



Dear valued customer,

At Eastman, we are committed to improving the quality of life for consumers around the world. That's possible through innovation.

I joined this company more than two decades ago. In that time, I've seen the **power of innovation** and creativity across multiple regions and in the many industries Eastman serves. I'm reminded every day how we can transform the world through materials by anticipating and finding solutions to the world's most challenging problems.

Today, I'm proud to introduce you to Eastman's newest offering: **Closed C tow**.

This innovative tow design offers improved performance with sustainability benefits. Closed C tow is the direct result of **our commitment to people and the planet**. You'll learn more about its application possibilities and benefits in the following pages.

We're also sharing recent updates from the Conference of the Parties (COP10), held earlier this year in Panama. COP made several decisions to examine the impact of tobacco and tobacco production on the planet, and we believe in the positive outcomes of the steps outlined.

We're eager to create innovative solutions for modern sustainability challenges. Thank you for being part of that journey.

Best regards,

A handwritten signature in blue ink, appearing to read 'Erwin Dijkman', enclosed in a blue oval.

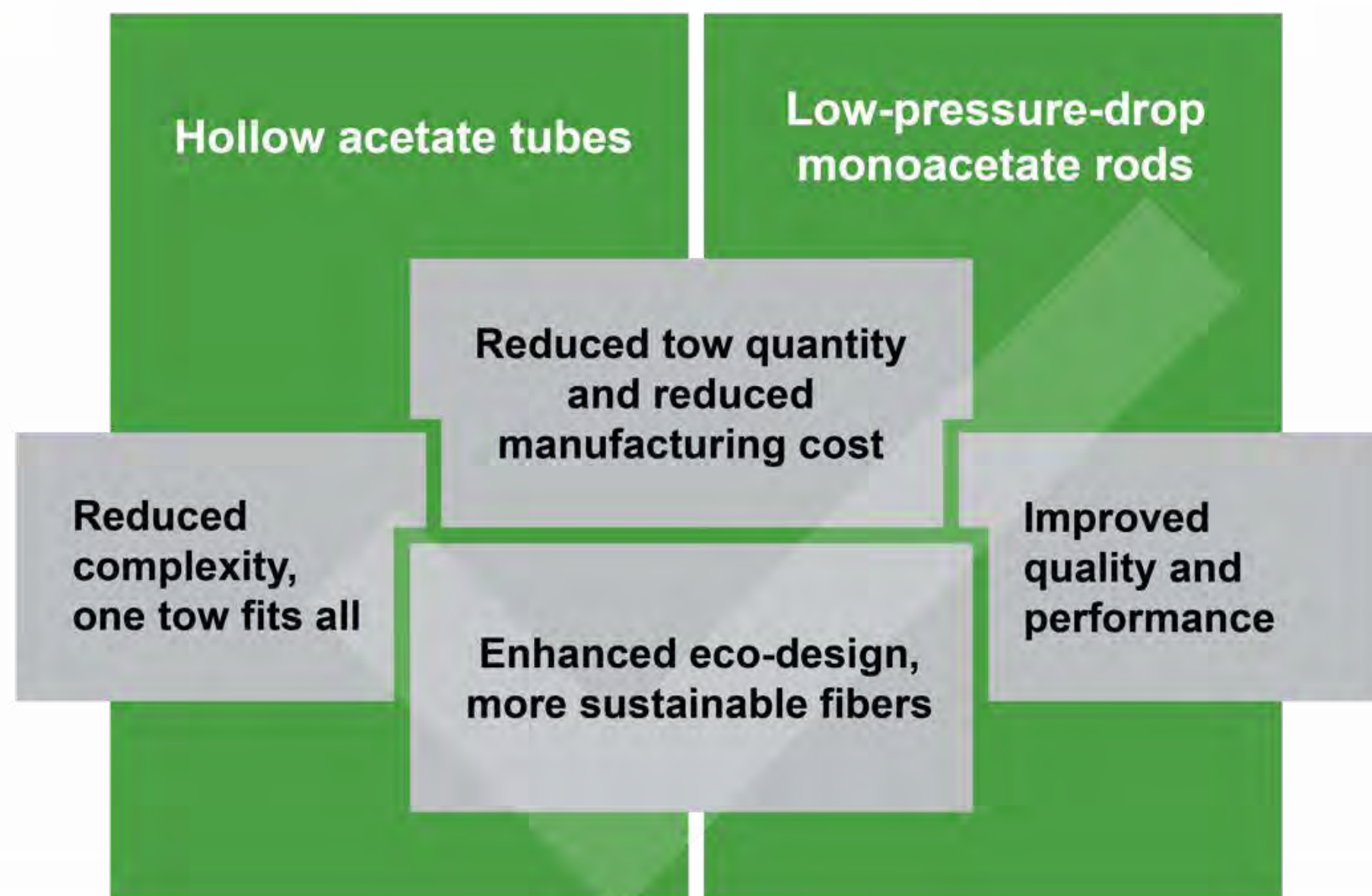
Erwin Dijkman

Division President, Chemical Intermediates and Fibers



Unlock new possibilities with Closed C tow

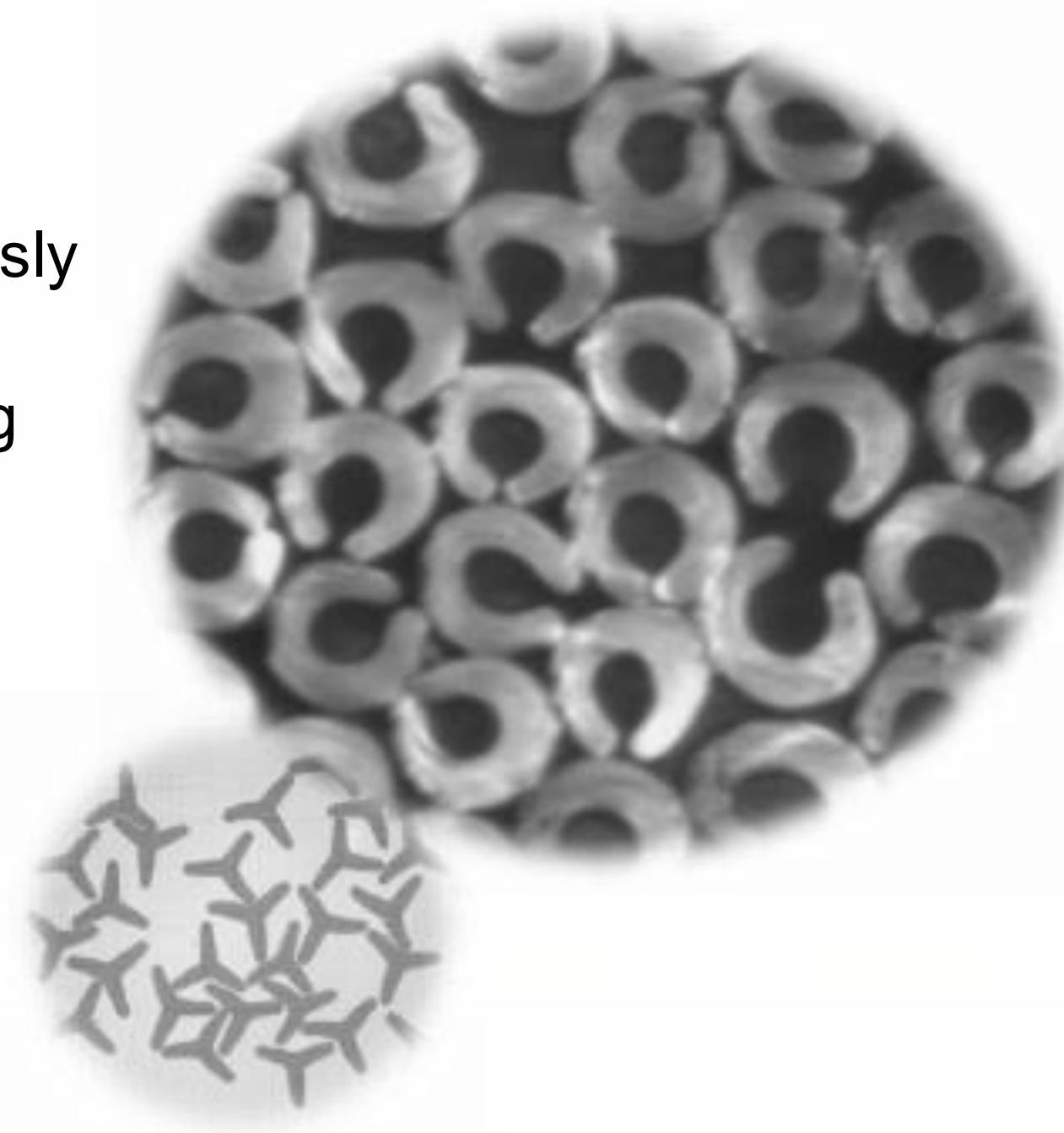
Main applications and benefits of Closed C tow



Experience remarkable advantages with our drop-in solution The perfect fit for diverse applications

Closed C tow is the ultimate choice for a wide range of applications, delivering unparalleled quality, versatility and sustainability. It seamlessly integrates with existing production standards while also reducing tow quantity and promoting eco-design — all at a cost-effective price. Embrace the hassle-free experience of this sustainable, one-size-fits-all solution!

Closed C tow is a cellulose diacetate fiber and is chemically the same as Y-shaped tow, meaning you get the same quality fiber with performance benefits for various applications.



The benefits of Closed C tow

Improved performance for hollow acetate tubes

Less becomes more with Closed C tow

Closed C tow brings forth a host of benefits that positively impact cost, processing, and overall quality of hollow acetate tubes (HATs).

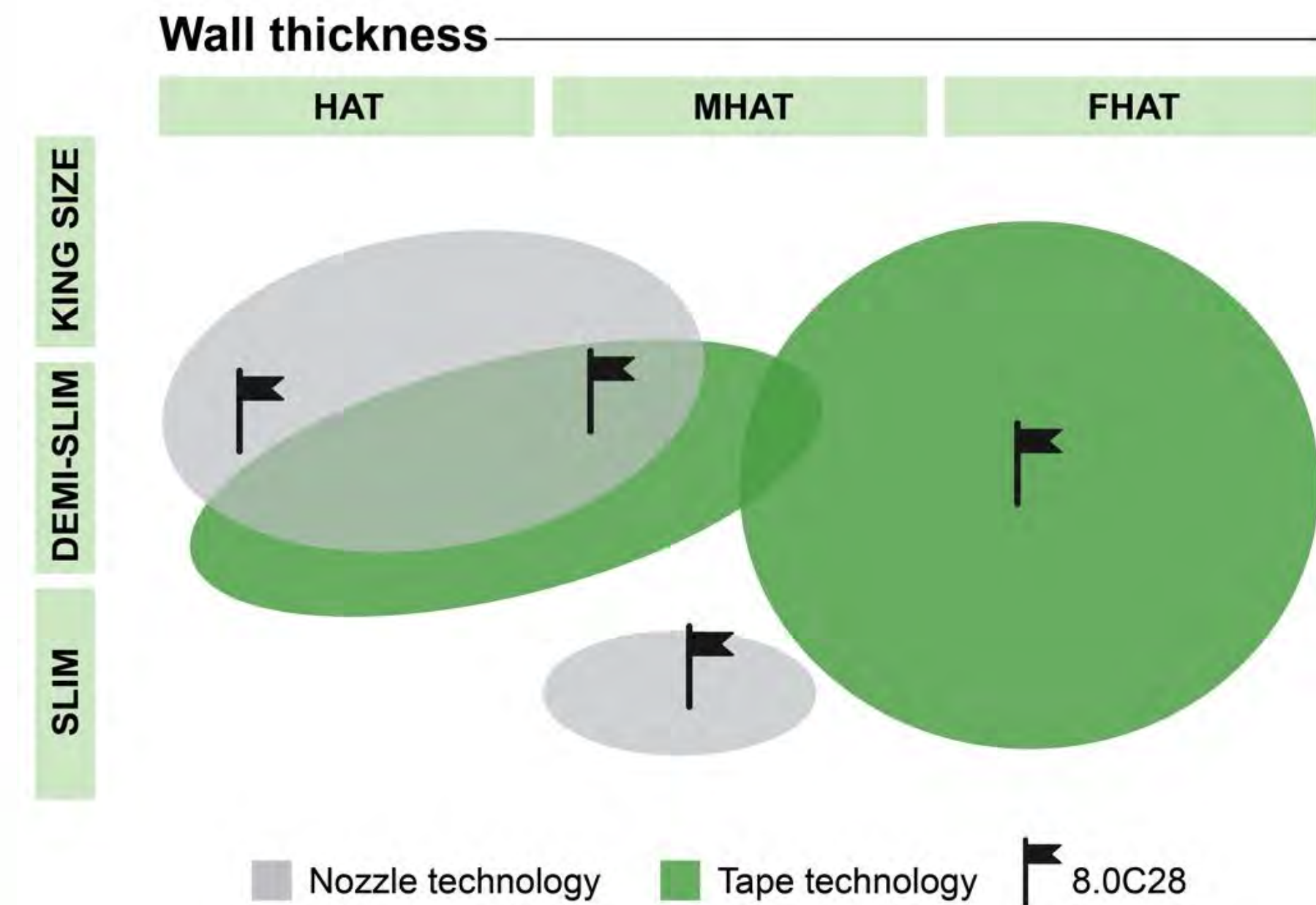
Reduced tow content with same hardness	With it's hollow, yet rigid structure, Closed C tow enables a reduction in tow content (ranging from 2%–5% in some case) without compromising the desired hardness of the tubes, optimizing efficiency and ensuring cost savings while maintaining exceptional product integrity.
Utility savings	For example, you can experience up to 20% lower steam pressure*, resulting in significant utility savings. Reduced complexity translates into streamlined operations, minimizing unplanned downtime and the number of stops along the production line.
Streamlined labor and efficiency	Closed C tow is a drop-in solution, which positively impacts direct labor, with an impressive 15-20 minutes less unplanned downtime (per shift) and reduced complexity in shipping and distribution.
Sustainability advantages	Reduced tow content and decreased utility usage, enabling a lower carbon footprint without compromising product performance. Also, thanks to Closed C tow's innovative horseshoe design, which reduced tow amount, there is a significant decrease in scrap, waste, and disposal requirements, reducing environmental impact.

*Depending on the format and technology

Closed C tow has proven successful across all HAT formats, regardless of the tube making technology, paving the way for a simplified and efficient **"one tow fits all"** design for more streamlined operations.

Figure 1 showcases different HAT formats and the seamless integration of a single Closed C tow item.

Figure 1



The benefits of Closed C tow

Improved performance for monoacetate filter rods

In the realm of ultralow-pressure-drop monoacetate filters, high denier per filament (DPF) grades have long been favored. However, these thicker filaments and narrower tow bands present challenges that can impact manufacturing efficiency and the overall consumer experience. That's where Closed C tow comes into play, offering a range of improvements that address these challenges head-on.

Improved processing and product quality

With reduced quality and maintenance intervention, manufacturers experience heightened levels of efficiency and productivity, while significantly minimizing unplanned downtime. Additionally, the low variable pressure drop and diameter of Closed C tow guarantee improved performance and consistency, ensuring optimal operation.

Enhanced consumer experience

Closed C tow eliminates common issues such as recessed ends and hot/wet collapse, enhancing the overall consumer experience. Consumers can expect filters that perform consistently and reliably, without any compromise in quality.

Sustainability advantages

Closed C tow brings notable sustainability benefits. With direct material savings exceeding 2%, manufacturers can achieve cost efficiencies while reducing waste and disposal costs. Additionally, the diminished material savings have an impact on carbon offsets and the extended producer responsibility cost.



Filters made with Closed C tow are less prone to show recess (left) and hot/wet collapse (right).

Driving sustainable change in the tobacco industry

COP10 decisions reshape environmental practices

The tenth session of the Conference of the Parties (COP10) to the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) took place in February this year. COP adopted several important decisions surrounding the environmental impacts of tobacco and its production.

The COP adopted a decision recognizing links between tobacco and the environment, which urges Parties (i.e., countries which have ratified the WHO FCTC) to “take into account the environmental impacts from cultivation, manufacture, consumption and waste disposal of tobacco products and related electronic devices.” The decision encourages Parties to implement regulatory options to deal with waste from tobacco products. Parties are encouraged to implement related obligations in relation to worker’s rights and the environment.*

Eastman believes examining regulation of waste generation will be positive. As a cellulose acetate tow producer, we find it important to support regulations to have better control over waste generation.

Further regulations would also allow governments to strengthen control of the industry where cellulose acetate tow is heavily affected by illicit trade and help companies find more sustainable solutions.

Eastman EcoTow™ CRT is a more sustainable solution for filter rods, produced from 40% recycled content. This innovative solution for the tobacco industry helps divert waste from landfills and reduces the consumption of virgin feedstocks.**

**Source: WHO FCTC, 2024*

***Via mass balance approach*



COP10
PANAMA
5 – 10 February 2024

OPENING
MESSAGE

CLOSED
C TOW

BENEFITS
FOR HATs

BENEFITS FOR
MONOACETATE RODS

COP 10
DECISION

CONTACT
US

EASTMAN



We hope you enjoyed learning more about Eastman's innovative Closed C tow. If you are interested in learning more or receiving samples, please contact your Eastman representative today.

Contact us

