

# Straw pulp from Mannheim

**Essity is the first and only company in Europe to produce high-quality pulp from straw. At the Mannheim plant, a unique 8,000-square meter facility has been created for this, which sets new industry standards.**

The new pulp being produced from straw in Mannheim is just as soft, tear-resistant and absorbent as conventional pulp made out of wood fiber. It is processed into high-quality personal care products for the Zewa, Zewa Wisch&Weg and Tork brands.

### From field to plant – a genuine loop



The new straw pulp plant is a genuine closed-loop innovation. Accordingly, Essity is the only tissue producer in Europe that is in the position to return the agricultural residual product straw into the materials loop.

- Straw is a residual product from agriculture. Each year, a large amount remains unused.
- Straw is what is left after the harvest of crops. The wheat grain is used for the production of food. We use the straw.
- Wheat is a fast-growing, domestic crop. The straw for the pulp production can be sourced from wheat. This reduces the purchase of wood-based pulp from abroad. The transport distances are shortened; CO<sub>2</sub> emissions are reduced.
- Essity uses an exclusive technology for the production of straw pulp, which uses less energy and water as required by conventional pulp production.
- Essity's innovative straw pulp has an ecological footprint that is 20% lower than pulp made from wood or recycled fiber.

### Data and facts

#### Construction project

- **Investment:**  
EUR 40m
- **Construction start:**  
May 2020
- **Completion:**  
Summer 2021
- **Project team:**  
64 participating companies,  
~ 1,300 participating employees
- **Steel:**  
2,050 tons
- **Pipeline:**  
15 km

#### Facility

- **Facility area:**  
8,000 sq.m.
- **Straw warehouse area:**  
10,000 square meters
- **Production capacity:**  
~35,000 tons per year
- **Wheat straw requirement:**  
~70,000 tons per year
- **Production time:**  
24/7
- **Control signals:**  
11,000
- **Employees:**  
25
- **Management:**  
Dr. Martin Wiens





**A plant inside a plant:** The new straw pulp plant extends over a total of 8,000 square meters across several buildings.



1



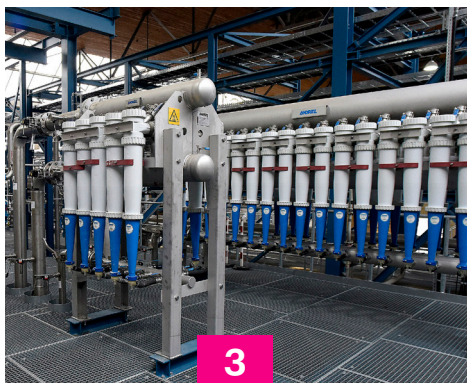
The facility also has a new 10,000-square meter **straw warehouse**. From there, forklifts transport the up to 650 kilogram straw bales on to a **conveyor belt**, which leads directly into the plant. On the way there, the straw is sorted and cleaned in several steps.



2

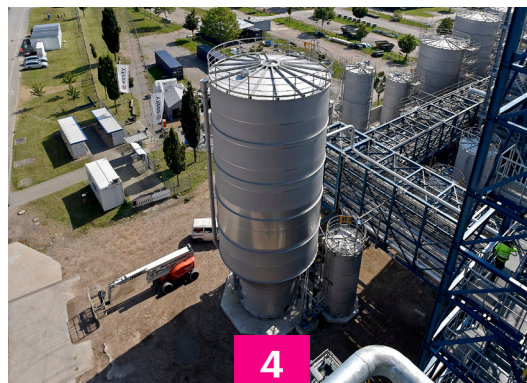


In the so-called **bleaching tower**, the straw is split into its component parts and then bleached. The tower is 30 meters long, 16 meters wide, 34 meters high.



3

Next to the bleaching tower, an **historical building**, a former spare parts warehouse, has been repurposed into a new plant facility using a great deal of creativity. This is where the pulp is cleaned.



4

After cleaning, the pulp is collected in the **pulp storage tower**. From there, it is pumped in liquid form, through a supply pipe of up to 1 km, directly to the paper machine.



5

The by-product lignin, which can be further used for industrial applications, is concentrated in the **evaporation plant**. The facility is 18 meters long, six meters wide and 30 meters high.