

The global magazine for hose & coupling producers, movers and users



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COVER STORY

ALL HOSE

*Custom Designed for
Your Application*

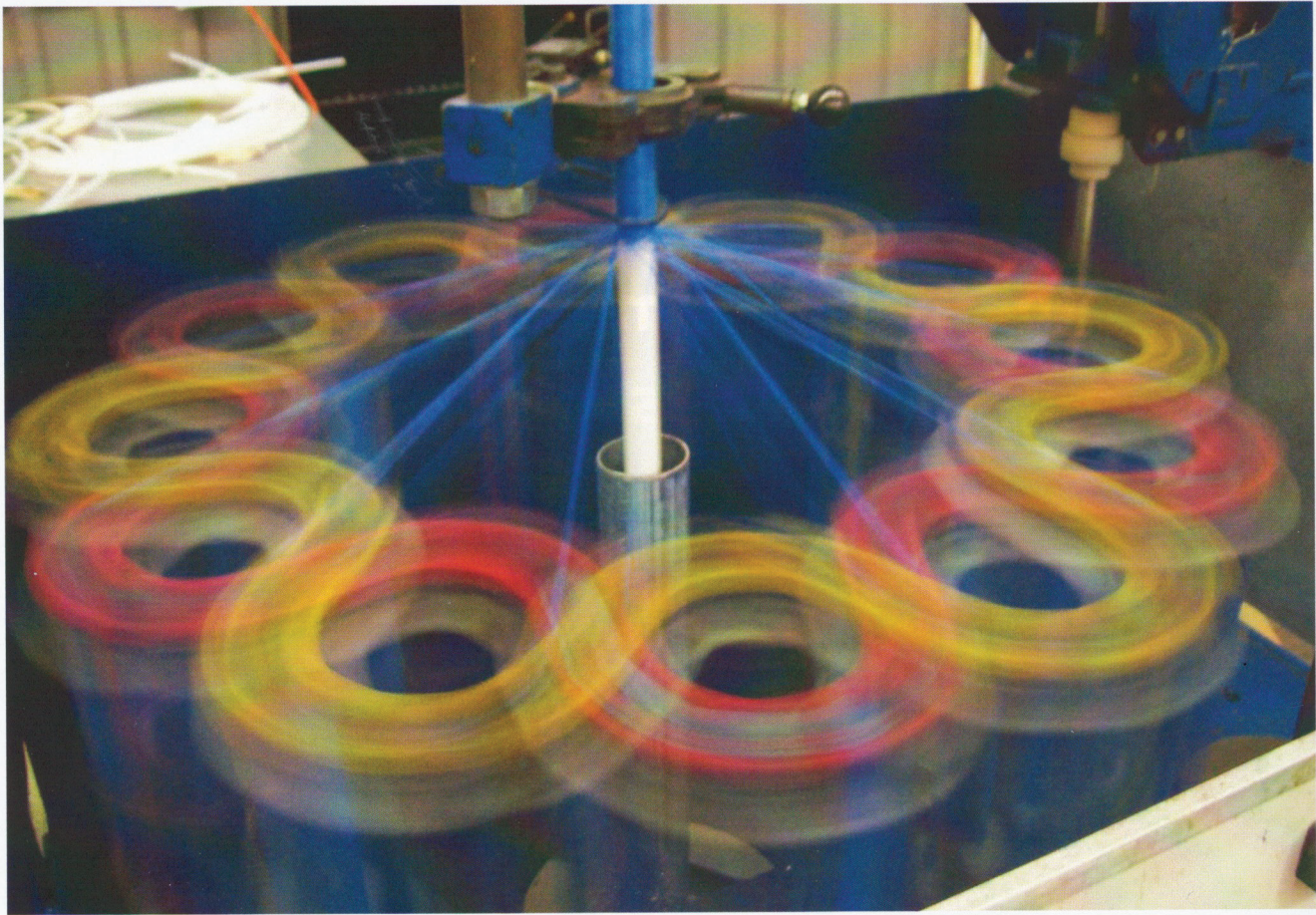
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ALL HOSE: Custom Designed for Your Application

All Hose Inc. are experts in the PTFE industry. Established in 1994, the company manufactures medium to high pressure smooth bore and convoluted PTFE stainless steel braided hoses, specialty extruded coverings and stainless steel tube fittings. Supplying bulk and assembly hose to a robust distribution network, which includes industrial distributors throughout North America and specialty OEM markets, the All Hose team possesses the skill and experience to provide flexible solutions for the most unique conveyance applications. The company services various industries, from injection molding, semi-conductor, turbine and solar to automotive, food processing, pharmaceutical and chemical.

Hose & Coupling World had the pleasure of speaking with Kevin McCoy, Sales and Marketing Manager/ New Product Development at All Hose, at their facilities in East Longmeadow, Massachusetts, USA, to learn about the company's approach to customer service, their expertise in manufacturing application-specific custom hose solutions and their commitment to continued growth and innovation.

By Melanie Gogan, Editor



Being a full-line bulk hose and finished assembly manufacturer with product design and engineered application services, All Hose stays current through its association with organizations such as NAHAD (the Association for Hose and Accessories Distribution) and its attendance at various industry trade shows. Whether it's the American Manufacturing Summit in Chicago or a pharmaceutical show in New York, McCoy emphasizes the company's focus on learning from OEMs and end users as a means of staying up-to-date on new processes and applications. This provides All Hose the insight required to fine-tune internal processes to further help serve customer needs. "The value gained through our specialty winding, braiding and extrusion processes results in an application-solving product,"

explains McCoy. The ultimate goal, he adds, is to utilize the company's custom manufacturing abilities to produce premium products that ultimately help users avoid hose failures and costly downtimes.

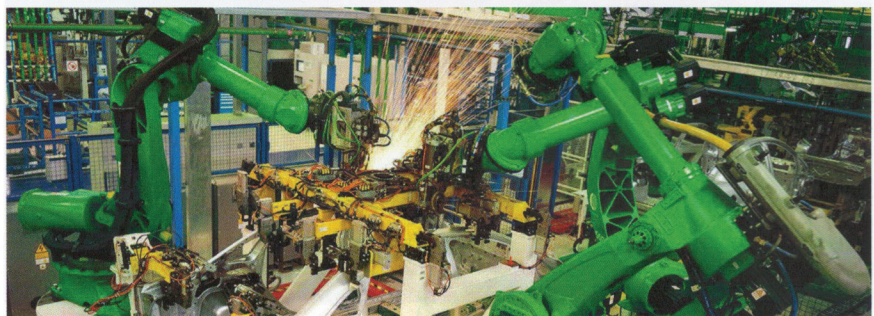
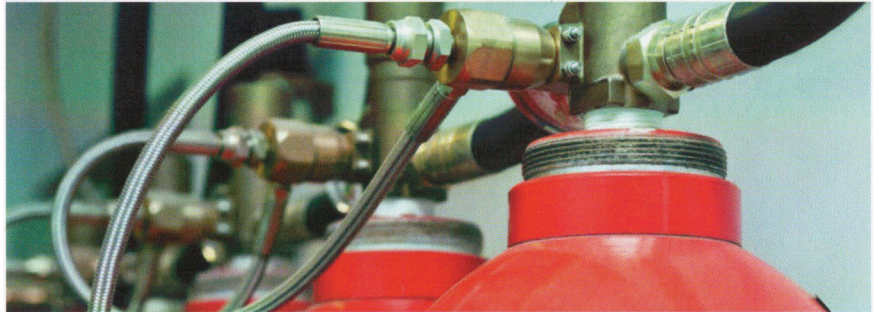
"The value gained through our specialty winding, braiding and extrusion processes results in an application-solving product."

Built to meet the toughest application

McCoy expresses the company's drive to set new standards in quality. While he admits that medium pressure PTFE hose with stainless braid is often regarded simply as a commodity item, he suggests there is a need in the industry to change this. Instead of the "buy it and use it" mentality that lacks focus on longevity, safety and performance, All Hose aims to strengthen individual hose properties in order to achieve greater end results. He explains, "We take the harder applications and we do custom blend braiding and value-added coverings to extend the life of the product." Through these unique processes, the All Hose team is able to increase hose flexibility and ultimately provide customers with a longer-lasting product, capable of withstanding higher temperatures and pressures.



Extreme Flex hose



Why choose PTFE?

PTFE, or Polytetrafluoroethylene, commonly referred to by the recognized brand name, Teflon®, has qualities ideally suited to various industrial processes. McCoy highlights the major advantage of PTFE being its ability to withstand extremely high temperatures – close to 500°F. Another key benefit, says McCoy, is its low coefficient of friction, or its "slickness." Likened to a miracle chemical, McCoy explains how PTFE's slick material property, offering virtually no friction or resistance, is a major benefit when dealing with abrasive media. He points out, "If you have sticky glue and it's heated, PTFE is what you are going to want to use to transfer your product." With a variety of studies attributing hose failure as one of the leading costs associated with downtime and scheduled maintenance, McCoy adds that PTFE assemblies have proven to be the most reliable under extreme conditions. He further adds that the combined temperature and abrasion resistance benefits of PTFE, complemented by All Hose's specialty reinforcement options, results in a hose

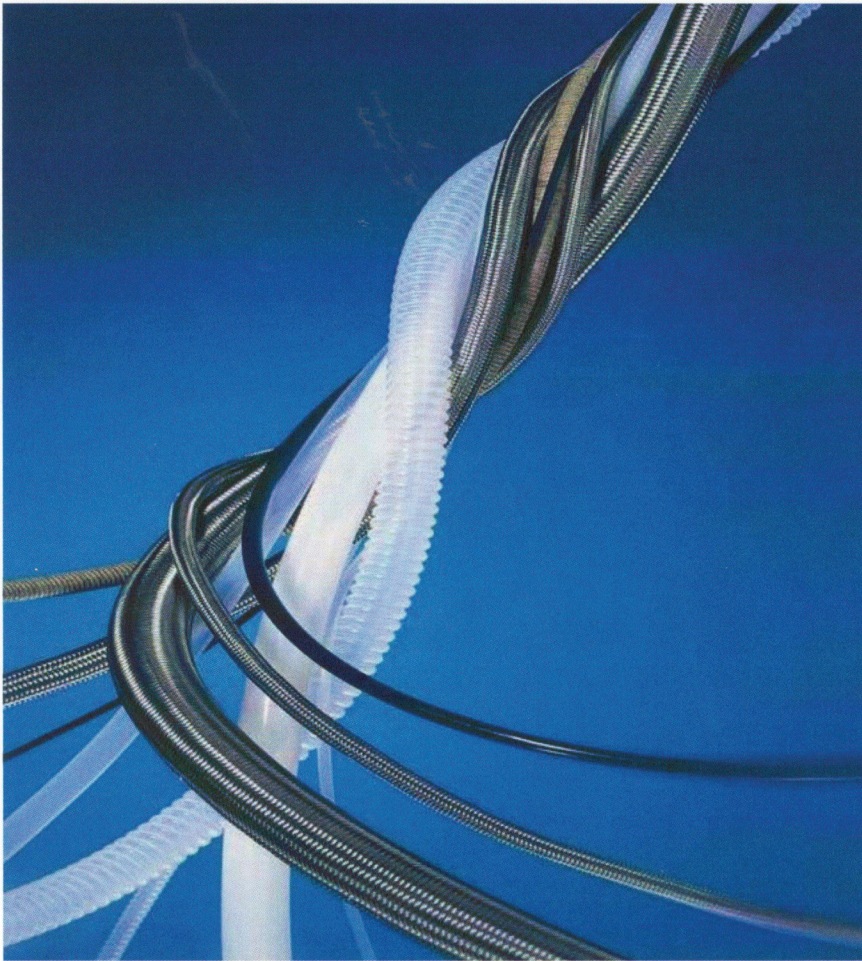
capable not only of attaining ultra-high pressures, but delivering ultra-high performance.

The Extreme Flex advantage

What sets All Hose apart? The company has developed the unique Extreme Flex hose, a highly flexible hose designed for the most severe applications, for which PTFE smooth tube is ideally suited. Featuring PTFE conductive smooth tube with stainless steel braid, an extruded silicone cover that insulates heat and a polyester braid for high abrasion guard, this hose is as reliable as they come, with a heat rating up to 450oF. Compared to a rubber hose, explains McCoy, the weight reduction offered by the Extreme Flex hose makes it easier to transport and greatly facilitates operator use.

McCoy provides an example, comparing the use of traditional rubber hose to Extreme Flex hose. The tire presses used in any manufacturing process work by applying steam to cure the rubber, water to cool the die and compressed air to blow the water out of the die prior to reintroducing steam for





the next cycle. This constant thermal cycling fatigues a traditional rubber hose prematurely, contributing to increased downtime and replacement cost. With *Extreme Flex*, the multi-layered design absorbs the temperature and pressure, extending the hose life well beyond the next planned preventive maintenance date.

Application-based product solutions

Manufactured entirely in-house, All Hose provides a versatile product line, including medium and high pressure smooth bore and convoluted transfer hoses, specialty extruded covers and fabric braids, and corrosion resistant stainless steel tube fittings. The workhorse of the industry, the company's medium pressure PTFE extruded tube with high tensile stainless steel braid cover is manufactured to SAE 100R14 specifications and ideally suited to a wide range of industries. All Hose's lightweight, high pressure hose is designed with the same reliable smooth tube and carbon impregnated tube for static dissipation, along with a densely packed stainless steel braid, ideally suited for high pressure demands and

challenging conveyance media and environments. Finally, their convoluted transfer hose provides unique PTFE helical low-profile convolutions with multilayers of fiberglass and stainless steel braid, to create a highly flexible hose, particularly useful in confined spaces and other applications that require a great deal of flexibility.

Custom extruded coverings

The ability for distributors and specialty OEMs to choose custom coverings helps All Hose ensure that their product meets and exceeds necessary requirements. To this end, users are encouraged to examine their options and choose the covering that best suits their application.

Silicone

- Integrally extruded over smooth bore hose up to 12
- Standard colors of red, white and blue "NSF"
- Provides a margin of safety where steam or hot oils are conveyed to external contact (400o F).
- Improves flexibility, kink resistance and hoop strength

Santoprene

- Produced in black or blue in sizes up to 12
- Good abrasion resistance and chafe guard qualities
- Resistant to UV, ozone and most alkalis and acids
- Improves bend radius and increases cycle life

Hytrel

- Produced in glossy black
- High durometer provides greatly improved abrasion resistance compared to natural rubber x8
- Improves hose life under severe conditions

PVC

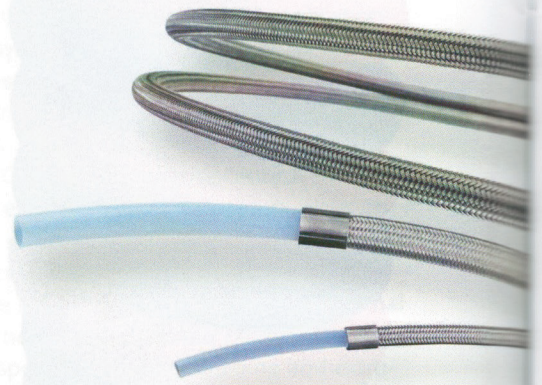
- Clear covered for auto sport market

Poly braid

- Braided directly over medium pressure hose
- Increases bend radius, hoop strength and kink resistance
- Excellent abrasion resistance and safety feature benefit
- Protects against stainless steel under braid from fraying and poking

Certified for performance

All Hose performs product testing aimed at meeting and exceeding national standard SAE (Society of American Engineers) guidelines, including scheduled impulse testing, cycling, aging and more. McCoy explains how every hose falls under a different category. For All Hose, that's SAE 100R-14, which covers the PTFE component of the industry standard. In accordance with All Hose certification **NSF/UL 1889** and ensuring that **ISO 9001:15** standards are always met, All Hose administers a training certification program that includes Extrusion, Braiding, Assembly H P, Assembly General



and Supervisor General, ensuring a high level of technical knowledge and skills are imparted to employees. This is further reinforced by outside associations, like NAHAD, says McCoy, through the company's adherence to the Hose Safety Institute's national safety guidelines for hose distributors.

R&D initiatives

"We are driven by application problems," says McCoy. "If we come across an industry that we know has chronic premature failures from using a rubber hose for instance, we will evaluate the application and look for a solution." He further explains how All Hose looks at all the factors that are unique to a specific application, such as pressure, temperature, cycles and unique routings, and incorporates that information into a research endeavor. At the end of the day, if a new product design will result in heightened performance for a specific application, this merits further product development. "That's the fun part of the business," he adds. "That's also how you end up with a product like Extreme Flex!"

Combining quality products with a delivery program that satisfies customer needs – namely bulk hose in two to three days, assembly hose delivered in one week and a guaranteed 30/60/90-day kanban stocking program for blanket orders – is the reason why All Hose continued to expand its network. Whether it's filling an order for Apple semi-conductors or delivering hose products to M&M Mars in Kansas, the company stays immersed in product development



"Pride in craftsmanship results in quality products and customer satisfaction that can be relied on."

and custom application problem solving. The company's commitment to R&D initiatives, McCoy asserts, contributes significantly to the company's continued success. "That is what allowed us to create the Extreme Flex hose... and what will help us to

continue designing innovative products in the future," he concludes. For McCoy, All Hose is well on its way to further increasing brand recognition for years to come, through problem solving initiatives that spark product development.



ALL HOSE AT A GLANCE

Company name:	All Hose Inc.
Years in business:	26 years
Headquarters:	341 Shaker Road, East Longmeadow, Massachusetts, USA
Product offerings:	Medium to high pressure and convoluted PTFE stainless steel braided hose, extruded coverings, tube fittings
Industries:	Semi-conductor, injection molding, turbine, solar, automotive, food processing, pharmaceutical, chemical and more
Website:	www.allhose-inc.com

