

Global customers and projects of Woodtek Engineering Ltd - Updated March 2024

| Project | Plant | Description |
|--|--|---|
| Fox Timber (United Kingdom) | Eco T4 Plus dryer Hopper fuel store - 55m3 capacity S conveyor - 27m length Rotary feeder Auger control slide valves | Drying arboricultural wood chip to supply 3 x 1mw Biomass boilers |
| Ricardo (United Kingdom) Stage 1 | Eco T2 Plus dryer Top Loader fuel store - 90m3 Rotary feeder | Ricardo is leading the UK-Government funded consortium delivering the demonstrator plant. The funding is awarded through the Net Zero Innovation Portfolio (NZIP) under the Department of Business, Energy and Industrial Strategy (BEIS). The consortium combines an innovative carbon capture system developed by Ricardo with the hot air turbine technology from Bluebox Energy and pyrolysis technology from Woodtek Engineering Source - https://www.ricardo.com/en/innovation/solution-innovation/negative-emission-cogeneration-technology <i>Please see case study</i> |
| Ricardo (United Kingdom) Stage 2 | C1000 Biochar plant Wet flue gas scrubber filtration Plant room ducting | |
| Irving (United Kingdom) | 3 x Eco T4 Plus dryer Top Loader fuel store - 250m3 S conveyor - 30m length Cross conveyor - 12m length Horizontal conveyor - 30m length | Drying sawmill byproduct (woodchip) for re-sale |
| Grahams Fencing & Logs (United Kingdom) | Eco T4 Plus dryer Rotary feeder | Drying woodchip for domestic and industrial biomass boilers |
| Olov Karls (Sweden) | C1000 Biochar plant S conveyor - 15meter Eco T2 Plus dryer | C1000 Biochar plant for production of biochar and district heating <i>Please see case study</i> |

| Project | Plant | Description |
|----------------------------------|---|---|
| Carbofex (Finland) | Eco T4 Plus dryer Hopper fuel store - 50m3 capacity Horizontal unloading auger | Drying woodchip for biochar production |
| Volter (Finland) | Eco T2 dryer Rotary feeder Fines separation auger | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Akhurst (Canada) | Eco T1 dryer Transfer auger | Biomass drying |
| Novalux - CHEP (South Africa) | Eco T4 Plus dryer Hopper fuel store - 55m3 capacity Loading & Unloading Conveyor Moving floor fuel storage | Drying waste wood for biomass boilers |
| Volter - Takasago (Japan) | Eco T2 dryer 2 x Fines separation augers Hopper fuel store - 50m3 capacity | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Tamura (Japan) | Eco T2 dryer Agitator | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Numata (Japan) | Eco T2 dryer Agitator | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Mahikari (Japan) | Eco T2 dryer Fines separation auger Rotary feeder | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Enewaza (Japan) | Eco T1 dryer Hopper extension Fines separation | Eco T1 dryer feeding a CHP plant with the heat used for district heating |
| Volter - Akita (Japan) | Eco T2 dryer Fines separation auger Rotary feeder | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Bitatori (Japan) | Eco T2 dryer Fines separation auger Rotary feeder | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Enewaza (Japan) | Eco T1 dryer Fines separation | Eco T1 dryer feeding a CHP plant with the heat used for district heating |
| Volter - Akita 2 (Japan) | Eco T2 dryer Fines separation auger Rotary feeder | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Tusvano (Japan) | Eco T4 Plus dryer Fuel store - 6 lane moving floor Conveyor - 36m Fines separation auger Auger control slide valves | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - Takumi (Japan) | 2 x Eco T4 dryer 2 x Rotary feeders 2 x Fines separation augers | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Volter - ABL (Japan) | Eco T2 dryer Rotary feeder 2 x Discharge augers | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |
| Entrenco (Japan) | Eco T2 dryer Rotary feeder Lower & Upper transfer auger Fines separation screen | Dryer for CHP plants |
| Volter - NAS (Japan) | Eco T2 dryer Rotary feeder 2 x Discharge augers | The eco range of dryers with the option of fines separation provides the perfect solution for Volter CHP plants |



Top Loader fuel store - 90m3 capacity



C1000 Biochar plant



Plant room air ducting

Project name: Ricardo

Location: Haywards Heath, West Sussex, United Kingdom

A BEIS-funded project where Woodtek were the chosen manufacturer and supplier for a Biochar plant. Woodtek was also chosen to supply the fuel storage, fuel conditioning, flue gas cleaning and as the project progressed other parts of the project including bespoke air ducting.

As of the end of 2023, a Woodtek **C1000** Biochar plant has been installed on-site along with a Woodtek top load and drier. The next stage was part of the Hot air turbine installation, once this was complete Woodtek delivered and installed the Wet flue gas scrubbing filtration system and commissioned at the end of March 2024.

Project name: Olav Karls

Location: Tjarnavagen 16, 785 30 GAGNEF, Borlange Municipality Sweden

Olav Karls had contacted Woodtek Engineering originally for a drying solution to dry feedstock for a Biochar plant already ordered through a European manufacturer. The customer was not aware that Woodtek made biochar plants and due to manufacturing delays with the supplier the customer had already placed a deposit, the order was cancelled and placed with Woodtek on the promise of an 8-week manufacturing lead time. The single **C1000** would replace two 500kw Biomass boilers for district heating, using the existing fuel storage and auxiliary plant.

The order deposit was paid on November 1st and the **C1000** biochar plant (skid mounted) complete with control system, fuel infeed and biochar outfeed was completed within 8 weeks



C1000 - Front view with biochar metering auger



C1000 rear view showing fuel in-feed and control



C1000 inside Woodtek engineering's fabrication



Wet flue gas scrubber



Electratherm 4400 O.R.C (Electrical generation)



C600 Biochar plant

Project name: Woodtek Engineering

Location: Caebardd, Welshpool, United Kingdom

This C600 biochar plant has been developed by Woodtek Engineering with over 40,000 hours of operation producing Biochar on a range of different feedstocks. Designing, manufacturing, operating and developing the C600 biochar plant at our Mid Wales base has been key to the success of the C1000 model. Any potential issues or problems are identified with solutions and improvements designed, fabricated and installed onto the C600. The ability to go from design to operation all on-site has been invaluable for the R&D phase of the C1000.

A wet flue gas scrubbing plant is installed which was also designed and developed with the C600 Biochar plant



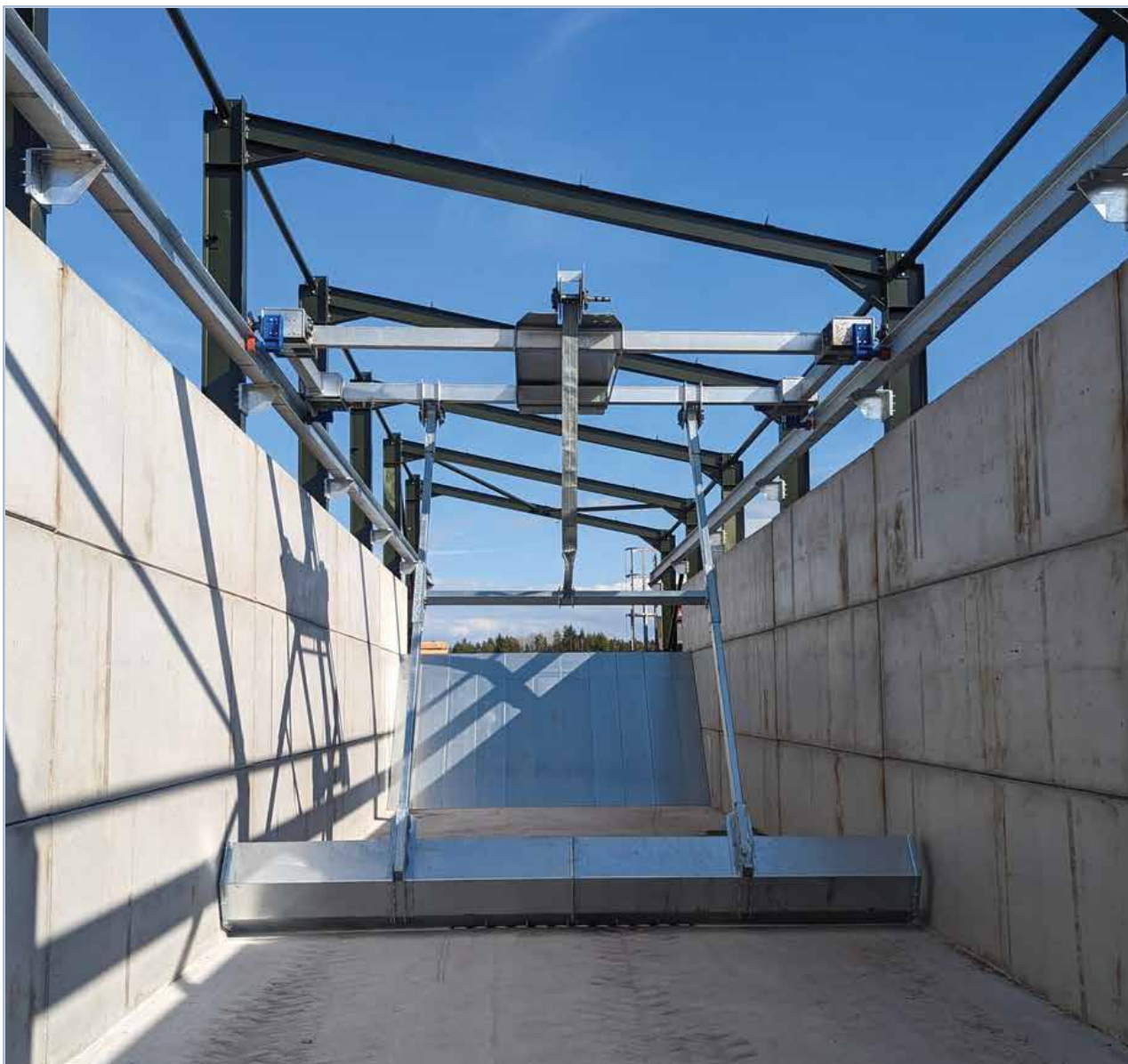
2 x Eco T4 dryers with a 55m³ fuel store hopper



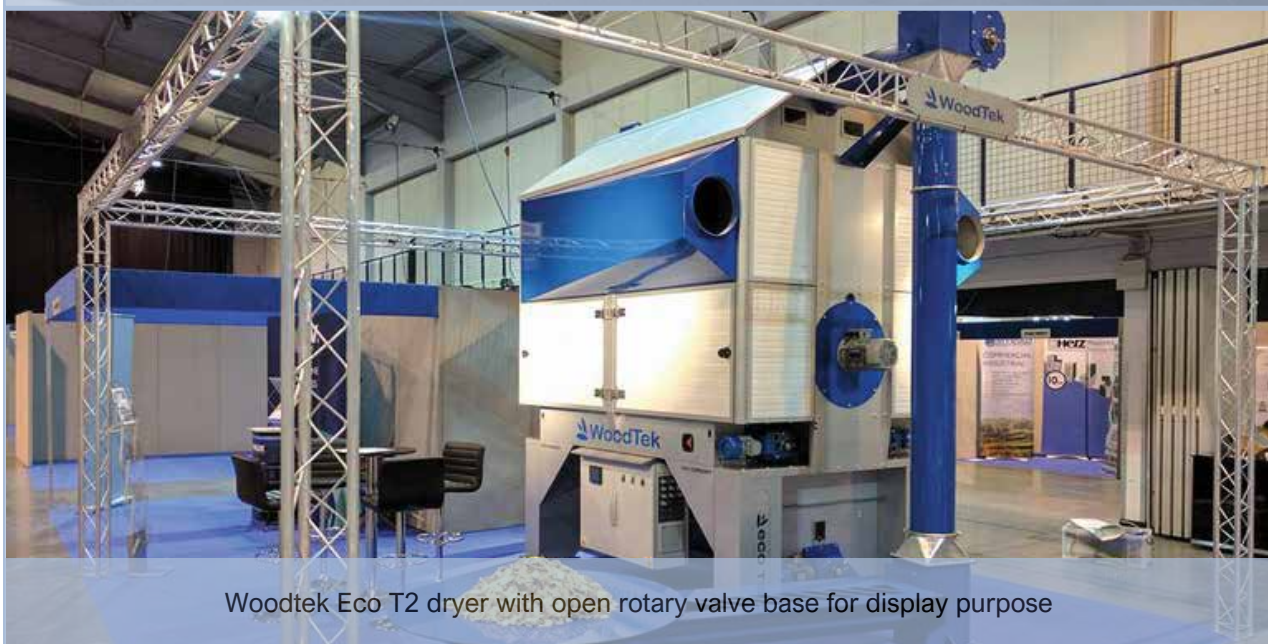
Walking floor fuel store
Installed in Yorkshire to provide feedstock to a single Eco T2 Plus dryer



Where possible electrical installation is completed before delivery to site which saves installation time and cost. Power and signal cables can be plugged together during installation proving a Plug and Play solution



Top Loader fuel store - 250m3 capacity



Woodtek Eco T2 dryer with open rotary valve base for display purpose



Eco T1 dryer - container loading



30mm hopper for T1 dryer



30mm hopper - container loading



T1 dryer with top hopper option



Eco T2 plus dryer



Eco dryer base



Eco T4 dryer



Dryer outfeed auger