

Driving innovation in high performance rubber compounds

Interview with Marc Poortenga, managing director, Polycomp BV



“When the Polycomp team is faced with demanding challenges, their eyes light up with the drive to create high-performance solutions that truly meet our customers’ needs.”

Based in Vorden, The Netherlands, Polycomp is widely recognised across Europe as a specialist in developing and producing high-performance compounds for demanding and critical applications. The company has particular expertise in rubber compounds utilising high-performance materials such as FKM, FFKM, HNBR, specialty EPDM and (F)VMQ, while also offering customised solutions with PU, NBR, SBR, and NR.

As part of the Dutch enterprise Elastofirm, Polycomp benefits from a growing network of rubber specialists across Europe, providing operational advantages and group support on essential topics such as compliance and ESG (Environmental, Social, and Governance).

What have been the main changes in the rubber compounding market over recent years?

Although my career has mostly been outside the rubber industry, I clearly see a growing emphasis on sustainability and eco-friendly practices. Topics like recycling, reducing carbon footprints, and potential legislative changes such as the EUDR are becoming increasingly important. At the operational level, increases in number of supply-chain disruptions, with *force majeure* and other supply constraints, are putting pressure on the availability of many raw materials. Although the situation has improved since COVID, this is a continuous area of attention.

How has Polycomp adapted to these changes?

Product development is a core part of Polycomp’s DNA, so we are well-equipped to respond to new requirements, including the demand for more sustainable solutions. To stay ahead, we collaborate with knowledge providers, research institutes, and suppliers, working on innovations like de-vulcanisation technology. This ensures we remain proactive in addressing environmental and regulatory challenges.

What are the key requirements for a high-performance compound supplier?

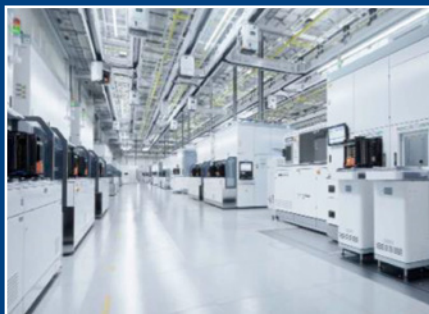
Obviously, this might be different for different players in the market, but for sure it is about supplying high performance materials, like FKM, FFKM, HNBR and specialty EPDM that can be used in very demanding applications. Polycomp has built up years of experience with fluoropolymers and per-fluoropolymers that are highly resistant against various fluids, gasses and high temperatures.

But high performance is not only material related, For Polycomp, high performance also relates to our product development services, particular easy access to R&D capacity and capabilities, rapid responsiveness to new inquiries and fast sample delivery. And thirdly, I connect high performance also to logistics where Polycomp is able to supply within short lead-times customised compounds, also in small order quantities where necessary.

In what other ways does Polycomp strive to deliver high-performance solutions and services?

Supply-chain robustness is a key focus for us. We work closely with our customers to identify ways to be more resilient against disruptions. For example, we discuss strategies like qualifying alternative raw material sources to mitigate risks. While the situation has improved since COVID, we all recognise that disruptions will continue, and it's crucial to decide how prepared we want to be.

High performance is also about the people and what they love to do. When the Polycomp team is faced with demanding challenges, their eyes light up with the drive to create high-performance solutions that truly meet our customers' needs.



Can you produce standard rubber compounds, and how do you handle high-volume requests?

Yes, absolutely! We can certainly also produce more standard compounds and especially if the customers want smaller order sizes, is looking for certain customisation or has a need for specific preforms. We can add a lot of value also to the more standard compounds.

At the same time, if we feel that we are not the right party to deliver the best value to the customer for a specific request, we will relay with our sister companies within the Elastofirm group.

Flevo Rubber Compounding and QEW (both located in the Netherlands), for example, are more focused on high-volume throughput and likely better equipped to supply for high volume applications. That is the benefit of being part of a network of compounders that each have special expertise.

Fluoropolymers are part of the PFAS group of chemicals. Considering the debate around PFAS, how do you see the future of these polymers?

As a responsible supplier, we recognise the challenges associated with PFAS chemicals. On the one hand, we are aware of the environmental concerns surrounding fluoropolymers, particularly their persistence. On the

other hand, we acknowledge that fluoropolymers offer unique properties – such as exceptional chemical resistance, thermal stability, and low friction – that make them indispensable in various high-demand applications where they provide clear benefits and add value.

Polycomp will therefore continue to focus on critical applications in semicon, aerospace, medical, and other industrial sectors. At the same time, the ongoing debate around PFAS drives innovation. Fortunately, innovation has always been part of our DNA. Our product development journey begins with customer requirements and the specific application, enabling us to find the best possible solution, which may not necessarily involve a fluoropolymer.

By addressing environmental concerns, investing in sustainable alternatives, and prioritising critical applications, Polycomp strives to maintain its leadership in the high-performance rubber market while contributing to a more sustainable industry.

Which developments are top of Polycomp's agenda for 2025?

We continue to invest in new equipment that will give us more possibilities to deliver any shape of compound the customer desires, often helping the customer to reduce waste. We will also further strengthen our supply-chain, working with suppliers to introduce new grades, most notably fluor surfactant free polymer grades for FKM.

Other priorities include working with customers and downstream users on recycling options of fluoropolymer compounds and reducing our own carbon footprint. Last year, for instance, we installed a detailed energy-measurement system to collect data on energy-usage at machine level – towards reducing our consumption year-over-year.

How do you expect the market for recycled rubber materials to develop this year?

In general, we expect the market to grow. Within the Elastofirm group, various initiatives have already been launched to incorporate recyclates into our formulations. At Polycomp, we have conducted extensive research together with partners on devulcanisation of FKM and assessing the impact of incorporating different levels of recyclates on the properties of our compounds.

There are several options available which we love to discuss with customers.

FACT FILE

Founded: 1990

Headquarters: Vorden, The Netherlands,

Contact: info@polycomp.nl, +31 (0)575 554 066, www.polycomp.nl

Specialisations: FKM, FFKM, HNBR and (F) VMQ, EPDM, NBR, SBR

Main markets: Semiconductor, pharmaceuticals, medical, food, automotive, chemical/process, oil & gas

International focus: Europe – over 70% of sales are outside of The Netherlands.

KEY PEOPLE



Frank Bloemendaal,
R&D



Roy Wildenkamp,
technical
account
manager



Wanda van Wage,
inside sales
manager

MAIN STRENGTHS OF POLYCOMP

- Expertise in high-performance compounds
- Customisation and flexibility
- Industry-specific approvals and compliance
- Service-oriented, high quality-standards, short delivery times/lead times
- Strong market focus on demanding applications
- Long proven track record in the compounding industry
- Global-reach with local expertise

MILESTONES – RECENT & NEXT

2023: Silam, silicone specialist, joins Elastofirm adding to group expertise and capabilities

2024: Introduction of recipe control system

2024: Four new ISO certificates acquired

2024: Taking over compounding activities Helvoet Rubber & Plastic Technologies

2025: Expansion of pre-forming equipment

