

Case study



A hemp pioneer labeling

When traceability is a target

Cannabis is "in". Adults in Germany are to be allowed to grow and consume cannabis in defined quantities. Plans intend as well in-control distribution in licensed stores. As a crop, hemp is as traditional as it is versatile.

Bernd Frank processes all parts of hemp since 1996. In terms of quality assurance, reliable container labeling is essential. Labels printed by Mr. Frank with **MACH 4S printers** meet all requirements.



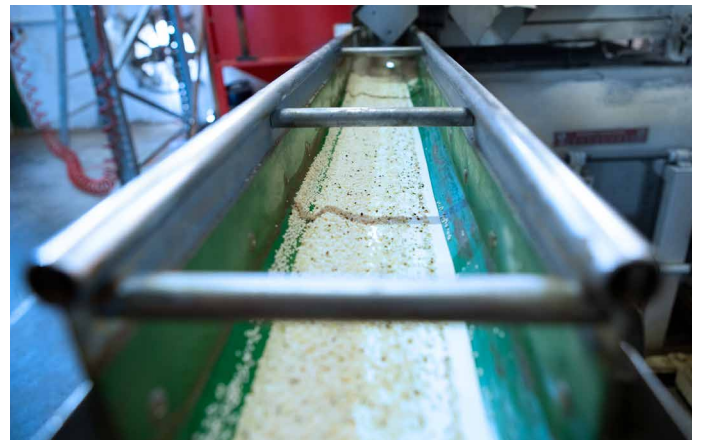
Industrial hemp is no stimulant

Malsch, a city located near Karlsruhe – this is where the **BAFA NEU company** has its headquarters. Its abbreviation implies natural fiber preparation made in Southern Germany. In fact, all parts of hemp are utilized and marketed: leaves, stems, grains, roots. Inside the production building one becomes aware of a sweetish smell in the air. If you are now thinking of cannabis flowers for smoking and expansion of the mind, you are wrong. Industrial hemp consists of less than 0.3 percent psychoactive substance. Only such species are allowed to be cultivated, and only by farms. Cultivation must be registered and is checked by authorities.

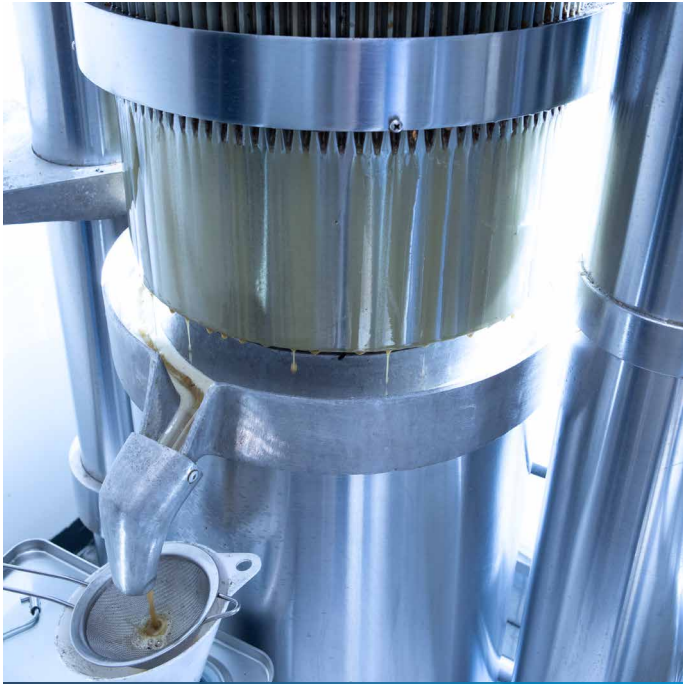
BAFA receives harvested industrial hemp from farmers throughout Europe. Intermediate products are formed in Malsch (seeds and oils) and France (fibers and shives). From these, industries can manufacture their commodities: Insulators and composites, reinforcing fibers in the automotive sector, mulches, bedding and mats for rodents, papers and yarns. Peeled hemp seeds and bruised grains, oils and proteins, fiber flours, breakfast cereals and creamy pesto are stored in supermarkets and wholefood shops. CBD extracted from hemp plants to oils and capsules is in demand in cosmetics and for regenerating body and mind.

Cleaned and sorted

Processing hemp seeds results in noise. This is also the case in Malsch. There is vibration and jiggling all over the place. Seeds are pouring out of a huge big bag into a collector. Conveyor belts and spirals distribute grains into silos, blowers, separators and pressing machines. Depending on the conveying speed and the quality of the seeds, a maximum of 25 tons of grain can be cleaned, packed or pressed into oil, labeled and made ready for transport each day. PCs on workstations display status messages or irregularities in production in real time. BAFA Hempfoods employees are thus enabled to react quickly.



A central link in food and feedstuff made from hemp:
Bernd Frank (second from left) and his team



Organic hemp oil is healthy and valuable.

Dust is removed from grains by intense cleaning, whereas peeling plants pull off shells from grains. Filters ensure low ratio of fines in end products. Processed seeds are packed in bags of up to 25 kilograms, sealed and labeled. There is hardly any waste. Seeds too tiny for processing delight birds in winter. Separated shells are pressed into high-quality oils in further steps. Oils are delivered by BAFA to industries in 1,000 liter drums. Press cake obtained from oil extraction is rich in proteins and well-liked as feedstuff by animals.

An interview

Mr. Frank is an authority and guiding figure in the industry. His unbroken passion for hemp is revealed when talking to him. Labeling his products with cab MACH 4S printers, he claims, provides added value to his processes.

On your homepage you call yourself a hemp pioneer. What is meant by this?

Frank: After 14 years of prohibition, industrial hemp got legal again in Germany in 1996. We were first with processing and also did in seed propagation, sowing and harvesting from the beginning. I think we can rightly call ourselves pioneers.

You have also been involved in harvesters.

Frank: Yes, I have. With partners, I developed the hemp harvester in 2000. Both straw and grains can thus be harvested on a cultivation area in one operation. The profitability of cultivation increases significantly. There are now 20 of these machines in use in Europe.

How do you rate the future of hemp?

Frank: Even after 27 years of intense work on this plant, I am still entirely optimistic. We have achieved a lot during this time. Hemp is coming further and further out of its niche. Due to ecological benefits and versatile use, a respectable growth in European agriculture is emerging. In Germany alone, cultivation has more than doubled since 2018. Nearly 900 farmers are now cultivating industrial hemp on a total area of 7,000 hectares. These are the figures as identified by the Federal Office for Agriculture and Food.

Private consumption is now assumed to complement the industrial sector. Does your industry expect a boom?

Frank: We will see. Medical hemp and cannabis as a stimulant each serve only a certain segment of people. Industrial hemp has touchpoints almost everywhere, if it is at home, in vehicles, food, clothing or health. This is an entirely different extent. Not to forget, of course, environment. Many people are acting more consciously again. Fossil sources of energy have to be conserved. This makes hemp an interesting raw material as well.

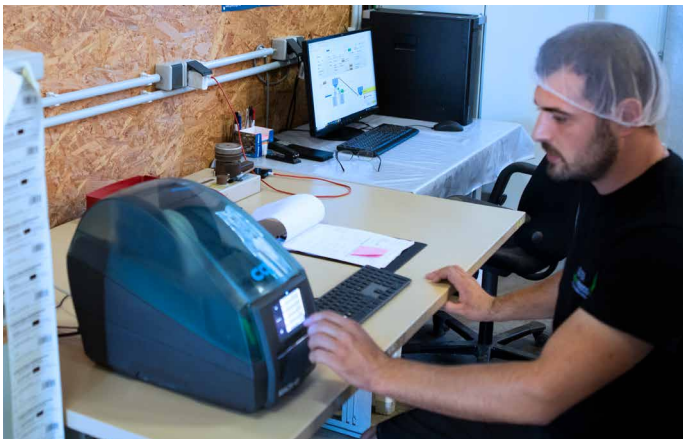
What are the benefits of labeling?

Frank: Labeling is a key aspect. Our processes are certified IFS, Bio, ISO and HACCP. We meet international standards in food safety, quality and hygiene. Our products require traceability. Labeling protects consumers. We label every step from incoming goods to intermediate to end products.



Are you satisfied with the cab services?

Frank: We are very satisfied. The printers do what we want them to do. We can call up labels at any time, print them and stick them on bags, depending on the product we are processing. Thanks to the materials wound on rolls, we are flexible when printing large quantities or individual labels. Reloading label sheets over and over again is no longer necessary. Waste is reduced as well. I like to praise the cab service in particular. We have been taught in simple manner how to operate a device. Our specific demands have been respected at any time.



Printers and labels

Hemp seeds are food and therefore a complex field of application. Product designation, data of manufacturer and production, batch numbers, quantities and weights must be identified on labels of BAFA products. In addition, there are storing conditions, certifications and data relevant to health, such as traces of gluten, cereals, lupins and mustard. All data must be printed visible, reliably legible and waterproof on labels. Thermal transfer printing is able to do so. Such labels have a rather long cycle of life. Print images by MACH 4S printers are high resolution and provide excellent contrast. This fits perfectly well for detailed and small data as required on BAFA labels.

Three brands, one target

A full-range processor of industrial hemp, **BAFA NEU GmbH** is at home in industrial products, seeds and bedding, **BAFA Hempfoods** in food and feedstuff. **Hempartis** dedicates to research and development.

www.bafa-gmbh.de

www.bafa-hempfoods.de

www.hempartis.org



Video of this operation:

www.cab.de/en/bafa-video



See information of printers outlined in this report on www.cab.de/en/mach4s