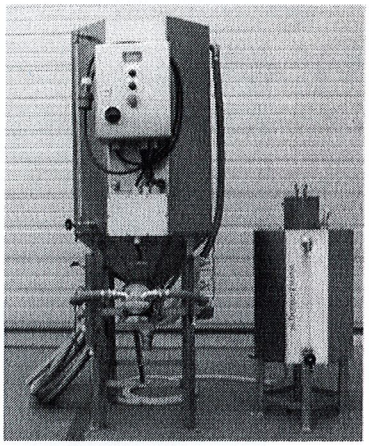
Detailed Information about BK-300-SS Series

The BK-300 reactor is very popular with small companies and farmers that want to produce biodiesel for their own consumption. It sells also very well in India and other strong developing regions that are eager to buy the highest quality/capacity refinery possible.
Specifically stainless steel that is explosion safe, for the lowest price available on the market.

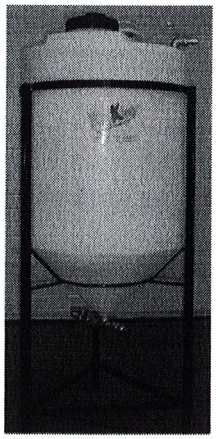
The BK-300 can produce 240 liter (65 *gallons*) per 1.5 hours. That means you only need to work 1,5 hours during the weekend to produce fuel for the whole week.

Price is:



Stainless Steel Reactor BK-300-SS
€ 6,500.-

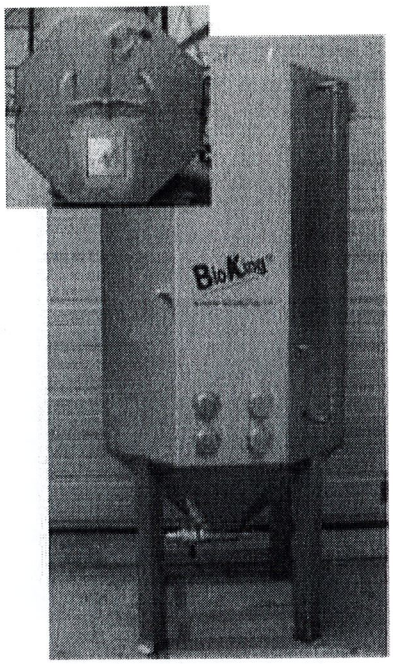
You need to keep in mind that, for each batch of 240 liters (*264 gallons*) of biodiesel you want to produce per day, you will need glycerin settling tanks.



300 liters *(65 gallons)* HDPE tank Settle/Wash Tank
€ 890.-

To save on your initial investment we recommend you start with 1 settle/wash tank to see whether you like to work with these tanks while getting the feel of making your own biodiesel. Prices include filter, nozzles and valves.

If you want to produce only 1 batch per day, then this 1 x Settle tank 300 liter is sufficient. If you want to produce 4-5 batches per day you better take one big S/W tank. This will allow you to produce 1000 to 1200 liter biodiesel per day! The Stainless steel Settle tank sits beautifully together with the BK-300 stainless steel reactor.



1,400 liters *(370 gallons)* stainless steel tank
€ 2,300.-

We also have a **1,500 liters** *(400 gallons)* HDPE Settle/Wash Tank, **€ 1,650.-**
This tank comes in a heavy duty steel frame. The size is bigger than the stainless steel model, and price is cheaper so can be interesting. You can also place two on top of each other, saving space.

Delivery time for all this equipment is only **4 to 6 weeks** after we have received your order. Delivery time depends on the workload at time of ordering.

Dimensions

- BK-300 reactor (big and small reactor go on one pallet):

Dimensions pallet

Length	: 120 cm
Width	: 87 cm
Height	: 206 cm
Weight	: 167 kg

- S/W tank 300 Ltr.

Dimensions S/W tank

Length:	: 120 cm
Width	: 80 cm
Height	: 153 cm
Weight	: 100 kg

Materials used

- Stainless Steel 3 to 5 mm thickness.
- Atex Pumps and Mixers
- Biodiesel, methanol, catalyst and feedstock resistant hoses
- Build conform CE Regulations

Electricity

The electricity system provided is suitable for all regions worldwide!
Electricity consumption is 9 Kwh

Input – Output Numbers

Per Batch:

Input:

- 240 liter feedstock (rapeseed oil, used cooking oil, palm oil, ...)
- 40 liter methanol, 99,8% Pure
- 3,5 – 5 kg caustic soda (Titration test will tell exact quantity)

Output:

- +/- 240 liter biodiesel
- 30 - 40 liter crude glycerin

Specifications	BK-300 € 6,500.-
300 litres (80 gallon) stainless steel high performance reactor tank	1
6 Kwh heating unit	1
Electrical pump 0.55 KW / 80 litre (21 gallon) per minute (filling and mixing)	1
100Liter (26 gallon) stainless steel high performance methoxide pre-mix tank	1
Adjustable digital thermostat	1
5 micron end filter system	1
Stainless steel manifolds with valves	1
Electricity system suitable for all regions worldwide !	1
Washing necessary	Optional
Settling necessary	Yes
Settle/washing tanks included	No
End product Meets EN 14214:2005, ASTM 6751-02 and DIN V 51606 standards	Yes
Plant is a turnkey plant, No assembling needed	Yes
One year worldwide warranty for motors & valves	Yes
Five year worldwide warranty for Stainless Steel Tanks	Yes
Built confirm CE regulations	Yes
Comes with easy step by step instructions	Yes
Comes with receipts for waste and new cooking oils and animal fats	Yes
Comes with titration kit	Yes

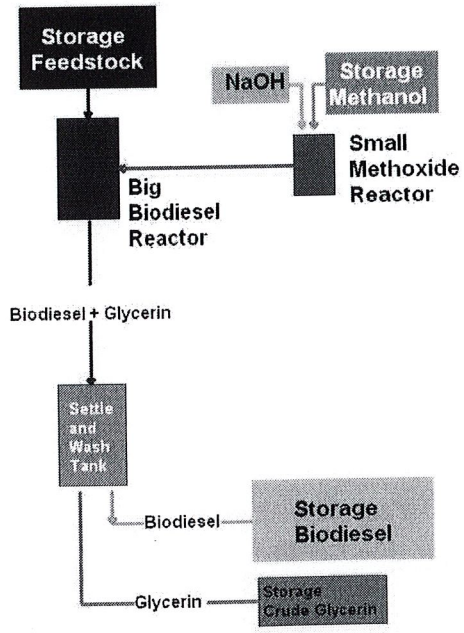
Production Numbers

	BK-300-SS	
Biodiesel Per Batch	240 Liter	65 Gallon
Time Per Batch	1h30	1h30
Per Day (24 hours)	4500 Liter	1200 Gallon
Per Year (330 Days)	1,5 Million Liter	400.000 Gallon

Step by Step Process

BioKing® Green Fuels

Flow Diagram - Reactor + Settle Tank



Steps To Follow

1. Pump feedstock oil in big reactor
2. Heat the feedstock oil to 55 degrees Celcius
3. Pump methanol into small reactor
4. Add catalyst based on titration calculation to small reactor.
5. Mix small reactor, methanol with catalyst to create the methoxide
6. Pump methoxide from small reactor to big reactor
7. Mix oil and methoxide in big reactor
8. Pump biodiesel and glycerin to Settle tank
9. Let the biodiesel settle in Settle tank till glycerin is at the bottom
10. Drain crude glycerin from the Settle tank into crude glycerin storage
11. Drain biodiesel to storage tank