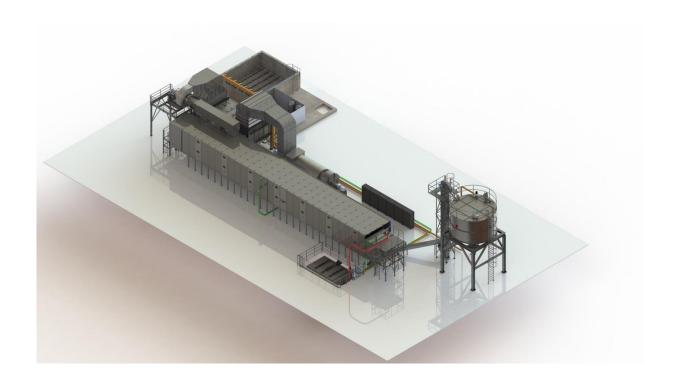


# ASOS PROSES MAKİNA SAN. VE TİC. A.Ş.

# 2 tons /h Belt Dryer System Technical and Commercial Quotation



**QUOTATION FILE** 



# **AVIOGRA**

**Date** : 07.04.2021

Our Ref : PM/YDT/UD-07.04.001.R00
Project : 2 tons/h Belt Dryer System

# Dear Sirs,

We are pleased to send you our technical and commercial quotation for belt dryer system.

Please do not hesitate to call us for any questions you may have. We trust our quotation will meet all your requirements and we are looking forward to hearing from you.

Kind regards,

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Mersis No: 0091082426100001



# 1. Project Data

Our quotation is based on the below given project data. Alteration of any project parameter might cause a revision of our technical and/or commercial quotation.

Product Name	: Pet Food
Granule Sizes	: 10 mm
Density	: 0.5-0.6 kg/m3
Ambient Temperature	: 5°C – 35°C
Ambient Humidity	: 60% – 80% RH
Altitude	: Sea level (0-5m)
Installation	: Indoor
Operation Time	: 24 hours/day
Number of Lines	: 1
Selected Belt Dryer	: ABT 1/2000- 8
Feed Moisture Content	: 28 %
Required Moisture Content After Drying	: 12 %
Hourly Feed Rate	: 2.000 kg /h
Water Evaporation	: 364 kg /h
Dry Product Capacity at Outlet	: 1.636 kg /h
Required Total Energy	: 364.000 kcal/h
Heat Source	: Combustible Gas
Total Electricity Consumption	: 37kW
Total Installed Power	: 46,2kW
Drying Temperature	: 50-60°C
Power Supply	: 400V/3pH/50Hz
Noise	: < 85 dB (A) at 1 meter of the equipment
Building Requirement	: W=4.000 mm, L=10.000 mm, H=4.000 mm

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# 2. Scope of Supply and Prices

We are pleased to propose an **ASOS Belt Dryer System** in order to achieve your drying goals for above given application. Our proposed system consists of the ASOS Belt Dryer and its ancillary equipment as follows:

#### **Basic Offer**

Item No	Product/Service	Remarks	Qty	Unit Price	Total Price	
1	Belt Dryer	-			€ 110.000	
2	Spreader System	-				
3	Burner Chamber	-				
4	Circulation / Exhaust Fans	-				
5	MCC and PLC Cabinet	-	1 Set	€ 110.000		
6	Ductwork	-	1 361			
7	Cables and Cable Trays	-				
8	Structural Elements	ctural Elements -				
9	Engineering & Documentation	-				
10	Packing	-				
GENERAL SUM						

#### **On-Site Services**

Item No	Product/Service	Remarks	Qty		Unit Price	Total Price
1	Supervision of Erection	Supervision on site by ASOS technician	1	d/p	€ 550	€ 550
2	Comissioning and Start-Up	Supervision on site by ASOS engineer	1	d/p	€ 900	€ 900

Our prices are valid on package order of all basic items. All prices are in EURO's, excluding any sort of taxes and duties.

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#### 3. Exclusions

Goods and/or services which are mentioned below are <u>NOT</u> in our scope of supply.

- Civil works: Any sort of civil works are not included in our scope of supply.
- Lifting devices: Any sort of manual or motorized lifting devices (winches, cranes, etc.) are not in our scope of supply.
- Instrument air: Supply of instrument air is not in our scope of supply.
- Power supply: Main power should be delivered by client to our MCC cabinet. Any sort of cabling or work for supplying mains to our MCC is not in our scope of supply.
- Water: Supply of service water is not in our scope of supply.
- Heat source: Supply of heat source (Natural gas, LNG, steam or any other source) to the connection point in our drying system is not our scope of supply. This connection must be carried out by locally authorized people (such as natural gas company) and this should be organized by client.
- Travel, boarding and lodging costs are not included in our prices and must be provided by client.
- Food expenses belong to the buyer.
- Shipping and Installation belongs to the buyer.

# 4. Equipment Specifications

#### 4.1 Belt Dryer

- Quantity : 1
 - Dryer Area : 16 m²
 - Belt Width : 2.000 mm
 - Dryer Length : 8.000 mm

Dryer Type : Single pass polyester belt
 Top Casing : Made of galvanized
 Bottom Casing : Made of galvanized
 Bed plate : Polyester belt

Heat Insulation
 Inspection Hatches
 Sockets for Instruments
 Available on both top and bottom casing
 Available on both top and bottom casing

# 4.2 Spreader System

- Spreader system that will ensure that the product to be dried is distributed evenly on the belt.
- Compact steel construction made of galvanized steel

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#### 4.3 Burner Chamber

- Thermal Heat Capacity: 400.000 kcal/h

- Material of construction : All components in Carbon Steel

# 4.4 Circulation/ Exhaust Fans

- Quantity : 1 set

- Type : Single stage centrifugal air fan

- Motor and Baseplate : Included

- Material of construction: All parts in contact with gas are in galvanised steel

Other parts in carbon steel

Drive Type : Direct
 Drain Connection : Available
 Inspection Hatch : Available
 Motor Start : VSD

#### 4.5 Motor List

No	P&ID No	Defination	Equipment	Motor/Reducer	Motor Power
1	BAH01	Feeding System	Asos	Yılmaz Redüktör	
2	BSK02	Mixer	Asos	Yılmaz Redüktör	5,5
3	DBK101	Belt Dryer	Asos		5,5
4	SF101	Circulation and Exhaust Fan	Asos/İncircioğlu/Edvan	Gamak / Wat / Volt	2,2
5	SF102	Circulation and Exhaust Fan	Asos/İncircioğlu/Edvan	Gamak / Wat / Volt	11
6	SF103	Circulation and Exhaust Fan	Asos/İncircioğlu/Edvan	Gamak / Wat / Volt	11
7	EX101	Heat Exchanger	Asos / FSA Alfa		11
8	EX102	Heat Exchanger	Asos / FSA Alfa		
9	EX103	Heat Exchanger	Asos / FSA Alfa		•
TOTAL INSTALLED POWER					

# 4.6 MCC and PLC Cabinet

- Cabinet Type : Floor Standing Modular Enclosure

- Place of Use : Indoor- Protection Class : IP55

- Framework- Paint: 2 mm galvanized steel sheet: Epoxy polyester powder paint

- Color : RAL 7035 - Operating temperature : -5°C, +40°C

- PLC & MCC Cabinet :  $W \times L \times H = 600 \times 4000 \times 2200 \text{ mm}$ - Control Interphase : 17 inch touch screen with SCADA

- Communication : Profinet 100Mbit

- HMI : SCADA made by ASOS for 17 inch screen

- PLC + Touchscreen : Siemens S7-1500 & TP1900 HMI

VSDs : ABB or Danfoss Other MCC Components : Siemens or ABB



# 4.7 Cables and Cable Trays

- All signal and power cables are included.
- Galvanized steel cable trays are included.

# 4.8 Structural Elements

- All in galvanized steel.



**Sample Picture** 

# 5. Spare Parts

Spare parts which might be required during commissioning and start-up will be delivered by ASOS. Spare parts for operation is not included in our offer and will be quoted on request.

# 6. General Layout of Dryer System

Our proposed layout for the dryer system is provided as an attachment to this offer. Proposed layout is a draft drawing and will be revised as client's requirements.



#### 7. Documentation

ASOS will provide the following documentation.

- P&ID diagram in English
- General layout drawing

# 8. Electrical & Mechanical Erection / Supervision

On client's request, ASOS erection team is available to travel to project site and realize all mechanical and electrical erection of the dryer system. If all site conditions are ready as, all erection works can be completed within 7 working days after arrival at site.

In case client does not require ASOS for erection works, then ASOS can provide supervision of all erection works. An ASOS engineer will be available on site after all mechanical and electrical erection works are completed by client. ASOS engineer will inspect the erection and will commission the plant if all erection works are approved.

Either for supervision or erection, ASOS staff is planned to work on site maximum 10 hours per day and 6 days per week.

Travel tickets, boarding and lodging will be provided by the client. If client accepts, ASOS will make all bookings itself and then will book all costs to client with 10% mark-up.

#### 9. Guarantee Terms

The drying system is designed for continuous operation. In order to reach maximum capacity and calculated energy uses, it is an absolute necessity to provide continuous wet product feed with a constant humidity content.

Our products are guaranteed against all production and material defects for a period of 1 year starting with commissioning and start-up.

# 10. Packing

Our standard packing is already included in our offer price. All goods will be delivered with plastic wrap, suitable for crane/fork lift handling, truck shipping or standard container shipping. All goods will be labeled as per client's request. Complete wooden box or any other special packing request will be priced separately.

#### 11. Terms of Delivery

All goods will be delivered Ex-works Çorlu, ASOS production facility. Delivery time is 10-12 months after receipt of advance payment.



#### 12. Terms of Payment

Contract price shall be paid in partial payments as follows:

100 % of the contract value against an irrevocable and confirmed Letter of Credit (L/C) allowing partial shipment, partial utilization, partial payment and prolongation. L/C valid for the whole delivery time plus 60 days.

The L/C payable according to the following conditions:

- 50 % Advance payment in the agreement (together with the contract),
- 40 % Pro rata shipment payable by announcement of shipment.
- 10 % advance payment after final acceptance.

#### 13. Cancellation of Order

In case buyer prefers to cancel a purchase order, the following cancellation fees will apply.

- 15% of total order value if cancellation occurs within 30 calendar days after contract signature.
- 45% of total order value if cancellation occurs within 120 calendar days after contract signature.
- No cancellation after 120 calendar days.

# 14. Force Majeures

Force majeures; natural disasters such as floods, earthquakes and fires that are not caused by their own negligence or mistakes, outside of their own inspections, accidents occurring during domestic and international transportation; mobilization, war, epidemic disease, strike, lockout, popular movement, civil war revolt, radioactivity pollution and the power of nature.

In the event of a force majeure, the affected party shall notify the other party in writing within 10 (ten) days. Due to force majeure, the parties will not be able to find any additional requests other than extension of time (compensation etc.). ASOS reserves the right to terminate the work on a single basis if the suspension of the work / progeny due to force majeure passes a total of 90 days.

#### 15. Validity of Quotation

Our offer is valid for 30 days after submission.

We trust our quotation will meet all your requirements and we are looking forward to hearing from you.

Kind regards,