

# PG 135

## Adiabatic Multistage Belt Dryer



# P i G o<sup>®</sup>

FOOD PROCESSING MACHINERY

## The key differences between PIGO DRYING Technology and competitive technologies

### MONEY SAVING PROCESS / FASTER FREEZING WITH LESS ENERGY

Our air guidance system reduces drying time while consuming less energy.

### LOW TEMPERATURE OPERATION POSSIBILITY

Our special design allows low temperature operation cycles which are crucially important for preserving the natural integrity of your product.

### FOOD SAFETY FRIENDLY

Great care and determination was put into designing a system that makes accessing and cleaning every component very easy, ensuring that bacteria or residue will not get entrapped on any equipment or food surfaces.

LISTERIA AND PATHOGEN FREE OPERATION - Today's "must" for food safety, provided by open design of all machinery parts

### OPERATOR FRIENDLY

All steps in the drying process are designed to facilitate simple, fast and efficient operation and maintenance.



## ADIABATIC MULTISTAGE BELT DRYER EASY Dry PG 135

ADIABATIC MULTISTAGE BELT DRYER EASY Dry PG 135 with continuous return air drying (by condensing water-humidity from the air) and individual zone drying control is giving to the user the possibility to dry the product at very low temperatures, with up to 2 times shorter drying time, preserving product color and quality.

Choice of drying temperature is up to the technology and products requirements.



# UNIQUE PIGO DESIGN

**TRANSFER OF THE PRODUCT** through the drying process is by the belts (from the upper belt to the below belt), providing continuous turning of the product and completely uniform drying.

**POSSIBILITY** of both drying air refreshment by fresh ambient air through apposite flaps (fresh air inlets), as well as using continuously dried air (up to only few percent of the humidity in the air) to obtain the best drying effect.

**EFFICIENT AIR DRYING** is provided by the condenser unit (working on 5-7 0C temperature), installed on the returned air flow. This condensing unit is providing possibility of continuous work with only recirculated air, particularly important in drying of easily oxidable products, eliminating necessity of introducing fresh air which is possibly causing oxidation.

**TO OBTAIN THE BEST DRYING EFFECT** and close to 100% uniform drying of product, complete system is projected for a very thin layer of the product, only 3-6 cm thickness at the entrance.

**EASY Dry PG 135** is equipped with partial CIP (Cleaning In Place System), consisting of piping with sprayers and water collecting basin, providing efficient washing of necessary areas after working cycle



## HEAT PUMP PRINCIPLE:

Hot air is blown through the product by powerful fans in predetermined multiple air ducts, providing perfect air flow distribution and uniform drying. After passing the air drying section, "dewatered" air is again heated up to the required temperature by passing through the heat exchanger.

If complete condensing system is supplied by PIGO, it is possible to use the heat produced by air drying unit for heating up the dried air, and drastically (up to 70-80%) reduce the quantity of the steam (or other heating source)



# BASIC TECHNICAL CHARACTERISTICS

<b>Model PG 135</b>	<b>800x3000-8</b>	<b>1000x4000-8</b>	<b>1500x6000-8</b>	<b>2000x8000-8</b>	<b>2000x12000-8</b>	<b>2500x19000x8</b>
Capacity (onion) kg/h (with adiabatic cycles)	150	250	500	1000	2000	4000
Unit Weight (kg)	4400	5500	9700	16100	31000	44000
Total length (mm)	7000	8500	11500	14500	20500	27500
Working length (mm)	3000	4000	6000	8000	12000	19000
Tunnel length (mm)	4500	6000	9000	12000	17000	24000
Belt width (mm)	800	1000	1500	2000	2000	2500
Dryer width (mm)	1300	1500	2000	3000	3000	3500
Dryer height (mm)	2300	2500	2500	2500	3500	3500
Total height (mm)	3300	3500	4000	4500	5000	5000
Belt N°	8	8	8	8	12	12
Fan N°	5	5	5	5	7	9
Required heating energy without adiabatic cycle (kW)	280	460	920	1840	3680	7360
Cooling unit installed power (kW)	40	65	130	260	520	1040
Installed el. power - belt motors & fans (kW)	14	18	25	35	55	90
Energy consumption per kg of wet product, with adiabatic cycle (kW/kg)	1- 1,5	1- 1,5	1- 1,5	1- 1,5	1- 1,5	1- 1,5

## PIGO provides complete, turn-key processing solutions:

- Freeze Drying - EFD
- Fluidized Bed IQF Freezers - EASY Freeze
- Spiral Freezers / Coolers / Pasteurizers
- Adiabatic Multistage Belt Dryers - PG 135
- Tunnel Dryers - PG 128
- Pitting Systems
- Complete Fruit & Vegetable Processing Solutions
- Milk Processing Lines



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