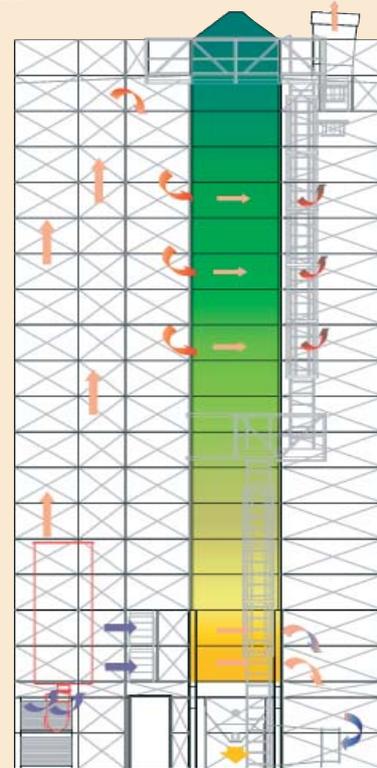




Flow diagram



PETKUS Continuous Flow Dryers are based on roof column design for drying processes of various types of cereals:

- Grain, maize, oil seed,
- Feed grain,

The PETKUS Dryer is designed in completely modular construction to ensure a wide range of models and capacities (from 5 to 60 t/h, based on wheat) by the different assembly possibilities of the main components. In total 3 types of dryers are available:

- Type DU 1500 / DU 2500 / DU 4000

The working principle of the dryer type DU (Direkt-Umluft) is based on direct heating by gas or oil burner and recirculation of the air. Aspiration systems or filter systems are not necessary.

Construction:

The warm air production is carried out directly by the use of either an oil burner + burn heat chamber or with a gas flat burner and installed in the warm air column. The air stream velocity in the drying column can be adjusted and controlled due to the treated product by air aperture slides which are installed in the exhaust air column.

In the drying column are installed conical air channels cascades. These air channels are closed on one side and installed mutually and can be used for in-suction and out-suction of air.

Based on the mutually installation of the air channels the product in the drying column will be even treated with warm air. Axial fans in the dryer roof are working in suction process and producing the air stream in the product column. Behind the axial fan an air louver is closing the air aperture during the discharge process of the dried product, this system avoids that the dust is flowing into the environmental during when the product is being discharged.

Process description:

The moist product is filled in a inlet hopper at the top of the drying column. The product flows intermittently in zigzagging through the column over cascades to the discharge device at the bottom. In this process the warm air flows through the product to the exhaust air column. The warm air temperature is related to the moisture content of the moist product. Following the warm air treatment the product passes the cooling section. Cooling air flows through the product. This process of air stream flow through the material ensures maximum efficiency, uniformity, gentle and a most effective method of drying.

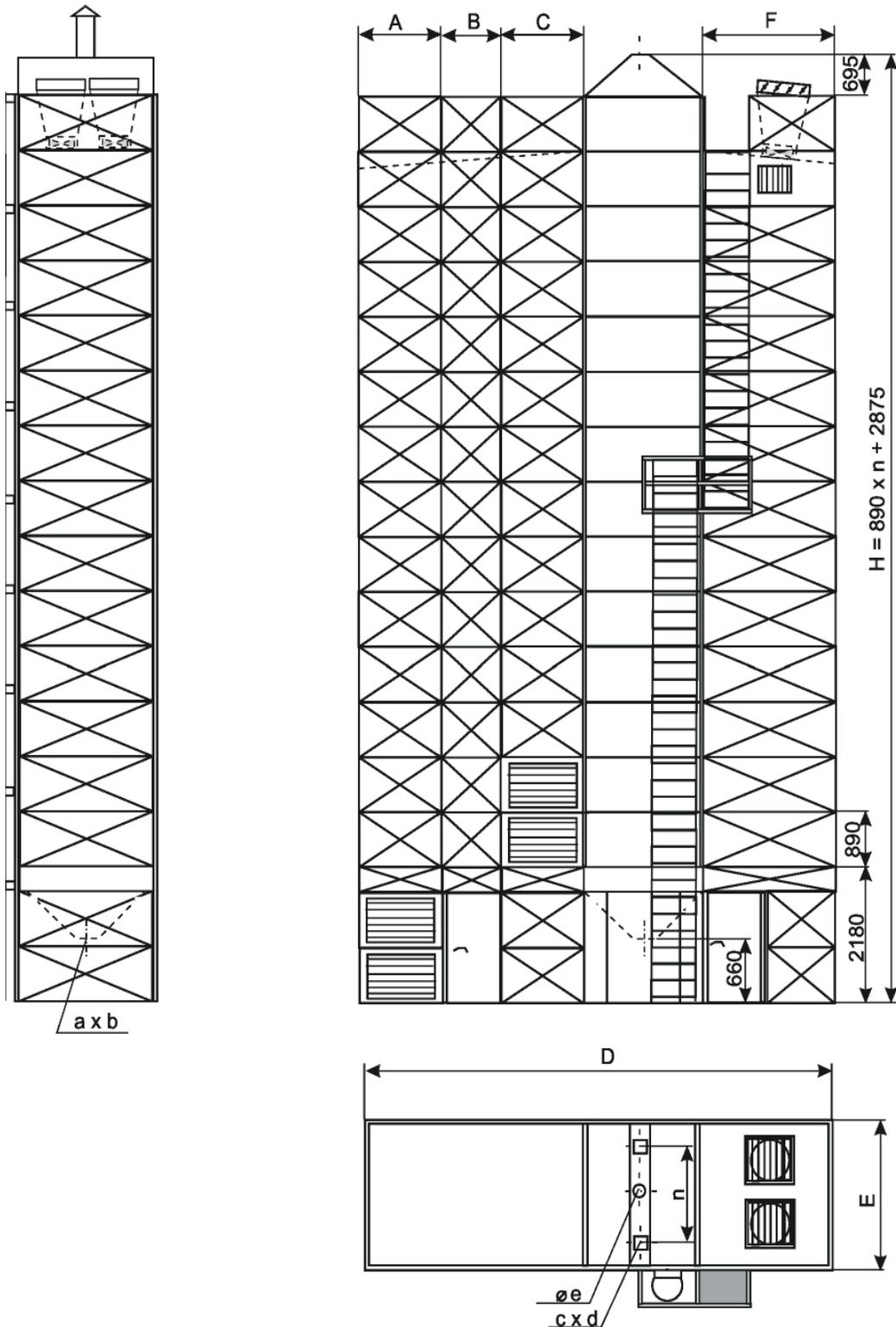
Standard equipment:

- Galvanised steel sheet construction,
- Drying column with conical air flow channels (cascades),
- Buffer bin with devices for the uniform distribution of the product in the whole section and level indicators,
- Warm air column with insulated outside walls,
- Exhaust air column,
- Pneumatically discharge device with outlet hopper,
- Ladder and intermediate support in galvanised construction,
- Axial fans with air louvers,
- Stable support frame construction,
- Burner and burn heat chamber,
- Compressor incl. air piping,
- Control panel with PLC,

Optional equipment:

- Insulation of the drying column
- Construction from Aluminium
- Devices for diverting the product in the inlet hopper available in type DS 4000
- Buffer bin with more volume

Continuous Flow Dryer Type DU



Type	A	B	C	D	E	F	a	b	n	c	d	e
1500	1450	1050	1050	7070	1570	1450	200	200	-	-	-	Ø 150
2500	1450	1050	1450	8340	2440	2320	250	250	-	-	-	Ø 200
4000	1450	1050	1450	8340	3890	2320	250	1700	1885	250	250	-

n = Total No. of cells
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