

NIRON®

PP-RCT Piping Systems

APPROVED FOR POTABLE WATER



NUPI AMERICAS, INC. was established in North America around twenty years ago in Houston, TX. It has since relocated its North American operations to the low country of South Carolina in a modern manufacturing, warehouse and headquarters site. From this coastal location, NUPI Americas provides sales and marketing activities for the Americas, as well as, pipe extrusion, fabrication and also manufactures pre-insulated piping system products.

NUPI AMERICAS, INC. combines high productivity and constant high quality standards while being fully conscious of the environment.

THE COMPANY



Facility in Early Branch, SC



The synergy between research, production, quality control and post-sales service allowed the company to obtain many international quality certifications for his various product ranges. nupi's market leadership has established our role in extremely competitive and highly technological fields such as the thermo-transformation of plastics and polymers.



Wharehouse in Early Branch, SC

This benchmark is well maintained thanks to high quality products and constant attention to our customers' needs and requirements, and by means of an effective team of people in post-sales service, effective and precise technical assistance and the training of installers.

Customers can rely on the best quality materials and precise manufacture, obtained through completely automated production systems, and continuous on time deliveries that perfectly integrate all business functions in real time.

THE PRODUCT

The **NIRON brand consists of a Random Copolymer Polypropylene (PP-RCT)** pipe and fitting system produced by NUPI AMERICAS, manufactured to ASTM F2389 and CSA B137.11 Standards.

NIRON is a piping system used for all kinds of water applications including hot and cold potable water applications, hydronic heating applications, and both chilled water and cooling tower circulation pipes. The System can be used for large multi-family residential buildings, hotels, hospitals, malls, churches, schools, gymnasiums, cruise liners and merchant ships.

The NIRON System is also used in industrial installations for the conveyance of compressed air as well as a wide variety of chemical substances.

■ ADVANCED PP-RCT MATERIAL

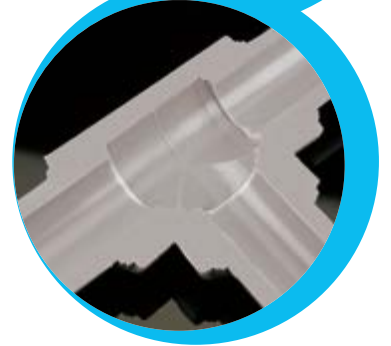
NIRON is manufactured from 100% Beta PP-RCT material, a highly crystalline form of PPR which allows for up to twice the pressure rating at higher temperatures and superior chlorine resistance.

■ ABSOLUTE RELIABILITY

Produced since 1982, the **NIRON System has been sold in all 5 continents**. Over 150,000 miles of pipes and fittings have been shipped with complete customer and installer satisfaction.

■ CERTIFIED QUALITY

The **NIRON System** not only **meets prestigious international quality standards**, but also meets our own benchmarks. Quality to us quality stands for complete customer satisfaction. This is obtained exclusively through the supply of products having features that completely fulfil the application requirements and leave the customer with a desire to use the system again.



■ COMPLETE RANGE

Pipes and fittings - **from ½" to 24"** - are available in a wide range of fittings and joining methods to solve any installation problem.



■ LOW THERMAL EXPANSION

This is obtained thanks to the new composite **MULTILAYER piping** produced with an innovative coextrusion technology. The middle layer is made of PP copolymer reinforced with fiberglass to reduce the linear thermal expansion up to 73%.

■ SPEED OF INSTALLATION

Unquestionably the biggest **advantage of NIRON lies in the speed of installation**.

Due to easy joining methods, time of installation can be reduced by up to 30 to 50%.



THE PRODUCT

■ NO CORROSION OR SCALING

Polypropylene is a poor conductor of electricity, so the NIRON System is cannot be affected by corrosion. Furthermore, thanks to its smooth inner surface, any type of lime incrustation is avoided.

■ ENERGY EFFICIENCY AND SAVINGS

The low thermal conductivity and smooth wall of NIRON allows for considerable energy savings compared to metallic materials and saves on pumping costs.

■ LOW NOISE INSTALLATION

The noise absorption properties and elasticity of this material soften noise and vibrations caused by the water flow and the water hammer effect.

■ RESISTANCE TO EXTREME TEMPERATURES AND THERMAL EXPANSION

The NIRON System is tested to resist temperatures up to boiling water and freezing conditions. NIRON FG piping allows thermal expansion to be reduced to levels similar to copper piping.

■ ABRASION RESISTANCE

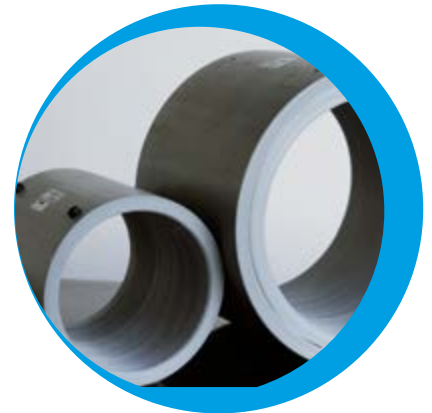
The high resistance of NIRON pipes eliminates erosion problems and allows high speed water flow.

■ NO TOXICITY

The NIRON Systems is absolutely non-toxic, complies with many international health standards and is fully listed for potable water by NSF.

■ 30 YEAR WARRANTY

The NIRON System is covered by third party liability insurance in accordance to EC Standards no. 85/374 and to D.P.R no. 244 dated 24th May 1988 - Italian law.



WIDE RANGE OF JOINING METHODS

NIRON System offers the widest range of joining options of any PPR product line with five primary joining methods and a complete range of fitting sizes. It can be joined by butt fusion and electrofusion through 24”.

SOCKET FUSION

For full pressure joining with a full range of fittings in ½” through 5” sizes. Joints can be made using hand held tools and in large sizes with bench-style tools for maximum effectiveness.



BUTT FUSION

Butt fusion with long spigot fittings starting at 2” and through 24”. Butt fusion is often a more fabrication friendly technique compared to socket fusion in sizes of 2” through 5”, and customers can take advantage of this feature of the NIRON System.



ELECTROFUSION AND ELECTROLET™ WELDING

Electrofusion offers a superior and cost effective ability to solve difficult installation challenges. NIRON is the only PPR system available with a full fitting system allowing electrofusion in sizes of ½” through 8”. NIRON fittings are manufactured using single wire technology, which means welds are fused simultaneously for every elbow, tee and reducer for highly efficient labor rates. NIRON electrofusion may be performed from 10” through 24” using NIRON couplings.



COMPRESSION

NIRON can be joined using a compression method, by the hand tightening of compression nuts of fittings and couplings. A full range of fittings are available in sizes of ½” through 4”. The system is rated to 150 PSI at ambient temperatures, and is rated to 90 psi for temperatures of up to 160°F in sizes through 2 inch and to 90 PSI for temperature of up to 140°F in sizes of 2½” through 4 inch. NIRON compression fittings and couplings may be disassembled and re-used, which adds versatility. Transition couplings are also available for connection to copper and copper-tube size systems.

INSTABRANCH™ AND INSTAHEADER™ WELDING


NIRON offers a full variety of fittings that allow small diameter branches to be readily fused into larger pipes without the expense of adding reducing tees. NIRON has saddles available which allow both socket fusion outlets, as well as long spigot outlets (in select sizes). In addition, saddle parts are available with female threaded adapters, as well as male transition parts to allow for a variety of PEX transitions. Custom headers can be created on site, or in the fabrication shop to prefabricate any kind of header combination that is required. Instabranh welding offers substantial labor savings in comparison to branch installations involving copper or steel piping.



PRODUCT RANGE

COPPER STUB OUT TRANSITION FITTING

CODE	inches
NCUT_L	from ½"x½" to 1"x 1"CTS




COPPER STUB OUT ELBOW TRANSITION FITTING

CODE	inches
NCUTC_L	from ½"x½" to 1"x 1"CTS




GROOVED MECHANICAL COUPLING ADAPTER

CODE	inches
NRV	
STAINLESS STEEL	
SDR 11	from 1½"x 1½" to 5"x4"
CARBON STEEL	
SDR 11	from 6"x 6" to 12"x12"




ALL-PLASTIC UNIONS WITH SOCKET FUSION ENDS

CODE	inches
NBRF	from ½" to 1¼"




UNION W/STANDARD BRASS NUTS AND SOCKET FUSION ENDS

CODE	inches
NCSJ	from ½"x ½" to 2"x2"




INSTABRANCH™ WELDING SOCKLET W/SOCKET FUSION OUTLET

CODE	inches
NGS	from 1½"x1½" to 3"x14"




INSTABRANCH™ WELDING SOCKLET W/SOCKET FEMALE OUTLET

CODE	inches
NGSF (W/LEAD FREE BRASS)	
NGSF_L (STANDARD BRASS)	
NGSF_SS (W/NPT STAINLESS STEEL)	
	from 1¼"x1½" to 24"x1" NPT




INSTAHEADER™ PEX ADAPTER (COLD EXPANSION - ASTM F 1960)

CODE	inches
NPGS	from 1¼"x½" to 5"x1"




INSTAHEADER™ PEX ADAPTER (CRIMP RING - ASTM F 1807)

CODE	inches
NPGSCR	from 1¼"x½" to 5"x1"




END CAP

CODE	inches
NCC (SOCKET FUSION)	from ½" to 5"
NCC_M (LONG SPIGOT)	
SDR 7.3	from 6" to 10"
SDR 11 - 17	from 2" to 24"
NCC_MS (SHORT SPIGOT)	
SDR 7.3-11-17	from 10" to 24"




STUB FLANGE

CODE	inches
NCOSA (SOCKET FUSION)	from 1" to 5"
NCRT (LONG SPIGOT)	
SDR 7.3	from 1" to 10"
SDR 11	from 1" to 20"
SDR 17	from 2" to 24"
NCRT_S (SHORT SPIGOT)	
SDR 7.3	from 4" to 10"
SDR 11	from 14" to 20"
SDR 17	from 14" to 24"




BACKING RING ANSI/ASA 150

CODE	inches
FLAACPP	from 1" to 10"
FLAVN	from 12" to 22"
FLAAC	24"




GASKET LOW - STRESS EPDM

CODE	inches
GRET	from 1" x 24"



ANCHOR POINT


CODE	inches
NAP	from 6" x 12"



ELECTROFUSION FITTINGS


ELECTROFUSION COUPLING

CODE	inches
NME	
SDR 7.3	from ½" to 10"
SDR 11	from 3" to 20"
SDR 17	from 6" to 24"




ELECTROFUSION REDUCER

CODE	inches
NRDE	
SDR 11	from ½"x ¼" to 10"x 8"




ELECTROFUSION 30° ELBOW

CODE	inches
NCEM30	
SDR 11	from 3" to 8"




ELECTROFUSION 45° ELBOW

CODE	inches
NCEM	
SDR 11	from 1" to 10"




ELECTROFUSION 90° ELBOW

CODE	inches
NGEM	
SDR 11	from ½" to 10"



ELECTROFUSION TEE

CODE	inches
NTCE	
SDR 11	from ½" to 8"



ELECTOLET™ BRANCH FITTINGS


CODE	inches
NCOL	
SDR 11	from 1¼"x¾" to 12"x5"
HIGH VOLUME	
	from 8"x3" to 24"x6"
NCOL_PR WITH PEX ADAPTER	
SDR 11	from 1¼"x½" to 12"x4"
NCOLF_F FEMALE THREADED	
SDR 11	from 1¼"x½" to 12"x4"
NCOLM_F MALE THREADED	
SDR 11	from 1¼"x½" to 12"x 2"
NCOLVPR W/VALVE PEX ADAPTER	
SDR 11	from 1¼"x½" to 12"x1"
NCOLTLV W/VALVE PEX ADAPTER	
HIGH VOLUME	
	from 14"x 2" to 24"x3"



VALVES


PPR TRUE UNION BALL VALVE - SOCKET ENDS

CODE	inches
NRSPPRCT	from ½" to 4"




PPR TRUE UNION BALL VALVE - SPIGOT ENDS

CODE	inches
NRSPPRCTS	
SDR 11	from ¾" to 4"



STANDARD BRASS - TRUE UNION BALL VALVE


CODE	inches
NRSFN	from 1¼" to 2"



PP-RCT COMPRESSION FITTING


COUPLING

CODE	inches
NKMAN	from ½" to 4"




90° ELBOW

CODE	inches
NKG	from ½" to 4"




REDUCER

CODE	inches
NKR	from ¾"x½" to 4"x3"



90° TEE

CODE	inches
NKT	from ½" to 4"



FOR SPECIAL APPLICATIONS

WE SUGGEST

All-Pro
NIRON



NIRON Clima
Cool-pro





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