier to detect at lower frequencies using the adjustable modules. In addition, testing at higher frequencies will cause the range to be significantly reduced in situations when there is an attenuative coating or general corrosion. Therefore, the HD rings accept both HD and Adjustable modules to cover the full frequency range depending on the pipe condition and anticipated defect type. However, HD modules cannot be used in standard EFC rings because there are not enough transducer positions to get reliable results.

The HD inflatable rings are available from 6 inches (nominal pipe size) and above; below this size, HD solid rings are available.



High Frequency Operation



Spring Lock Mechanism



Smart Sensors



Enhanced Circum Resolution



Ring Joining



Pneumatic Operation

## Available Modules:

### HD Modules



Two row fixed space transducer modules with four transducers per module to inspect at a high frequency range, which increases sensitivity to small local defects (pits) while decreasing sensitivity to supports and erosion. These modules require the G4 Mini (Fully Loaded) or the Wavemaker® G4 with the MF option. Key application areas include:

- Inspection for localised pitting
- Pipes with large numbers of welded supports
- Simple supports
- Concrete anchor supports
- Short range inspection

### Adjustable Modules



Two row adjustable transducer modules with four transducer spacing to inspect across a wide band of frequency range (but all below the frequency range of the HD Modules). Key application areas include:

- Standard pipe screening
- Inspection for patches of corrosion
- Buried pipes
- Bund walls

## Specifications:

Number of Channels

16

Nominal Pipe Sizes

6" to 36" (DN 150 to 900)

Operating Temperature

-40°C to +150°C (300°F)

Radial Clearance

63mm (2.5")

Compatibility

Wavemaker<sup>®</sup> G4 (with MF Option) and G4Mini (Fully Loaded)