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# **EVO OIL PLANT**

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### RESELLER

**Renewable sources** 

## **EVO OIL PLANT**



#### USE

The EVO Oil Plant produces vegetable oil from raw seed, not chemically modified, which can be used as a fuel for diesel motors compatible with vegetable oil or electrical oil co-generators (CHP).

It is used by agricultural firms for:

- Production of biofuel for agricultural machinery,
- Renewable electric energy production through cogeneration can be passed into to the main network.

#### **OPERATION**

The EVO Oil Plant processes oil seeds including sunflower, rape, Abyssinian mustard, standard soy and Jatropha Curcas in a decentralized way.

It is capable of extracting VEGETABLE OIL FROM RAW SEED, NOT CHEMICALLY MODIFIED, through a solvent free, continuous mechanical squeezing process. The seeds must be decorticated, well cleaned, and free from crushed stone and metallic impurities. The oil seeds to be processed must have a minimum fat content by weight of 8% and a maximum humidity of 9%. The residual protein cake deriving from the oil extraction is transformed directly into PELLETS.

The EVO oil plant works continuously or intermittently and functions without the need for steam boilers.

It is equipped with advanced mechanical technology. It has PLC electronic control of the working phases and it is structured with materials highly resistant to abrasion and wear. It is powered electrically from three-phase industrial voltage at 400 V 50 Hz.

#### **ADVANTAGES**

The Oil Plant EVO, compared to all other conventional systems on the market, offers the following:

- 1. Mechanical extraction at low temperature,
- 2. Capability of job batch processing,
- 3. Cold start time greatly reduced,
- 4. Direct transformation of the residual protein cake into pellet form.



#### **DISCHARGED PROTEIN CAKE**

The residual material is discharged in the form of pellets with a diameter of 6 to 14 mm (varies according to oil seed type). Depending on the type of seed to be processed, these pellets can be used in the livestock sector (sunflower/rape), as a fuel in multi-fuel boilers (sunflower/rape), or in the production of fertilizer or soil conditioner (Abyssinian mustard or Jatropha Curcas).

#### **LEGISLATIVE PROVISIONS**

The production and use of raw seed vegetable oil as a fuel for diesel motors compatible with vegetable oil, as with mineral diesel, must occur only for the uses authorized by Law and according to the Legislative decrees of 26/10/1995 n 504, 02/02/2007 n 26 and any successive modifications and integrations issued by the Customs Agency.

#### CONSTRUCTION

- Construction according to CE standards
- Structure in pressed, folded and painted Carbon
- steel sheets
- Anti-slip sheet base
- Double shutter access door with fixed grid windows for ventilation
- Machinery interconnected and fixed to base.
- Connection piping.

#### POST SALE

- Materials and components provided
- Quick on-site assistance
- Scheduled revisions
- Telephone assistance

#### **OPTIONALS**

- Product storage line (product to be processed)
- Seed cleaning line
- Oil storage tanks line
- Cogeneration unit
- Container unit made of bent, varnished carbon sheet



MODEL	CAPACITY * (inbound seed) Kg/h
EVO 1	60
EVO 2	120
EVO 3	180
EVO 4	240
EVO 6	360
EVO 8	480
EVO 10	600
EV0 12	720

\*The hourly working capacity can change significantly according to the type and variety of seed processed.

\*\*The actual oil yield may vary significantly according to the original fat content of the seed processed.









- 1 Sunflower
- 2 Jatropha Curca
- 3 Rape
- 4 Soya
- 5 Pelletized expeller
- 6 Function scheme





APPROXIMATE MAXIMUM OLEARIE YIELD**	
Grain	Weight / quantity squeezed of seed
High oleic sunflower	33%
Rapeseed-Canola	35%
Brassica Carinata	35%
Jatropha Curcas	28%

For other oil seeds not included in the table, the feasibility and approval technical specification must be preventively requested written by the manufacturing firm.

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