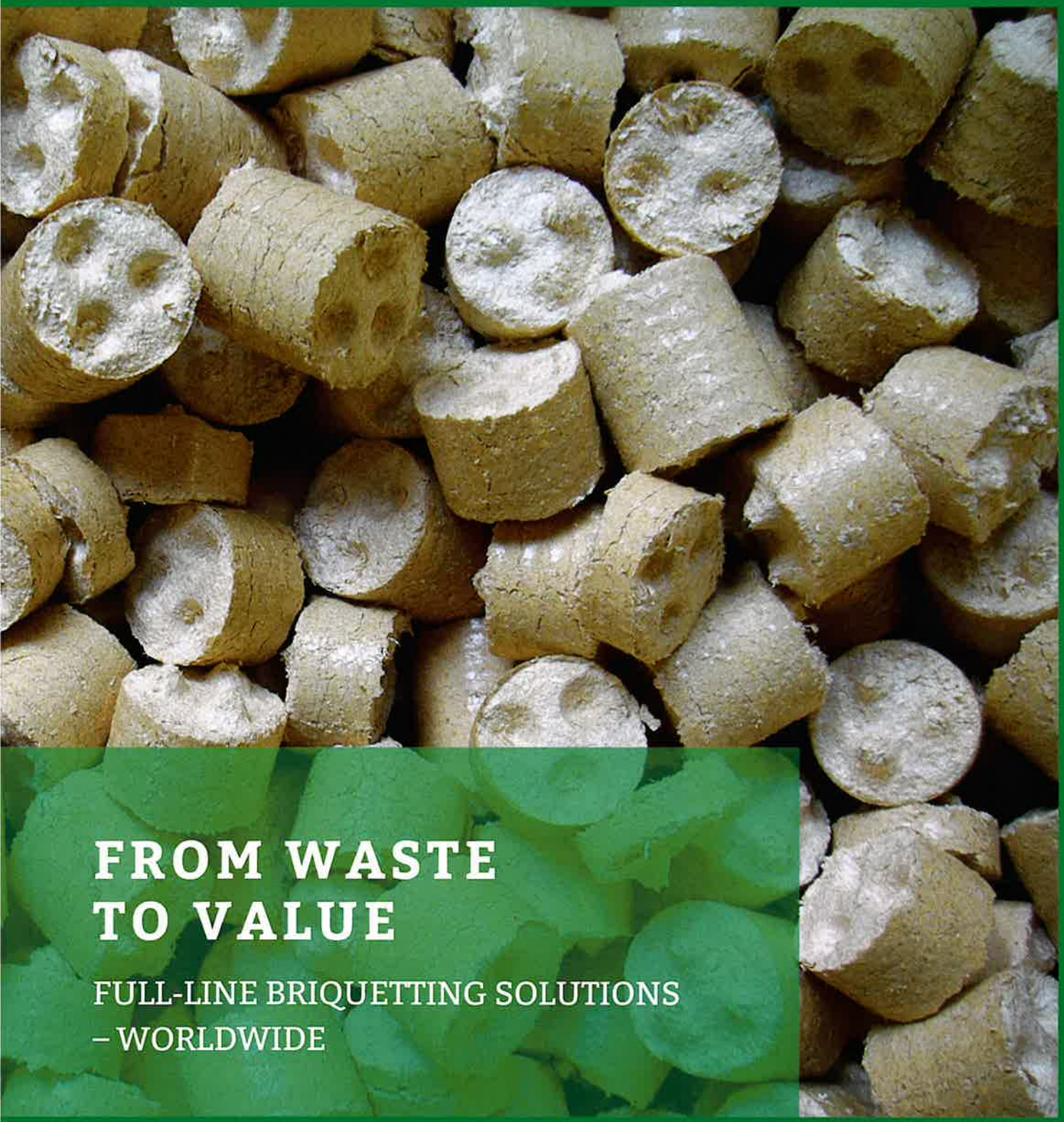

FROM WASTE TO VALUE

FULL-LINE BRIQUETTING SOLUTIONS – WORLDWIDE

C.F. Nielsen A/S
a member of
RUF.
BRIQUETTING SYSTEMS

World Leader in Briquetting Solutions

C.F. Nielsen is the leading manufacturer of mechanical briquetting presses. For raw materials like – agricultural waste, wood waste and other biomass residues and wastes, we offer full-line briquetting solutions all over the world. Briquettes are utilized in big boilers and power plants and log-type briquettes for use in fireplaces and wood-burning stoves by private consumers.

We take pride in maintaining almost the entire value chain inhouse. Our technology is constantly being developed while working closely with our customers, to ensure that our solutions meet their demands and expectations - now and in the future. This philosophy, combined with the supply of briquetting machines for many different applications, permits us to constantly innovate and adapt our machines to the latest market requirements. This also enables us to continue delivering the strongest and most efficient briquetting machines in the world.

"Tell us about your market, your challenges, your story – and our expert staff will determine the best briquetting solution for you and your company."

Founded in 1889

The C.F. Nielsen history spans over more than 130 years and the company has expanded considerably throughout the years.

On July 1, 2018 the German family owned company RUF Maschinenbau GmbH & Co. KG acquired C.F. Nielsen A/S making the two companies world leaders in hydraulic, mechanical and extrusion briquetting technology. As of December 1st 2019, Jesper Stecher Madsen took over the postion as Managing Director and is running the company independently in Denmark.

What makes us so special?

Our dedication, years of experience, industry expertise and adamant commitment to the needs of our customers, as well as:

- We see every project through from idea to completion
- We are briquetting experts able to deliver different technologies including mechanical presses, hydraulic presses and extruder presses
- In-house specialists offer a wide range of services on everything from testing raw materials to after-sales services
- Our sales managers all have international experience and are able to advise you on a wide range of aspects related to briquetting
- We offer you our expertise for complete briquetting plants and we work with the best suppliers worldwide to ensure quality in all aspects for our customers
- Fast delivery of spare parts – we can respond to a breakdown in a matter of hours
- Long life span on machines
- Emphasis on customer ROI
- We strive to secure the future through ingenuity and innovation – and to create value through service

Scan the code and read more:

Global Supplier

At C.F. Nielsen, we are dedicated to serving our customers. Many of our employees have been with the company for more than 10 years, and some for even more than 40 years – acquiring the expertise needed to serve the many diverse markets in which we operate. From Africa to Asia and from the Middle East to North America – our skilled staff is at your service.

High-quality Briquetting Presses

C.F. Nielsen has the world's largest range of Mechanical Briquetting Presses, ranging from 150 kg to more than 3,500 kg/h. The presses are sold all over the world for making briquettes from bi-products from different wood types, agricultural biproducts and other residues. Having established our leading position within the mechanical presses, C.F. Nielsen has expanded the product range with Extruder Presses, enabling us to meet increasing demands.

Is it profitable to produce Briquettes?

Profitability depends on many different factors which will vary according to location, raw materials and the actual amount of raw material. However, the main factors you need to consider are the following:

- Raw material – the cost, type, particle size and moisture level
- Production – power consumption, wages, spare parts, service, potential drying- and downsizing costs
- Logistics – transportation, shipping and storing costs
- Sales price – local sales or exports

There are many factors to analyze which is why extensive research is necessary when deciding about your investment. Contact us with any questions. We are happy to take on projects large and small.

Briquettes with diameters 50, 60, 75, 90 and 120 mm

Why make briquettes?

Briquetting often leads to a sizeable volume reduction - simplifying storage and transportation issues.
Briquettes are a strong alternative to pellets, with simpler technology offering many advantages for industrial applications. Briquettes are perfect for logs for fireplaces and wood-burning stoves, for animal bedding and feed, district heating plants and industrial furnaces, biogas production and flammable dust.

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Mechanical Presses – The Cornerstone of the Company

Mechanical presses are typically used for both small and large-scale installations and two or more presses can be combined for high tonnage per hour. C.F. Nielsen offers a large range of mechanical presses:

MODEL	MAIN MOTOR	BRIQUETTE SIZE	CAPACITY INDUSTRY*	CAPACITY CONSUMER*
BP2010	18,5 kW	Ø 50 mm	150-250 kg/h	-
BP2510	22 kW	Ø 50 mm	250-350 kg/h	-
BP3200	22 kW	Ø 60 mm	400-600 kg/h	-
BP4000	30 kW	Ø 60 mm	500-750 kg/h	500-650 kg/h
BP5000	37 kW	Ø 75 mm	800-1200 kg/h	700-1000 kg/h
BP5510/5510HD	45/55 kW	Ø 75/65x65 mm	900-1400 kg/h	850-1200 kg/h
BP6510/BP6510HD	55/75 kW	Ø 90-100/75x75 mm	1200-2300 kg/h	900-1500 kg/h
BP7010/7010HD	75/90 kW	Ø 90-100/75x75/85x85 mm	1500-2500 kg/h	1300-1700 kg/h
BP7510/7510HD	110/132 kW	Ø 90-120/85x85/90x90 mm	2000-3500 kg/h	1400-2600 kg/h

* Capacities are estimates, depending on many factors such as the raw materials bulk density, particle size and moisture content as well as the density requirements for the briquettes.

The presses are equipped with advanced control systems with remote access, making it possible to monitor, operate or even to reprogram the PLC-function online.

Features & Benefits:

- Modern design with streamlined covers
- Touch screen operation
- Latest PLC software
- Service-friendly
- Low maintenance costs
- High efficiency motors
- Die system with exchangeable wear parts
- Die system adapted to customers' raw material and density requirement
- Double infeed system on large machines for higher capacity and uniform density

Hydraulic Briquetting Systems

Different hydraulic briquetting systems are provided and quoted by our mother company Ruf Maschinenbau GmbH & Co. KG in Germany.

RUF Briquetting Systems are suitable for making briquettes from wood, biomass, metal and numerous other residues. The wood and biomass machines have a throughput between 30 and 1,500 kg per hour. The rectangular RUF Briquettes are uniform sized and easy to store.

Alternative briquette formats are available. The wood briquettes as high quality source of energy are typically used for fireplaces and wood-burning stoves. You can find more information about these hydraulic briquetting systems on www.briquetting.com

Extruder Presses

C.F. Nielsen's BPE Shimada Extruder Briquetting Press comes as a compact unit with press, buffer silo, dosing system and control panel. The press has a PLC operated control panel with internet access.
The square briquettes are uniform, easy to store, and typically used as logs for fireplaces and wood-burning stoves. The specialized BPE Shimada Extruder Briquetting Press produces very dense briquettes, which can be carbonized to high quality charcoal briquettes for cooking and BBQ.

The Extruder Presses are equipped with a main motor of 45 kW, producing briquettes measuring 62x62 mm.

Additional equipment

C.F. Nielsen offers a wide range of accessories as well as additional equipment to supplement the briquetting machines. The equipment includes saws, briquette breakers, dosing silos, and packaging machines.

Wood Briquetting

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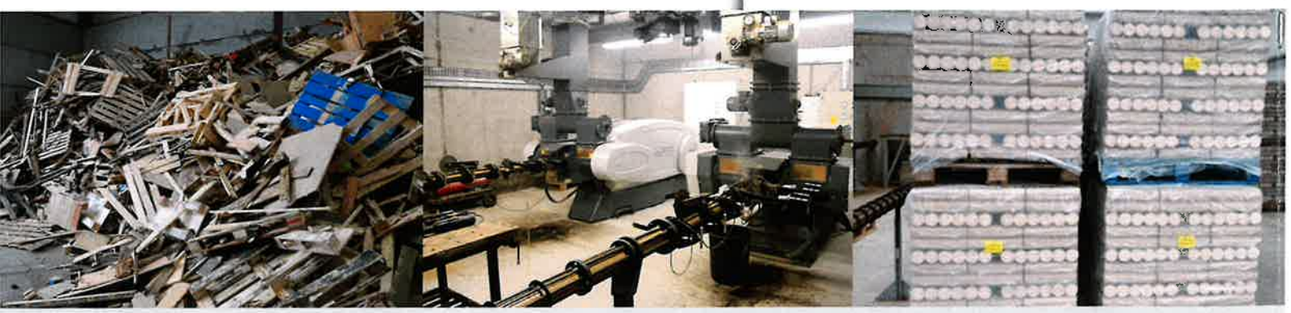
The picture shows what is probably the largest consumer briquetting line in the world with a capacity of more than 100,000 tons consumer briquettes per year. 12 x BP6500HD Briquetting Presses, with saws and automatic weighing system.

Consumer Briquettes

Over the last two decades, the demand for briquettes for fireplaces and wood-burning stoves has increased.

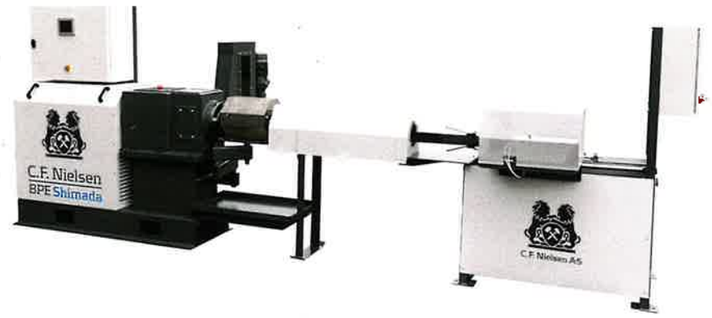
C.F. Nielsen is the leading supplier, developing a wide range of equipment for consumer briquetting, including lines with the highest capacity and the latest designs and control system. Silos, saws, packaging equipment and other accessories complete the lines.



Waste wood

The shown line is a combination of a new and an older mechanical briquetting press, for a complete double line with saws and packaging line. The raw material is a mix of cleaned waste wood and wood residues producing excellent briquettes.

Complete Consumer Line: Including BP6510, silo, saw & automatic packaging solution



The BPE Shimada Extruder Briquetting Press – complete with press, smoke hood and saw.

Different hydraulic briquetting systems are now provided by our mother company Ruf Maschinenbau GmbH & Co. KG in Germany

Industrial Briquettes

Some of C.F. Nielsen's first briquetting plants were for industrial fuel. Initially, Scandinavia was one of our primary markets. However, today we export our presses all over the world.

Two BP5510 Briquetting Presses producing industrial briquettes from sawdust.

MDF board is becoming a popular alternative to particle board and solid wood alternatives.
C.F. Nielsen has developed a solution to handle the challenge of MDF dust .

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Agricultural Briquetting

Demand for briquetting agricultural residues has increased in recent years. There are many kinds of agricultural raw materials, however, making careful preparation, before briquetting is vital.

C.F. Nielsen's equipment is well-suited for briquetting agricultural residues, with specialized spare parts developed to reduce wear and tear.

1 x BP7510 producing briquettes from wheat straw for biogas with a capacity of 2500kg/h.

Three mobile briquetting presses BP3200, BP5000 and BP6510 for installation in Ethiopia. The raw materials will be a wide range of agricultural and wood based residues.

After-Sales Service

Our After-Sales Service has high priority and ensures that our customers obtain maximum up-time and long life-time on their equipment as well as minimum maintenance and repair costs. Our services include: spare parts, trouble shooting, internet access to machines, service contracts and overhauls.

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