



BB720-CRFA Ion Exchange Resin

The BB720-CRFA dry wash unit, based in ion exchange resin, removes from the biodiesel all the contaminants like glycerine, metals, gums, etc.

Advantages of BB720-CRFA:

- Maximizes yield with no biodiesel loss through filtering;
- Completely water drying;
- No expensive filters needed;
- No messy filters to clean;
- Less expensive than any other biodiesel washing process;
- Very fast biodiesel washing process;
- Works at any temperature;
- Easy to integrate into any biodiesel plant;
- Easy to use;
- The biodiesel meets all the international standards including ATSM D6751 and EN 14214.

How it works:

After methanol extraction, the biodiesel stream passes through the BB720-CRFA unit at a constant flow of 720 Litre per hour, while the ion exchange resin retains all the residues. The 480 Kg resin divided in two columns can wash from 432,000 to 768,000 Litres of biodiesel, depending on the impurities level.

Due to the '*peg-leg*' operation mode, the resin renovation is made alternatively in each column. Then, the washing columns sequence shall be reversed which is done by acting on the unit valves.

BB720-CRFA characteristics:

- Completely automatic unit;
- Continuous or batch compatible process;
- Resin substitution without stopping production;
- Peg-leg process to improve excellence in biodiesel purity;



BB720-CRFA Exchange ion resin dry wash unit

- Each column fit 240 Kg of resin;
- Biodiesel wash capacity of 720 Litre per hour;
- Electronic and mechanical safety systems;
- Analogical pressure gauges for 'in loco' control process;
- Over pressure safety valves;
- Safety manual cut valves;
- Standard instrument and valves for easy replacement;
- Stand alone unit and easy to integrate in existing biodiesel plants.

BB720-CRFA specifications:

Equipment	Specifications	Material
Resin columns	1000L vertical columns 2 flanged doors to resin access	AISI 304
Overpressure security valves	Type: pressure relief Overture pressure: > 1,0 bar	AISI 316 Seal: PTFE
Vacuum security valves	Type: vacuum spring valve, ½” Vacuum range: 800 a 1000 mbar	AISI 316 Seal: PTFE
Process cut valves	Type: ball valve 1”	Body: AISI 316 Seal: PTFE
Flow regulation valves	Type needle valves 1”	Body: AISI 316 Seal: PTFE
Flow meters	Type: needle analogical rotameter Biodiesel calibrated	Body: AISI 316 Watch: Borosilicate glass
Biodiesel wash feed pump	Type: Centrifugal multicelular pump Flow: 1000L/hr ATEX certified	Body: AISI 304 Impeller: AISI 304
Pressure transmitters	Type: DC PNP, 4 - 20 mA analogical ATEX certified	Body: AISI 316S Wetted parts: AISI 316
Check valves	Type: spring check valve 1”	Body: AISI 316 Seal: PTFE
Pressure manometer	Type: pressure gauge Pressure range: 1 - 10 bar	AISI 316

Thank you for your time reading this paper,

BB-DIESEL

www.bb-diesel.com