



Sports

Case Study: **Supporting Olympic excellence with high-tear silicone tubes for pole vaulting**

In the world of pole vaulting, the pursuit of perfection is continuous. Modern vaulting poles must strike a balance between extremely light-weight construction and the strength to absorb and return the athlete's energy, propelling them to new heights.

This striving for excellence was displayed globally when Mondo Duplantis set a new World Record at the Paris Olympic Games, clearing an astounding 6.25m (20' 6").

The high-performance pole he used was crucial to this achievement, meticulously crafted by a world-leading pole vaulting pole manufacturer. Our company played a pivotal role in this success by supplying the silicone tubes essential to the manufacturing process of these record-breaking poles.

The Opportunity & Challenge

The customer, a well-known manufacturer of pole vaulting poles, approached us to find a new supplier for high-tear and high-temperature silicone tubes.

A trusted industry contact highly recommended Silicone Engineering for reliably producing different lengths and diameters of tubes.

The main challenge was to create a silicone solution that meets strict quality and performance standards while ensuring consistency across different specifications.

The lab team at Silicone Engineering developed a special formulation that meets all of the customer's requirements. The silicone tubes are formulated to be used as bladders during pole production. They need to withstand high heat while also possessing high tear resistance and maintaining precise dimensions.



The Solution: **suraSil™**

After approving and discussing the next steps, the customer and Silicone Engineering material engineers agreed on the optimal production schedule, promptly mobilising our production capabilities to deliver the silicone tubes according to the required specifications.

Our tubes were initially produced using solid extrusion lines and then cut to the exact lengths needed by our secondary operations team. The product was delivered on time and met the stringent demands of the pole manufacturing process.

The results were nothing short of extraordinary. Mondo Duplantis used the poles crafted with the aid of our silicone tubes to set a new World Record and secure gold at the Olympics. The precision and reliability of our silicone tubes contributed to the poles' exceptional performance, enabling the athlete to achieve unparalleled heights.

Click the links for more information on suraSil applications:

Sports

Vaulting Pole

suraSil™ High-tear silicone tube

Used as pole bladder

Long life service

Temperature Range
 -60°C to 230 °C
 -76°F to 446°F

GOLD