# Quality and Advantages



### A HISTORY OF QUALITY AND INNOVATION

Designed, developed and manufactured at Piranha® Hose Products, in Cadillac, Michigan, USA, the line of Piranhaflex™ Hydraulic Hose and Fittings incorporates over six decades of high-pressure thermoplastic hose manufacturing experience.



Piranhaflex Hoses are manufactured at Piranha's 178,000 sq. ft. facility in Cadillac, MI.

Founded in 1945 under the name Polymer Corporation, Piranha has a rich history of innovation and a commitment to providing high quality products. Piranha Sewer Hose is regarded as the engineered industry leader, and many of those same technological advancements contributed to the development of Piranhaflex Hydraulic Hose.

## **INNOVATION AT WORK**

With a focus on customer driven innovation, the Piranha Engineering Team is constantly developing new, value-add hose technologies, such as the ability to perform at extremely cold temperatures; their slick, Slither® covers and Piranha's proprietary kink resistant technology.

**Extreme Low Temp. Flex** – All Piranhaflex R7 and R8 hoses are designed to flex at temperatures as low as -65°F, well exceeding SAE low temperature requirements, making them well suited for equipment used in cold storage applications such as poultry plants.

Slither® Cover - Piranhaflex "Plus Slither", PFP Series hoses, incorporate Piranha's "Slither" cover additive. This

allows the hoses to slide more easily through tight spaces commonly found in the long hose bundles on aerial equipment, which includes bucket trucks and scissor lifts — greatly reducing time-consuming installation processes. In addition, the Slither cover further increases abrasion resistance by lowering the hose's coefficient of friction.

Kink Resistant Technology – Piranhaflex PF267 and PF528 Series hoses incorporate Piranha's proprietary, engineered design technology, exhibiting up to 53% better resistance to kink initiation, well outperforming traditional R7 & R8 designs in especially tight bend radius applications such as over the sheaves and pulleys on forklift masts.



PF267 Series vs. similar style R7 hose

Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.





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### THE POWER OF POLYURETHANE

Polyurethane hydraulic hoses are highly regarded for their better abrasion resistance, smaller bend radii and lighter weight, when compared to rubber hydraulic hoses. In addition, their ability to withstand weathering and ozone; and resistance to repeated stretching and compressive forces, even at sub-zero temperatures; makes them a great choice for highly demanding applications.

Polyurethane does not dry rot and will not swell, flake or otherwise degrade after contact to most hydraulic fluids or oils, eliminating the possibility of system contamination.

**Abrasion Resistance** – Polyurethane resists abrasion better than rubber due to its low coefficient of friction and higher tear strength. Piranhaflex hoses with Slither® polyurethane covers possess an even higher level of abrasion resistance due to their enhanced lubricity.

Lighter Weight – Piranhaflex hydraulic hoses range 30-50% lighter in weight than similar rubber hydraulic hoses.

Smaller Bend Radius – Piranhaflex hydraulic hoses are tested at 1/2" SAE 517 bend radius requirements, making them especially well-suited for applications with tight bends. Piranhaflex hoses incorporating Piranha's proprietary Kink Resistant Technology possess an even higher level of kink resistance.

#### ISO:9001 QUALITY ASSURANCE SAE TESTING

Piranhaflex Hydraulic Hose and Fittings are subjected to rigorous testing, unmatched in the industry; including force to bend testing, fitting retention testing, abrasion testing, hose kink initiation testing; as well as meeting and exceeding the relevant ANSI and SAE requirements.

Piranhaflex hoses are validated to the relevant SAE J517 standards at Piranha's state-of-the-art, ISO 9001 registered quality assurance testing lab, following approved SAE J343 testing procedures.

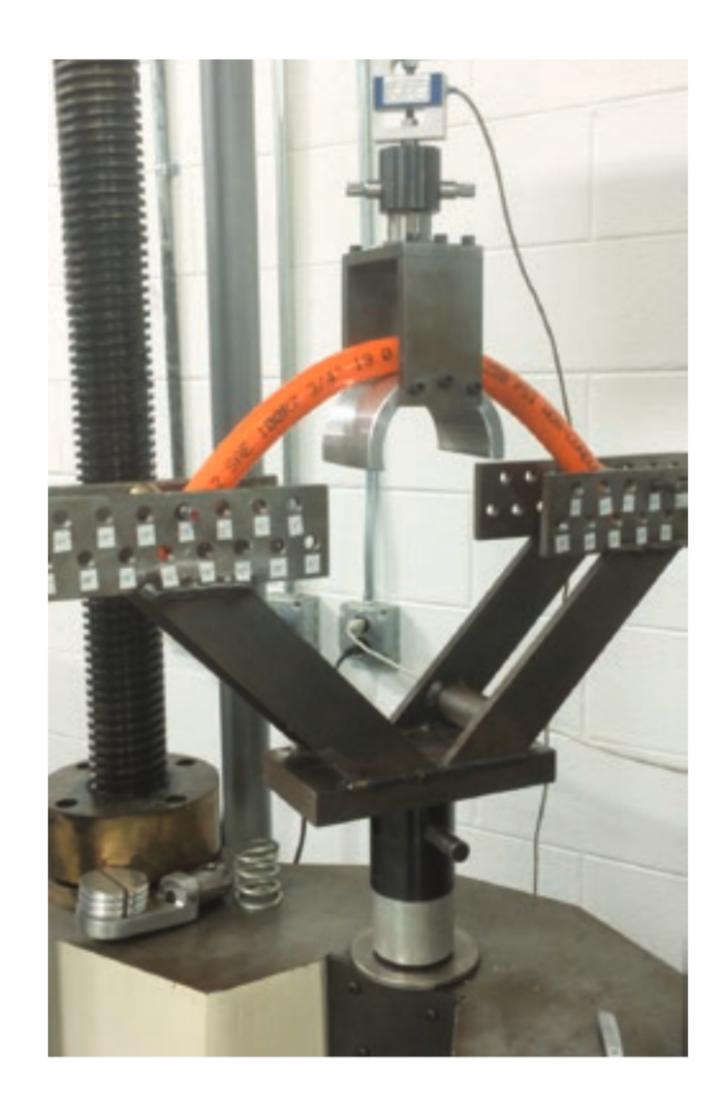
## IMPULSE (PRESSURIZED):

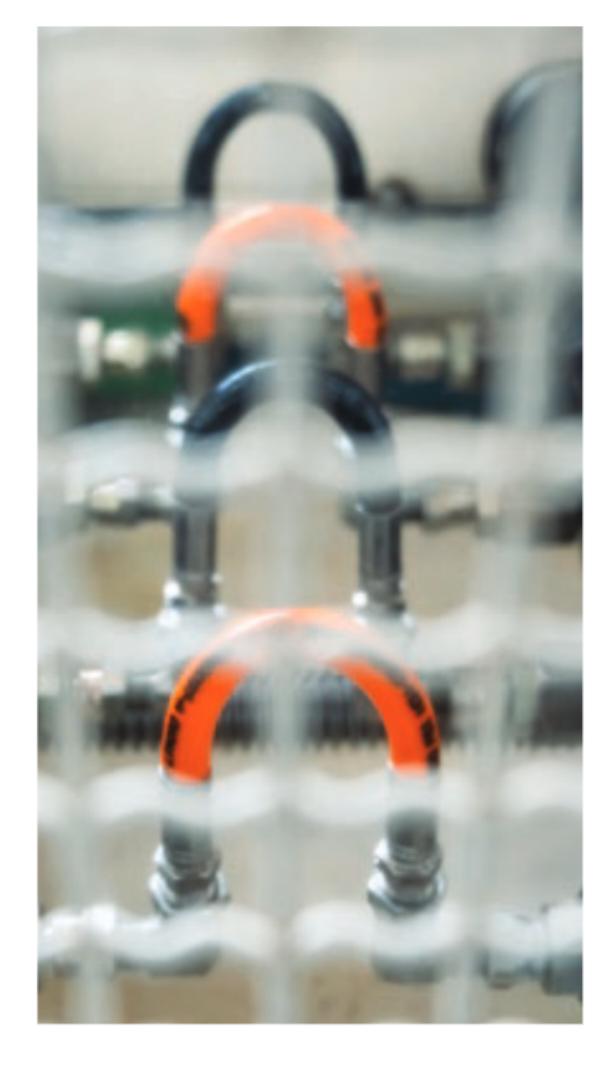
SAE J517	Pressure	Cycles
100R7	125% x WP	>150,000
100R8	133% x WP	>200,000

#### LOW TEMPERATURE:

SAE J517	Temperature
100R7	-65°F*
100R8	-65°F*

<sup>\*</sup>Hoses exceed SAE -40°F low temperature flexibility requirement.







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