



CPU 1000 Compact Production Unit

Biodiesel Processing Technology

A DEPENDABLE PARTNER WITH PROVEN SOLUTIONS

BioDiesel Technologies offers the most comprehensive biodiesel equipment solution on the market. Over the past five years BDT has developed its expertise in biodiesel processing technology built around the concept of standardised modular production units.

These units, which are at the forefront of European biodiesel processing technology, have been designed to offer each client a flexible, efficient and modern solution to biodiesel production. The effectiveness of BDT's offering can be witnessed through its numerous reference projects operating in nine countries on three continents around the world.

THE FUTURE OF BIODIESEL

With strong legislative support from the European Union, biodiesel has currently replaced 2% of the mineral diesel use in member countries. The goal is to increase usage to 5.75% by 2010 in order to reduce dependence on foreign oil and to cut back on greenhouse gas emissions.

In order to reach this target, additional production of several million tons of biodiesel is required per year.

CPU 1000 – TECHNOLOGY WILL CONVINCE YOU

The CPU 1000 is a compact, pretested & standardized machine for the production of biodiesel:

- Produces 1000 liters of biodiesel per hour (approx. 8000 tons per year)
- Designed for 24 hour operation
- Installed in a 20ft. ISO container

THE CPU 1000 PROCESSING ADVANTAGE

- Fast delivery and start up
- Equipment with CE + SGS protocol
- Plug & Play
- Continuous Process Production
- Leasable - Cheaper financing
- Easily Transportable
- Complete methanol recovery
- 100% biodiesel yield
- Compact Project Design
- Modular Capacity Expansion
- Numerous reference projects
- Easy permitting
- Multi-feedstock technology
- Smaller low-cost facilities
- Very low Pollution and Waste
- Low energy usage

A FLEXIBLE FEEDSTOCK SOLUTION

Feedstock selection plays a key role in the successful production of biodiesel. BDT's proprietary acid esterification and de-gumming technology now allows the use of vegetable or animal based oils and fats with up to very high FFA content. This gives our customers the flexibility required to ensure use of the cheapest feedstock available.

BDT is pioneering the use of new feedstocks. It currently supplies technology to the world's first commercial scale *Jatropha* biodiesel project and is working currently on the first micro-algae pilot project.

BDT is using the knowledge acquired to develop further *jatropha* projects in South America, Africa and Asia.

BASIC FEEDSTOCK REQUIREMENTS FOR CPU:

- **Acid Number / FFA:** Acid No. <3 (i.e.max. FFA content ~ 1,5%)
- **Water:** < 0,1%
- **Phosphorus:** < 20ppm
- **Impurities:** clean, free from solids (<25 micron filter)

*Pretreatment units provided by BDT will increase the potential to use more profitable feedstocks
For more information please visit our website: www.bdt.co.at*

PROCESS OPTIMIZATION

BDT's dedicated R&D facility has been continually developing our product offering, giving clients access to process improvements that are consistently bringing down the cost of production. These proprietary process improvements have become a crucial element of BDT's offering. Recent innovations include:

- **Methylat** – 3% increase in biodiesel yield
- **G-Phase Splitting** – 90% glycerin purity, 3% increase in biodiesel yield
- **Acid Esterification** – use of high Free Fatty Acids (up to 100%) oils
- **Dry Washing** – No waste water, reduced labour cost
- **De-gumming** – reduces feedstock cost
- **Self pressing** – control of feedstock price

LOW INFRASTRUCTURE REQUIREMENTS

BDT's compact modular units provide the lowest cost infrastructure requirements of any biodiesel offering. BDT assists during the construction phase of the facility to ensure proper procedure. Project requirements are:

- CPU housing
- Supply of electricity, water and compressed air
- Storage tanks and piping
- Work Shop

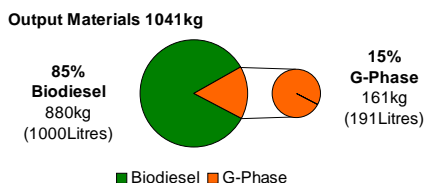
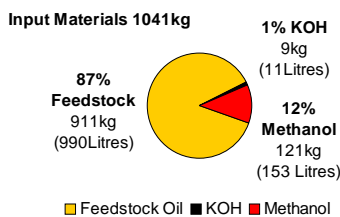
ADDITIONAL PROJECT PLANNING SERVICES

BDT project developers will guide the client through all the stages of planning from feedstock strategy to site selection and design.

- **Network** – extensive global contacts from feedstock providers to biodiesel purchasers
- **Engineering** – biodiesel plant infrastructure development and design
- **Financial** – funding arrangements inc. investors, grants, subsidies
- **Training** – comprehensive on-site training
- **Feedstock planning** – development of the optimal feedstock strategy
- **Plant management** – Operational biodiesel plant support
- **Knowledge database**



CPU INPUT - OUTPUT DATA



CONTACT US FOR FURTHER INFORMATION:

BioDiesel Technologies GmbH
 Hietzinger Hauptstraße. 50
 1130 Vienna, AUSTRIA
 Tel: +43 1 876 08 95
 Fax: +43 1 876 08 95 – 20
www.bdt.co.at