

+++ Presse release from INEOS Phenol and CAC ENGINEERING +++

## **INEOS Phenol starts up Europe's largest Cumene facility and halves CO<sub>2</sub> emissions.**

Chemnitz/Marl, December 7th, 2023:

- The world scale 750,000 kt/a plant reduces CO<sub>2</sub> emissions by 50% per tonne
- Cumene is essential to the production of Phenol used in healthcare and cleaning products.
- Hans-Juergen Bister, Operations Director for INEOS Phenol: "Phenol is an essential component of our everyday lives. To be able to produce phenol with cumene that has a dramatically reduced carbon footprint is a game-changer."
- The plant was constructed in association with CAC Engineering GmbH, who managed the project in close cooperation with INEOS under an EPCM<sup>1</sup> model.

## **INEOS Phenol has started production at Europe's largest Cumene facility in Marl, Germany.**

The world scale 750,000 tonne facility produces up to 50% lower CO<sub>2</sub> emissions per tonne of product. The significant reduction in emissions is enabled by pioneering cumene technology in combination with unique heat integration at the Marl Chemical Park.

The well located plant will use existing pipeline connections between INEOS' phenol and acetone production sites in Gladbeck, the Evonik Chempark in Marl, and the BP refinery and cracker complex in Gelsenkirchen. The site also benefits from the nearby Marl harbour waterway connection. Most of the waste heat from the plant is used for a district heating circle further reducing the carbon footprint of the site.

Cumene is an essential raw material in the production of phenol and acetone, which are used in a wide variety of applications including medical applications ranging from aspirin to throat lozenges and sprays. Their derivatives are also used in contact lenses, artificial joints, dentures and dental fillings, as well as many other applications.

INEOS is the world's largest producer of phenol and acetone, and the largest consumer of cumene. The plant was constructed in association with CAC Engineering GmbH, who managed

---

<sup>1</sup> Engineering Procurement and Construction Management Model

the project under an EPCM model. CAC work included FEED verification, detail engineering, procurement, construction and pre-commissioning of the plant.

**Hans-Juergen Bister, Operations Director for INEOS Phenol**, said: "We are delighted that INEOS Phenol's world scale facility is up and running. The unit strengthens our European Phenol position in terms of feed-stock supply. At the same time it helps to reduce the carbon footprint of the business."

"We are investing heavily in reducing our carbon footprint when producing essential materials. We know our customers are doing the same and supplying them with an equally strong and reliable product but with a significantly lower environment impact is an enormous step forward."

**Mike Niederstadt, Managing Director of CAC** said. "The technical, organisational and above all human input involved here make this a flagship project for CAC. Not only does this project go down in our company history as our largest ever engineering assignment and a fantastic reference, it also represents the outstanding collaborative partnership with INEOS Phenol."

## ENDS

### Media Contacts

Richard Longden ( <a href="mailto:Richard.longden@ineos.com">Richard.longden@ineos.com</a> )	+41 7996 26123
Andrew McLachlan ( <a href="mailto:andrew@mediazoo.tv">andrew@mediazoo.tv</a> )	+44 7931 377162
Alex Williams ( <a href="mailto:alex.williams@mediazoo.tv">alex.williams@mediazoo.tv</a> )	+44 7793 207325
Antje Wappler ( <a href="mailto:antje.wappler@cac-chem.de">antje.wappler@cac-chem.de</a> )	+49 371 6899108

## Note to editors

### Technical highlights

- The reactor and the size of the distillation columns make this one of the tallest plants on the Marl Chemical Park. With a total height of up to 90 metres
- The project included around 3,000 tonnes of steel construction,
- Several hundred control and on/off valves with a weight of up to 6 tonnes per unit
- More than 1,300 field devices for process monitoring and control.
- A total of 1,5 million working hours without accidents were achieved.

### Image

Europe's largest cumene plant from INEOS was planned, implemented and commissioned in Marl together with CAC ENGINEERING, ©Dirk Hanus/CAC



### About INEOS Phenol

INEOS Phenol is the largest producer of phenol and acetone worldwide and the largest consumer of cumene. It is the owner and operator of cumene and phenol plants in Europe, the US and Asia. Cumene is one of the most important raw materials for the chemical industry and is the precursor for the manufacture of phenol and acetone. Phenol and acetone are used in the production of polycarbonate, plastics, phenolic resins, synthetic fibres and solvents. These products find applications in a diverse range of end markets, including the automotive, construction, electronics, healthcare, surgical and fibre industries.

### **CAC ENGINEERING GMBH**

Reliable, experienced and approachable, CAC is an internationally leading plant engineering company in the field of process and chemical engineering. In the business fields of Chlor Alkali, (Green) Power to X, Hydrocarbon and chemical solutions CAC offers the entire range of services of an engineering and plant construction company. This begins with the development of a concept, continues through the planning stage and turnkey construction to the point of commissioning of complex plant and plant units – in close co-operation with the customer at all times. With around 400 employees, 300 at the headquarters in



Chemnitz, CAC has constructed over 500 industrial plants worldwide in the course of almost 60 years.  
More information about CAC ENGINEERING GMBH can be found at [www.cac-chem.de](http://www.cac-chem.de)