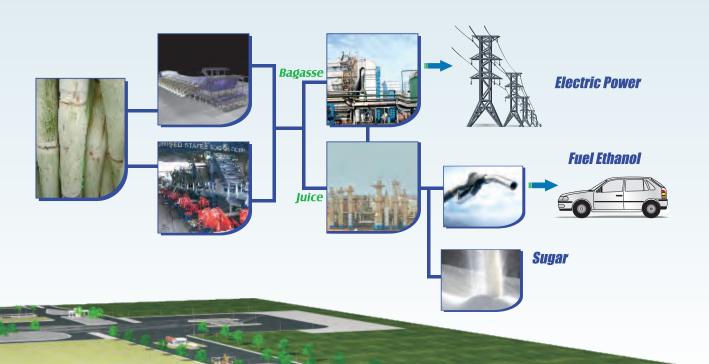
"Turn key" **Plants**

Dedini supplies Green Field plants on "Turn key" basis, with maximum advantage of raw material and maximum production of clean and renewable energy.

Dedini supplies:

- Sugar and Ethanol Plants
- Ethanol Plants
- Sugar Factories
- Sugar Refineries (Amorphous/Granulated)



Dedini garantees a future full of energy.

Dedini is the largest supplier of complete plants in Brazil and one of the largest in the world for the production of:

BIOENERGY







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Sertãozinho - SP - Rod. Armando de Salles, Km 339 Zip code: 14160-000 - Phone: +55 (16) 3946-7100

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DEDINI



Fuel Ethanol Plants

BIO-Equipments and Plants

www.dedini.com.br

Dedini

Dedini is a company with 100% Brazilian capital, operating in the custom made capital goods sector

With its own technology and from internationally renowned companies, Dedini operates at excellent levels of quality in engineering solutions and supplying of complete "Turn key" plants in severals market sectors.

Facilities

Dedini's Factory Complex consists of 6 Industrial Units, located at 4 strategic points in Brazil.



























Market Served

- Sugar & Ethanol
- Food, Juice & Beverages
- Biodiesel
- Pulp & Paper
- Breweries
- Cement
- Energy & Co-gerenation

- Fertilizers
- Hydroelectrical
- Mining & Metals
- Oil, Gas & Petrochemical
- Chemical
- Steel Works
- Wastewater Treatment Plants

Products & Services

- "Turn key" contracts Industrial Erection
- Cast Parts
- Industrial Automation
- Dished Ends









Engineering Solutions for all Types of Ethanol

- Fuel Ethanol
- Neutral Ethanol
- Fine Ethanol
- Anhydrous Ethanol





Juice Treatment

- Heaters
- Evaporators
- Settlers
- Filters



Fermentation

- Batch
- Continuous
- Flexible

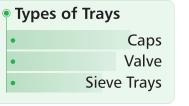
Continuous Batch





Distillation

- Conventional
- Flegstil





Split Feed

Ethanol distillation is divided into two systems:

Distillation under pressure: with steam feed Vacuum Distillation: Operates by Thermal Cascade

- Possible to use exhaust steam;
- Completely automated;
- 1.5 kg steam/liter Hydrous Ethanol.



Distilleries for AEHC production using the Split Feed technology

Dehydration Technology

 Extraction via cyclohexane as dehydrating agent.

SIDPEM

 Dehydration System via Molecular Sieve.





Vinasse concentration

- Possibility of using exhaust/bleed steam in the stillage concentration unit;
- Possibility of energy integration with the distillery (without extra steam consumption).
- Reduction in the quantity of stillage of approx. 13l/l ethanol for up to 0.8 l/l ethanol;
- Use of concentrated stillage as fertilizer;
- Suited to environmental demands;
- Concentrated stillage application in distant areas from the industry and in lands no longer used.
- Reused of water removed from stillage in the industrial process.







Tanks for Ethanol and Molasses

Capacities 40.000 m³

30.000 m³ 20.000 m³

10.000 m³

5.000 m³