WOODEN WASTES BECOME VALUABLE

CMD ECO20X machine is a micro CHP (Combined Heat & Power) machine system transforming wooden wastes into synthesizing fuel gas (syngas) thus efficiently generating electrical energy and heat to be used during production processes for building heating, for self-consumption, for thermal facilities or community-district heating. Energy produced by ECO20X machine can be released into the national power grid, thus allowing to issue a remuneration from the energy distributor.

Pyro-gasification (or else referred to as biomass gasification) is a thermo-chemical treatment to which wooden wastes undergo. Through a few different phases, this treatment transforms biomass into fuel.

100% GREEN ENERGY

Based upon the following energy equivalence: one litre of petrol corresponds to less than 3 kilos of wooden wastes. By exploiting wooden wastes, CMD ECO20X machine can entirely substitute fossil fuel. Pyro-gasification process produces GREEN ENERGY thus reducing pollution and avoiding the increase of global warming and greenhouse gas. Furthermore, fuel is renewable!

CERTIFICATIONS AND WARRANTY

CMD ECO20X machine achieved the European Community Conformity Standard as well as the European Community brand since this machine system is in compliance to all safety and quality standards required by law. ECO20X production process is certified according to the Integrated Quality – Environment – Safety Management System UNI EN ISO 9001/2017 - ISO 14001 - ISO 9100:2009 - ISO/TS 16949:2002.
SMART CHOICE

SAVING MONEY AND HEATING PROPERLY
Turning once again the wooden wastes into value contribute to reduce waste management costs to the point that new economies are generated thanks to the reduction of energy and heat consumption.

NATURAL FUEL
The considerable variety of wastes that can be exploited by ECO20X machine makes its use applicable within numerous industrial sectors.

CIRCULAR ECONOMY
ECO20X machine system transforms wooden wastes into energy by putting it again into recirculating thus avoiding all waste. ECO20X system respects environment thus allowing to be fully autonomous from fossil fuel as well as to reduce CO2 emissions in the atmosphere.

ENERGY INDEPENDENCE
It is the first step towards a new “independent management system” of resources since it allows electrical and thermal energy production and self-consumption to become entirely independent from all other operators.

ECO-ADVANTAGES

USER-FRIENDLY AND EASE IN MANAGEMENT
The assembly procedure of ECO20X machine is simple and its logistics is simplified owing to the reduced dimension of the machine. To start ECO20X machine is an easy procedure owing to its remote control: it is enough to push a button so as to switch it on.

FISCAL INCENTIVES
CMD ECO20X machine is included in the list of incentives foreseen by the Italian 4.0 National Industry Plan (such as hyper-depreciation, tax credit, financing and grants). Please, contact our Sales Department for further information.

ASSISTANCE UPON INSTALLATION
CMD is available to analyse free-of-charge the area of the plant wherein ECO20X shall be installed. Likewise, CMD can supply all engineering services necessary for the machine installation.

ASSISTANCE PROVIDED UPON START-UP OF THE MACHINE
CMD performs the biomass-compatibility tests of to be exploited to power ECO20X machine as well as it fine-tunes all eventually necessary treatment processes. CMD also provides the necessary assistance so as to obtain the administrative authorizations that are mandatory for ECO20X machine installation required by the current law provisions.

REMOTE CONTROL
The innovative software system allows to record and to check ECO20X machine activities by constantly monitoring the machine performance as well as providing immediate reporting of failures.

ASSISTANCE UPON FINANCING
Major Italian banking institutions are available to provide financing on CMD ECO20X machine.

GLOBAL SERVICE
CMD company supports its Clients starting from the drafting of the Business Plan all the way to the fine-tuning of ECO20X machine. A bespoke and flexible system according to each Client’s requirements so as to allow ECO20X machine to be immediately installed on-site.
TECHNICAL SHEET*

<table>
<thead>
<tr>
<th>Continuous Electrical Power</th>
<th>20kW @50Hz (the value dependent on biomass)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Thermal Capacity</td>
<td>40kW (cfg standard)</td>
</tr>
<tr>
<td>Phases and frequencies</td>
<td>three-phase</td>
</tr>
<tr>
<td></td>
<td>50 Hertz</td>
</tr>
<tr>
<td>Output voltage</td>
<td>400 Volts</td>
</tr>
<tr>
<td>Average hourly consumption</td>
<td>25 Kilos per hour</td>
</tr>
<tr>
<td>Noise Level (G. E. Silenced)</td>
<td>67 dB(A) 7m</td>
</tr>
<tr>
<td>Maximum Continuous</td>
<td>24h</td>
</tr>
<tr>
<td>Fully Operability</td>
<td></td>
</tr>
<tr>
<td>Compliance with EU Conformity Standard</td>
<td>yes</td>
</tr>
<tr>
<td>Consumption @100%</td>
<td>about 1kWh/kg</td>
</tr>
<tr>
<td>Unladen weight</td>
<td>5.500 Kilos</td>
</tr>
</tbody>
</table>

RANGE OF APPLICATIONS

CMD ECO20X machine is ideal for industrial companies, national public institutions and departments having high energy need operating in agricultural and forestry sectors, wood industry, horeca - hotellerie-restaurant-café - industries, hotels, community districts, eco-resorts and wellness spas. ECO20X machine is also ideal to provide self-energy supply.

Sport facilities
SPA Wellness Centres
National public institutions and departments
Wood Industry
Small and medium sized enterprises
Agricultural and food sectors
Agricultural and forestry sectors

info@eco20cmd.com | www.eco20cmd.com

*We herein specify that herein above indicated continuous power performance data could vary depending on the humidity degree, on the dimension of the wooden chips as well as on the heating value of the wooden wastes that are used.

CMD S.p.A. reserves all rights to make modifications without notice.

AWARDS

CMD SpA Loncin Group was awarded with ELITE Prize by Borsa Italiana. The company also achieved WCM Award.