

BIODIESEL FACTORIES

The BioMaster System

An economical entry level processor for making biodiesel from vegetable oils

No methanol emissions
No manual mixing of methoxide
No exposed electrical circuits



The Process

Pump oil into processor



Test titration of oil – calculate amount of catalyst (KOH)



Weigh catalyst (KOH) and load into methoxide mixer



Pump methanol into methoxide mixer



Allow KOH to dissolve



Pump methoxide into oil and circulate for 1 hour



Leave to settle overnight then drain off glycerol



Wash biodiesel with water – allow to settle and drain off water



Filter and pump biodiesel into storage tank and start to use





The BioMaster processor

- The BioMaster processor has been developed for the DIY/small commercial operators.
- We promote the use of materials that do not adversely affect the environment and are always looking for better ways to do things.
- The BioMaster 150 processor is locally designed and built to the highest Australian quality and standards.
- The BioMaster 150 processor allows any user to manufacture quality environmentally friendly biodiesel using our safe home-batching production technology for as low as 30 c per litre.
- The Biomaster uses a high quality very reliable gear pump.
- Cost of the processor is \$3300
- I originally designed and built the Biomaster for Bioworks and am now offering the machine directly.

Biodiesel advantages:

- Simple to make;
- Cheaper than petroleum diesel;
- Non-toxic;
- Biodegradable: not harmful to soil or groundwater in cases of accidental spillage;
- Is a renewable fuel;
- Carbon neutral, will not contribute to the Greenhouse Effect;
- Free from sulphur;
- Lower exhaust emissions than petroleum diesel;
- Can be used neat or blended in any ratio with petroleum diesel;
- Higher lubricity than petroleum diesel which can prolong engine life;
- Higher flashpoint than petroleum diesel – safer to handle, store and transport; and
- Not classified as a hazardous substance.

Biodiesel training workshops

We have been running biodiesel training workshops in Australia and overseas for the past 15 years
See <http://www.sustainability.fm.uwa.edu.au/welcome/biodiesel>

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