

Tarragona Biogas

El Mollo

Mora la Nova

Tarragona, Spain

EuRec® Waste Treatment Plant



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EuRec project № & date
DE0857 / 29.01.24

Our reference: CK/aw

Dear Mr. Fitz,

we are pleased to offer you for your project in Mora la Nova, Spain a EuRec® Waste Treatment Plant for the manufacture of refuse derivate fuel (RDF) from municipal solid waste (MSW) as follows:

Project	Spain, El Mollo (Mora la Nova)
Input material	municipal solid waste (MSW) according to composition sent on 29.01.2024, mainly without construction waste, sand and stones
Throughput	up to approx. 25 t/h, 12 operating hours per day, 280 operating days per year 84,000 ton per year

Feeding

The feeding of the shredder has to be arranged by an efficient grab (selector grab loading crane) and a qualified operator, to achieve a high throughput.

Procedure

The following presented EuRec® plant gives you the possibility to treat municipal solid waste with a high organic content. After shredding and optimal decomposition of waste, a high-efficient separation of the organic parts with the help of a EuRec® Star Screen takes place. The organic can be forwarded for composting or to a biogas plant or other use. Before manual sorting a top belt magnet is used for deferrisation of the material on conveyor belt. For this purpose, the magnet is placed above the conveyor belt, so that the magnet can remove ferrous parts from the passing flow of materials.

Essentially rid of organic components the material overflow from the star screen will be forwarded to a sorting line (consisting of sorting conveyor, sorting chutes, sorting cabin), where materials like glass, plastic, paper, ferrous-/non-ferrous-metals etc. are sorted out by hand. A conveyor to EuRec® Air Drum Separator transports the sorting overflow. At the end of the conveyor the material falls. An air stream blows light material falling from the conveyor belt **over** a rotating splitter drum, heavy material falls down in front of the splitter drum (residual waste). The light material coming from the air separator is transported to a EuRec® Fine Shredder, where the material is shredded to an output material size < 50 mm.

Mechanical EuRec® Waste Treatment Plant

From waste results recyclable materials: substitute fuel, biogas, electrical energy, compost, etc.

Consisting of:

010 EuRec® Shredder S 16.00 E

for loading, shredding and homogenization of waste

The waste is shredded up to a size of < 300 mm by use of special designed and patented shredding tools installed in our EuRec® Shredder, elastic materials such as foils, plastic bottles, etc. will be much larger. The special design of the tools of the EuRec® shredder ensures the decomposition of the organic fraction in the waste, which makes a screening in the following EuRec® Star Screen possible.

020 EuRec® Feeding Conveyor

for transportation shredded waste to

30 EuRec® Star Screen

for screening out organic material

The patented screen deck almost does not wrap, but does have the high output and aggressive agitation, preventing the smaller parts from sticking to the larger parts. In addition, the larger parts are not rotated, like the way they are in a drum separator, to a crocodile, but are torn apart. This results in a better performance of the following sorting steps.

31 EuRec® Over Belt Magnet

removes free iron parts contained in the screen output material.

The magnet is placed above the conveyor belt so that the magnet can remove iron parts from the flow of material passing by. These iron particles are drawn by the magnet onto the belt of the upper belt magnet. When this belt has passed the magnetic sector, all the parts fall into a collecting container.

040 EuRec® Sorting Conveyor

for manually sort different materials

The sorting belt is used to sort different waste: municipal solid waste, light waste, bulky material. The sorters remove the material to be sorted from the material flow and deposit it in different chutes.

050 EuRec® Sorting Chutes and Sorting Cabin

enclosure for sorting belt and chutes, location of sorters

060 EuRec® Feeding Conveyor

for transportation the sorting residue to the EuRec® Air Drum Separator

070 EuRec® Air Drum Separator

for separating the light material from the material stream with the help of an air stream

The input material is separated into light and heavy material by means of an air flow generated by a ventilator. The light material is blown across the rotating splitter drum. The heavy material falls down in front of the splitter drum or bounces against the splitter drum and then falls down.

080 EuRec® Transfer Conveyor

for transportation the light material to the reversible feeding conveyor of the EuRec® Fine Shredder

090 EuRec® Reversible Feeding Conveyor

for feeding conveyor of the EuRec® Fine Shredder

100 EuRec® Fine Shredder

for secondary shredding of light fraction coming from the EuRec® Air Drum Separator

the output material size after secondary shredding should be approx. < 50 mm

the secondary shredder is supplied with discharge conveyor

We recommend to protect the treatment line against too strong weather influences e.g. with a roof against too strong solar radiation or with walls against too heavy rain.

One hour per shift for small maintenance and cleaning of the machines should be included.

Commissioning and training

Please note that the first-time assembly, installation, commissioning (start the machine on site) of the equipment and training of the staff has to be made by EuRec® service technician. The electric connection to the power grid has to be made by an electric fitting company licensed for your supply area.

Technical plant offer

Consisting of

One EuRec® Shredder S 16.10 E
One EuRec® Star Screen
One EuRec® One EuRec® Sorting Station
One EuRec® Air Drum Separator
One EuRec® Fine Shredder
One EuRec® Transport Conveyors

Prices are subject to change, EXW Krayenberggemeinde OT Merkers, Borntalstrasse 9, Germany (Incoterms® 2020), but excluding transport packaging. Transport packaging can be offered separately upon request after determining the intended transport vehicle (ship, truck, airplane, courier, etc.) and the mode of transport (in container, on flatrack, pallet, carton, etc.). Also costs for transports, dues, export documents, assembling and commissioning on site are not included in the quoted prices. We will charge them according to the real costs. Lifting apparatus etc. must be provided by the customer on site.

The prices are net without VAT as we expect export to Spain. So this export trade is zero-rated according to § 4 Nr. 1a UStG (only valid if delivery and invoice are addressed to South Africa.) Also duties, fees or custom charges have to be paid by the beneficiary party. If VAT is owed due to statutory regulation, the parties commit oneself to correct the invoice.

Please note: EU-machine directive, EU-compliant product liability, EU-compliant warranty, EU-compliant guarantee and EU-compliant issue of operating & maintenance handbook apply explicitly.

Validity of offer

4 weeks

Readiness for delivery

At present approx. 8 - 10 months after order confirmation and receipt of pre-payment, depending on date of order

Delivery delays due to the Corona pandemic are considered force majeure.

Payment conditions

First down payment:	50 % by direct bank transfer
Second down payment:	35 % three months after coming into effect of contract resp. 3 months before shipment readiness (when 6 months until shipment readiness)
Final installment:	15 % at shipment readiness and against presentation of FCR (Forwarder's Certificate of Receipt / bill of loading) of the shipping agency collecting the goods in Merkers.

The Buyer must secure the second down payment as well as the final installment (that means 50 %

of total sum) by an irrevocable Letter of Credit (L/C) issued by a first-class international bank to the benefit of the Seller. It is only necessary to secure 50 % of the total sum because 50 % of the total sum is paid as down payment by direct bank transfer when order is placed. The bank of the Seller must agree with the text of the L/C, accept the bank chosen for the opening of the L/C and confirm this document. This L/C resp. the bank guarantee must be presented by the Buyer to the Seller resp. the bank of the Seller with receipt of the first down payment.

The contract becomes effective and the calculation of the time till the plant is ready for shipment with fulfillment of the following conditions:

- The contract and all belonging attachments are signed by both parties.
- The first down payment received on the Seller's account.
- The L/C is presented and accepted and confirmed by the Seller's bank.

Warranty

12 months, but maximum 2,000 operating hours. The warranty starts at readiness for shipment and includes all construction components of which malfunction can be lead back to construction faults or manufacturing faults. Parts of wear and tear are generally excluded from the warranty.

The acceptance of a warranty claim requires the return of the defective parts as well as the evidence of the proper maintenance and handling of the machine. Another precondition is that within the warranty period, all non-daily servicing of the equipment, as defined in the Operating & Maintenance Handbook, has to be made by EuRec or by a company explicitly and specifically authorized by EuRec.

General Terms and Conditions of Business

This quotation is governed by the General Terms of Business of EuRec Technology, which you will find overleaf as well as for download on our website www.eurec.de.

For any question, please do not hesitate to contact us.

Best regards, yours Christoph Kottmann

EuRec Environmental Technology GmbH

Christoph Kottmann
(Managing Director)

Attachments:

- **Appendix A:** General terms of business