

Application: 5191

SCHOTT TOPPAC® Nest 160

Page: General Information
Provide information about the company to be considered for the award. If you will be nominating an individual, specify the nominee's employer.
Name of Organization/Company SCHOTT Pharma AG & Co. KGaA
Additional Contacts I would also like to have others receive emails about the disposition of our entries.
Page: Entry Information
Entry Title SCHOTT TOPPAC® Nest 160
Category G03. Technical Innovation of the Year - Biotechnology
Technical Innovation of the Year Submission Format Written Answers
a. Briefly describe the organization that achieved the nominated technical innovation: its history and past performance (up to 200 words). Required SCHOTT Pharma designs solutions grounded in science to ensure that medications are safe & easy to use for people around the world. The portfolio comprises drug containment solutions & delivery systems for injectable drugs ranging from prefillable glass and polymer syringes to cartridges, vials, & ampoules. Every day, a team of over 4,600 people from over 60 nations works at SCHOTT Pharma to contribute to global healthcare. The company is represented in all main pharmaceutical hubs with 16 manufacturing sites in Europe, North & South America, and Asia. With over 1,000 patents and technologies developed in-house and a state-of-the-art R&D center in Switzerland, the company is focused on developing innovations for the future. SCHOTT Pharma AG & Co. KGaA is headquartered in Mainz, Germany & listed on the Frankfurt Stock Exchange as part of the SDAX. It is part of SCHOTT AG, which is owned by the Carl Zeiss Foundation. In light of this spirit, SCHOTT Pharma is committed to sustainable development for society and the environment and has the strategic goal of becoming climate-neutral by 2030. Currently, SCHOTT Pharma has over 1,800 customers, including the top 30 leading pharma manufacturers for injectable drugs, and generated revenue of EUR 899 million in the fiscal year 2023.

b. Outline the nominated technical innovation. Be sure to describe it in terms that someone with limited knowledge of the technology can understand and appreciate (up to 250 words). Required

SCHOTT TOPPAC® Nest 160 improves the fill-and-finish process of pre-fillable polymer syringes. This new product meets the increasing demands for high-speed, large-scale production without compromising compliance or quality. While ensuring efficiency, the SCHOTT TOPPAC® Nest 160 reduces overall manufacturing costs and offers a more sustainable solution for pharmaceutical companies.

While the intellectual property field is highly competitive, our engineers have demonstrated exceptional creativity by developing innovative nest shapes that significantly enhance packaging density. This groundbreaking design is unique and unprecedented in the industry. As a result, we have successfully established our own intellectual property, setting a new standard in nest design.

More specifically, the SCHOTT TOPPAC® Nest 160 increases syringe capacity from 100 to 160, enhancing efficiency by up to 60%, and boosting output by 67%. This improvement results in a 60% increase in manufacturing capacity and 60% more syringes per pallet, leading to a 38% reduction in manufacturing costs. The optimized packaging density of the SCHOTT TOPPAC® Nest 160 improves storage and transportation by reducing the number of pallets needed while reducing waste and environmental impact. With the more streamlined storage and retrieval processes, carbon emissions can be reduced by 17%, while also lowering time and labor costs.

In collaboration with leading machinery providers, the SCHOTT TOPPAC® Nest 160 is fully compatible with advanced filling lines, ensuring efficient and reliable operations. Implementation is straightforward, requiring minimal adjustments to existing equipment.

c. Explain why the technical innovation you have highlighted is unique or significant (up to 250 words). Required

Compared to previous nests, which had a filling capacity of only 100 polymer syringes, SCHOTT TOPPAC® Nest 160 offers two-thirds more polymer syringes in one nest at lower costs. This efficiency gain is due to economies of scale, where increasing production volume decreases the cost per unit. Fixed costs, such as personnel, production support, logistics, energy, and creation costs, are spread over a larger number of units, significantly reducing the fixed cost per unit.

Implementing the system is straightforward, and only small retrofit changes are needed. Furthermore, the speed increase from 36,000 items per hour to 60,000 items per hour can be realized by the team without any increase in the cycle time.

d. Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words). Optional

Webpage Link

<https://www.youtube.com/watch?v=okn6e6Znrq4&list=PLKfiA4Ro5jJlswd2KYK2Uo3Ro8s8O4CUP&index=5>
(<https://www.youtube.com/watch?v=okn6e6Znrq4&list=PLKfiA4Ro5jJlswd2KYK2Uo3Ro8s8O4CUP&index=5>)

Would you like to add an additional webpage link?

No

Supporting Document

No File Uploaded

Would you like to add an additional supporting document?

No

By your submission of this entry to The Stevie Awards, you verify that you have read and agreed to abide by the regulations, terms and conditions of the competition (<https://www.asia.stevieawards.com/rules-and-terms-conditions-competition>).

Terms and Conditions

I Agree