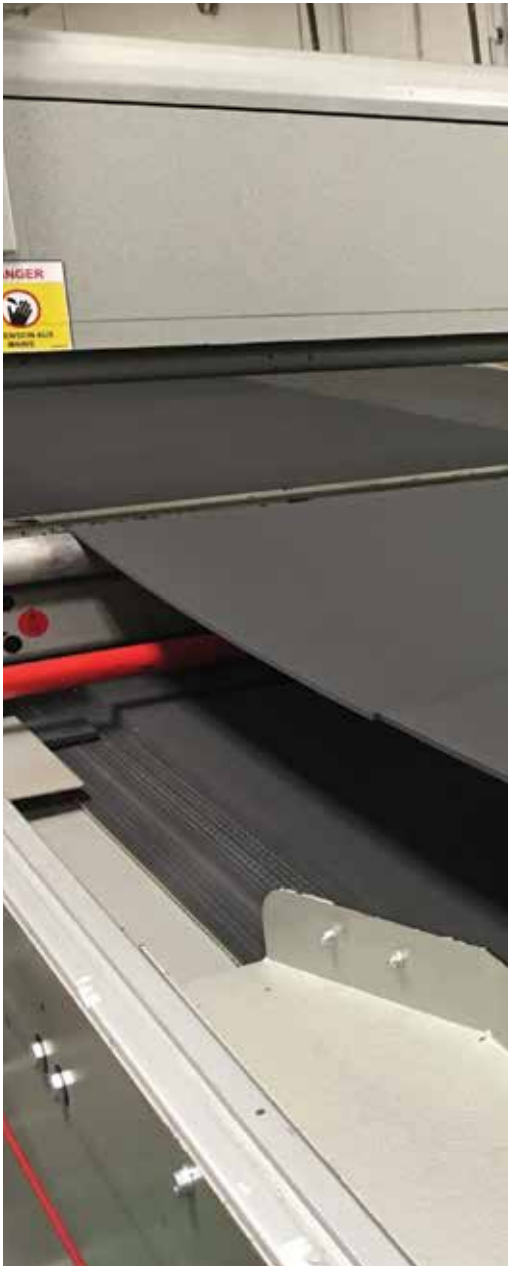


CASE STUDY

Sealing Gaskets for the HVAC Industry

A large OEM converter was seeking to quickly manufacture gaskets for an upcoming HVAC mechanical system being installed on a new building project. Armacell's Monarch® closed-cell EPDM/CR/SBR product supplied through Worldwide Foam was the just-in-time answer to a tight delivery deadline and cost-conscious customer. Learn how easy-to-convert Monarch foam is the material of choice for OEM converters needing a quick, efficient, and quality solution for gasket production. **Armacell in action.**

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 **armacell**[®]
Monarch[®]

Worldwide Foam and Armacell Supporting OEM Converters

Project:

Supplying continuous rolls of closed-cell foam material for HVAC gasket and seal manufacturing.

Location:

Elkhart, Indiana

Customer:

Worldwide Foam

Challenge:

Providing a competitive price coupled with a short fulfillment time frame to support an OEM converter's HVAC gasket manufacturing for a large mechanical system install in a new building in the Midwest of the USA.

Solution:

Utilize energy-efficient and regulatory-compliant Monarch material processed into a longer linear foot roll by Worldwide Foam that reduced setup waste while improving machine run time which ultimately increased production savings.

Original Equipment Manufacturers (OEM) converters understand the importance of using high quality engineered foams from dedicated suppliers to ensure their products are meeting performance, supply and regulatory compliance standards. In 2020, when a high speed OEM converter in North America reached out to trusted converter and supplier, Worldwide Foam, seeking a product solution for HVAC sealing gaskets, it was

clear only one product would win the bid, Armacell's Monarch 5031. Worldwide Foam was able to successfully provide competitive pricing to the customer while meeting the demand of a short shipping time frame due to their increased roll length processing and their progressive just-in-time (JIT) inventory stocking procedures.



SPEED AND COST EFFICIENCY COUNT

OEM's are capable of processing closed-cell EPDM/CR/SBR foam quickly but often they can have difficulty finding a reliable material supplier who can accommodate a quick shipping turn-around within their price requirements. Armed with the knowledge of Armacell's products and efficient internal inventory processes, Worldwide Foam was secure in knowing they could successfully complete this request which called for approximately 22,000 linear feet of Monarch 5031 foam rolls. Traditionally, the linear footage of a single roll of Monarch is limited by a supplier's skiving equipment, which is used to convert buns into a custom thickness and continuous roll format for high speed rotary die cutting. Fabricators often have to settle for shorter rolls, which increases material change over times, lowering the production throughput and decreasing the overall efficiency.

These particular rolls were needed within a short one week delivery turn around as they were being converted into HVAC gaskets and installed on a mechanical system in a new 114,000 square foot building being constructed in the Midwest. Understanding that this customer needed efficiency, Worldwide Foam converted Armacell's Monarch 5031 buns into a 0.125" thickness, 300 linear foot press-ready master roll on one of their F&K loop skiving lines. When compared to other suppliers and their standard 50 foot roll, the material waste on setup is greatly reduced and

Rubber, one of the primary materials used in the gasket industry, is produced worldwide with over **30 million metric tons** being made in just 2019!

machine run time is significantly improved. This extended roll length option provided by Worldwide Foam translates to a 10% process capacity improvement over an 8 hour shift. The overall revenue per 8 hour shift and the profit per 1,000 pieces also increased by over 20% due to this format. With these production savings in mind, the OEM converter was able to submit the bid with a more competitive price, securing the project.

RISING ABOVE THE REST

By utilizing the specs and performance of Monarch 5031 coupled with Worldwide Foam's longer rolls and speed to market, the OEM converter completed their project on time. Monarch 5031 offered the end user piece of mind knowing that it was UL 94 HF-1 listed and spec'd in by many

of the major US manufacturers. The performance and workability of the material also played a large role in winning the business as the OEM converter was able to meet the rapid lead time and offer a price reduction over current costs. This was a great win for the converter, Armacell, Worldwide Foam, but most importantly for the end user.

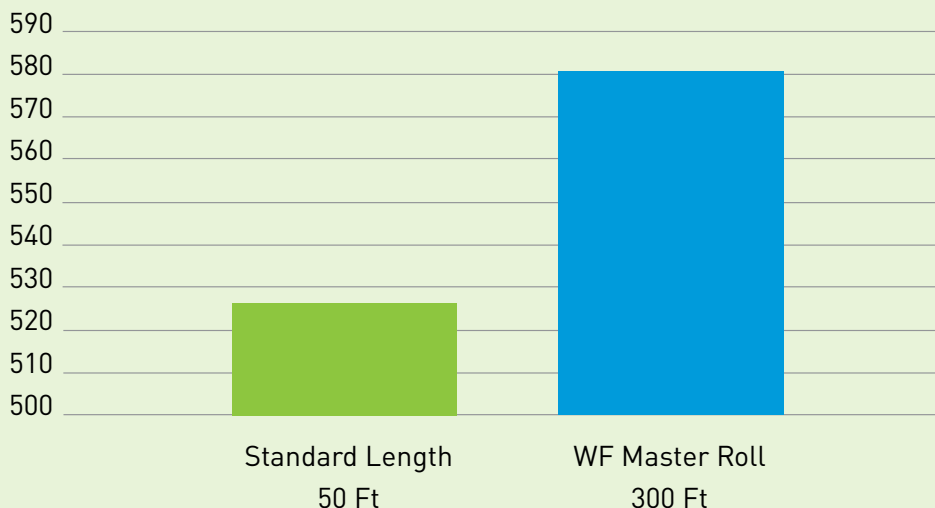
ENGINEERED FOAM SOLUTION

Armacell's innovative elastomeric closed-cell foam solution, Monarch 5031, meets specific design considerations and industry regulations for fabricated products in the OEM market, especially in the automotive and HVAC industries. Our Monarch 5031 closed-cell foam is a blend of EPDM/CR/SBR and is an industry standard. Monarch is spec'd in and meets all the physical property requirements of ASTM D 1056 2A1. It is also UL50E, UL508 and UL48 listed for gaskets and seal inserts and listed on the approved source list of GMW 17408 Class I Type IV (MATSPC). ■

Facts and Benefits

- Flame, water and high and low temperature resistant
- Variety of density, thickness and compression deflection combinations
- Manufactured in blocks (buns) for conversion and fabrication

Linear Feet Processed Per 8 Hour Shift



All data and technical information are based on results achieved under typical application conditions. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. By ordering/receiving product you accept the **Armacell General Terms and Conditions of Sale** applicable in the region. Please request a copy if you have not received these.

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ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With 3,100 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

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