



Steel On A Reel



FLEXIBLE PIPELINES

Flexible Risers

The growing popularity of flexible risers is understandable thanks to the multitude of benefits they provide over conventional rigid risers.

Lower Full Life Costs

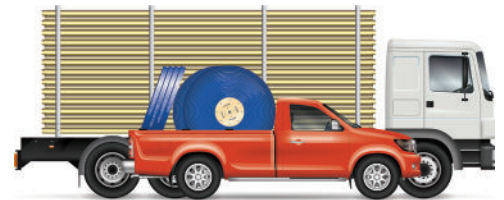
- Simple, rapid installation and retrieval without the need for heavy machinery
- Low cost transportation and ease of storage
- Resistance to microbiological growth and internal scaling, maintaining its optimum hydraulic performance
- Up to 15% swell gives improved flow, lower pressure losses and means downsizing of risers is possible
- 25 year service life with lower ongoing maintenance and replacement costs

Improved Safety

- No need to work under suspended loads
- Eliminates the stored energy safety risk from uncoiling plastic pipe

Logistics

- Small transport and storage footprint allows for lighter vehicles and easier access (200m coils of Wellmaster can often be delivered on a small flatbed)



The Proven Choice Over Time

- **Over 100,000 installations** - Wellmaster has been the brand leader for flexible risers since the 1980s in all sectors internationally
- **Mine dewatering** and **supplying potable water** for public utility use - by choosing Wellmaster you join a long list of prestigious users of flexible pipe who have proven these benefits in service

Installation Methods

One of the key benefits of using flexible riser is the ability to rapidly install and retrieve the hose from boreholes. This can be achieved using a number of methods depending upon operating conditions and technical requirements.



Roller Installation



Specialist Trailer Installation



Crane Installation

Why Wellmaster?

Having made an informed decision to use flexible riser, choosing the right riser is key to making the most of the benefits they afford. Angus Flexible Pipelines has been producing premium flexible risers for 40 years and our Wellmaster hose has been used in over 100,000 installations across the globe. Here's just a few of the reasons why Wellmaster is the first choice for some of the world's most respected companies:

Quality Assurance Guarantee

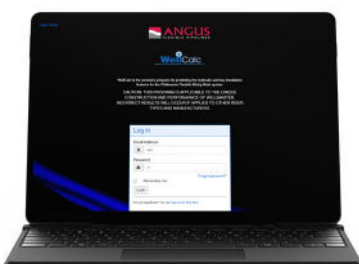
Wellmaster represents the safe choice for flexible riser installations both at installation specification and over the service life of the riser. To support our confidence in Wellmaster:

- **Every metre** is extensively tested and certified in the factory during manufacture and before despatch including burst and tensile load tests.
- **5 year warranty** which can be increased to 10 years, at no additional cost, provided you have evidence of a WellCalc supported design and installation is by an accredited Wellmaster Installer
- **Third Party Accreditation** for safe potable water applications
 - UK : DWI Reg 31
 - Australia : AS 4020
 - N.America (RoW): NSF/ANSI/CAN-61

Ongoing Wellmaster Support Package

Angus Flexible Pipelines provide a comprehensive support package, available to you before, during and after the installation process. This includes:

- **Angus WellCalc** - the only online tool which allows you to confirm your specification before purchase. An essential step in the procurement decision and only applicable and available for Wellmaster Systems
- **Angus Flexible Pipelines Training** - support for users during commissioning, in-service and to accredit Wellmaster approved installers
- **Technical support** available both online and by telephone



The success of a Wellmaster installation is based on correctly choosing the right product and fully understanding the required performance and local conditions. Angus Flexible Pipelines has developed a unique software package for Wellmaster, which takes all these parameters into account and produces a detailed report on the suitability of the proposed set up. The software package, called WellCalc, has been designed to only work with the unique features of Wellmaster to assist you in your system designs.

Register for free at: www.calc.flexiblepipelines.co.uk



Testing

Flexible rising main need to perform without fail in the toughest conditions as any failures can result in costly repairs and losses. Wellmaster is manufactured under Angus Flexible Pipelines ISO 9001 Quality Management Systems accreditation and each length of Wellmaster hose is rigorously tested before leaving our manufacturing facility to guarantee optimal performance. These tests include:

- **Tensile strength test** - ensuring the security of pumps and equipment attached to the riser
- **Burst test** - reliable and safe performance when operating under high hydraulic pressure
- **Abrasion test** - resistance to prolonged deployment in harsh and extreme environments
- **Adhesion test** - to guarantee equipment and user safety when in use within boreholes

Due to this stringent testing at every stage of the manufacturing process Angus Flexible Pipelines offers an unparalleled warranty with 5 years as standard that can be increased to 10 years cover provided you have a WellCalc proven setup and installation is carried out by an approved Wellmaster installer.



Don't just take our word for it...

"The Wellmaster 400 provided a solution for a high pressure installation that no other lay flat hose on the market was able to achieve. In a tough application, it was the most successful aspect of the overall system design."

- S Johnson, General Manager