# DEN BERK DÉLICE

# Fueling greenhouse operations with combined heat and power

Meeting Belgium's goal of transitioning to 100% renewables by 2050 requires a stronger focus on power flexibility. At Den Berk Délice's greenhouses in Belgium, small distributed power plants are enabling that flexibility using Jenbacher energy solutions and greenhouse balance-of-plant equipment.

Through multi-year service agreements, the Jenbacher engines also are connected to INNIO Group's myPlant Asset Performance Management (APM) platform for enhanced reliability, productivity, and performance.

The high-efficiency Jenbacher engines use pipeline gas to provide heat and power to Den Berk's greenhouse complex and carbon dioxide (CO<sub>2</sub>) to fertilize the tomatoes. The result of continuous enhancements and extensive experience, INNIO Group's Jenbacher 1,500-rpm Type 6 engine technology delivers high power density with low installation costs, and its pre-combustion chamber achieves high efficiency with low emissions.

»For more than a decade, we have been relying on Jenbacher solutions and services to power our multiple greenhouses. Our long-standing relationship with INNIO continues to grow, and we rely on its proven technology and deep domain expertise. The Jenbacher systems provide a bridge to renewable energy and are helping us do our part to help meet Belgium's renewable energy goals.«

Luc Beirinckx, owner, Den Berk Délice

#### **About Den Berk Délice**

With 82 hectares of tomato cultivation, Den Berk Délice is an exceptionally reliable, full-service specialist dedicated to growing, marketing, and innovating delicious, top-quality tomatoes. The company strives to build effective long-term relationships with its suppliers and has made extensive use of Jenbacher technology in pursuit of its mission to let its customers enjoy tomatoes 365 days a year.





#### Plant facts: Den Berk

Engines	6 x J416, 2 x J624
Energy source	Pipeline gas
Electrical output	16,482 kW
Thermal output	20,948 kW
Total efficiency	102.3% (44.5% electricity, 57.8% heat)
Year of commissioning	2017, 2022



# Plant facts: Berkenrijs

Engines	2 x J624
Energy source	Pipeline gas
Electrical output	9,004 kW
Thermal output	11,220 kW
Total efficiency	103.3% (46.0% electricity, 57.3% heat)
Year of commissioning	2021

#### Plant facts: Den Horst

Engines	2 x J624
Energy source	Pipeline gas
Electrical output	8,994 kW
Thermal output	10,702 kW
Total efficiency	102.6% (46.8% electricity, 55.8% heat)
Year of commissioning	2018, 2022



#### Plant facts: Benteltom

Engines	1 x J612, 1 x J616
Energy source	Pipeline gas
Electrical output	4,684 kW
Thermal output	5,748 kW
Total efficiency	93.8% (44.8% electricity, 49% heat)
Year of commissioning	2010, 2020

# **JENBACHER**

#### Plant facts: Beirinckx

Engines	1 x J612, 2 x J624
Energy source	Pipeline gas
Electrical output	10,995 kW
Thermal output	12,832 kW
Total efficiency	101.7% (45.8% electricity, 55.9% heat)
Year of commissioning	2013, 2018, 2022





# Plant facts: Lauwerysen

Engines	1 x J616, 1 x J624
Energy source	Pipeline gas
Electrical output	7,175 kW
Thermal output	8,942 kW
Total efficiency	103.5% (45.9% electricity, 57.2% heat)
Year of commissioning	2015, 2022

#### Plant facts: Salmmeir

Engines	2 x J624
Energy source	Pipeline gas
Electrical output	8,994 kW
Thermal output	10,886 kW
Total efficiency	102.6% (46.8% electricity, 55.8% heat)
Year of commissioning	2017, 2022

### **JENBACHER**

## Plant facts: Truyenberg

Engines	2 x J612, 3 x J416
Energy source	Pipeline gas
Electrical output	7,617 kW
Thermal output	9,744 kW
Total efficiency	101.0% (44.1% electricity, 56.9% heat)
Year of commissioning	2016

#### **Plant facts: Vrouwkensblok**

Engines	2 x J624
Energy source	Pipeline gas
Electrical output	9,004 kW
Thermal output	11,220 kW
Total efficiency	103.3% (46.0% electricity, 57.3% heat)
Year of commissioning	2022







Contact us: www.jenbacher.com/en/contact

#### About INNIO Group

INNIO Group is a leading energy solution and service provider that empowers industries and communities to make sustainable energy work today. With its product brands Jenbacher and Waukesha and its digital platform myPlant, INNIO offers innovative solutions for the power generation and compression segments that help industries and communities generate and manage energy sustainably while navigating the fast-changing landscape of traditional and green energy sources. INNIO is individual in scope, but global in scale. With its flexible, scalable, and resilient energy solutions and services, INNIO enables its customers to manage the energy transition along the energy value chain wherever they are in their transition journey.

INNIO is headquartered in Jenbach (Austria), with other primary operations in Waukesha (Wisconsin, U.S.) and Welland (Ontario, Canada). A team of more than 4,000 experts provides life-cycle support to INNIO's more than 55,000 delivered engines globally through a service network in more than 100 countries.

In March 2023, INNIO's ESG rating ranked first out of more than 500 companies worldwide in the machinery industry assessed by Sustainalytics.

For more information, visit the INNIO website a

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