



Special points of interest:

- **Gasification Syngas produces renewable blended Diesels**
- **PowerCan® 200 produces high grade fuels from feedstock found anywhere**
- **All modern aircraft are converting to Syngas fuels**
- **PowerCan® 200 technology provide service stations total self sufficiency**

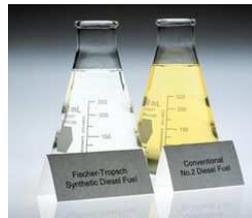
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PowerCan® 200 Liquid Fuels for Diesel and Jet Engines

“SOLIDEA can produce high quality diesel and Jet fuel from PowerCan® Syngas“

PowerCan® 200	A 200kW Power Solution in a 20ft container
Deployed	Europe, Asia, Africa, US
Fuel Culture	Pure Syngas at 700 degrees C
Conversion Process	Feedstock to Syngas to Fuels
Conversion Technology	Fischer Tropsche [F-T]
Feedstock	MSW Fiber or Biomaass
Feedstock Form	Wet and Dry Solid Waste
Fuel Yeild	280-350l per ton of MSW
F-T Process Temperature	50% Syngas 350 degrees C
Payback Period	From <2 years
Products	MSW Fiber, Syngas, Fertilizer
Delivery/Commissioning	3-6 months/Plug and Play
Landfill Project Capacity	Unlimited
F-T Process	1 x 20ft container
Physical Size	20ft container F-T 20ft containers
Compatible Feedstock	MSW Fiber, Biomass and Pelletized Human Waste



Fischer Tropsche Plasma F-T “its nothing new”

Fischer Tropsche or “F-T” process existed since the 1920’s. Hitler raced across Europe on F-T and without it the Apartheid regime would never have lasted as long as it did and nor would an oil embargoed Cuba. There have been many political reasons for keeping F-T under wraps for almost 80 years. But Plasma F-T is an alternative fuel which is made locally and provides energy security

The Science of Plasma and F-T

Plasma is the fourth physical state. Heat a solid it becomes liquid, heat a liquid it becomes gas, heat a gas and you get plasma. Plasma occurs naturally. Dirty producer gas passing through plasma produces even more clean syngas cooling and precipitating in water it becomes a liquid synthetic fuel. F-T has an advantage over oil based fuels, its much cleaner.

So why isn't everyone doing it

Typical plasma produces as over 1400 Celsius, these technologies assume unsorted feedstock. F-T efficiently converts at around 350 Celsius. High temperature plasma means that the conversion is inefficient. Feeding such a heat and cooling process for F-T conversion demonstrates Plasma F-T uneconomical through exceptionally high parasitic costs

F-T's Even bigger boundaries

Plasma F-T is still incompatible with traditional and modern thinking. A small island nation with its own fuel energy resources is not easily manipulated nor embargoed by persuasive oil wealthy nations. At home it simply would not do to have many small producers of tradable energy nor would the power struggle it would create be of benefit to society. So all over the world monopolies have evolved and are still enforced to day. PowerCan® 200 F-T turns a corner and the evolution of renewable F-T with it



“Is the extinction of landfill the feedstock for the diesel pumps of the future”

A Long Chain of Low Temperature Events

SOLIDEA develop PowerCan® 200 plasma F-T projects the system work exceptionally well at low temperatures thanks to the recent development in plasma technology clean Syngas is dispensed at 700 Celsius. The long chain reactions which benefit F-T conversion at this temperature and a low internal energy use [between 2-4%] means PowerCan® 200 can be used to produce very competitive low cost fuels. These fuel feedstock traditionally used in the CHP process can be tapped for many other uses.

Keeping PowerCan® 200 Small Keeps it local

PowerCan® 200 is a modular operation it can operate from large scale feedstock distribution such as MSW or locally produced biomass it converts waste locally in small scale low cost plant. Producing CHP or Syngas liquid fuels locally means a very high level of efficiency; a low CAPEX and far less embedded costs means cheaper Diesel based fuels.

Rolling out for rapid growth

PowerCan® 200 systems demonstrate that a plug and play system can be installed and pay back faster than most any traditional projects are designed built



or commissioned.

Rural, Military and Remote Servicing Stations

PowerCan® 200 CHP system is ideal for rural, military or remote service and fuel stations where biomass or MSW is readily available. SOLIDEA Group system are highly efficient consuming only 3.4% of the total energy it produces. A single PowerCan® 200 can provide more than enough electricity and heat to take a large service station off grid, it can even provide a fuel contingency in case of emergency. More modular units can be added to provide an excess energy or fuel capable of powering many types of land and air vehicles

SOLIDEA's Fischer Tropsche Feedstock

The risk to any F-T process is sulfur and mercury or many of the other heavy metals abundant in coal which is the traditional alternative F-T sulfur is far less likely to occur in sorted MSW or Biomass.

PowerCan® 200 Syngas Fuels

PowerCan® 200 feedstock systems are better partners for gasification. PowerCan® 200 delivers first class clean burning Diesel and Jet Fuels through F-T.

Aircraft Going Green

Although the United States and Europe are not quite ready to send MSW to the airport practically all new civil and military aircraft fly Syngas fuels. The Airbus A380 and the new x47 B fighters use Syngas fuel. The US and NATO Air force already adopted 100% Syngas compatible for future sustainability.

Blended Diesel Fuels

Today's internal combustion engine was designed for dirty and not clean fuels, however simply blending PowerCan® 200 Syngas fuels with traditional Diesel instantly solves the issue and without any modification to the engine