SUBLIDECOR 700 SUBLIBAG 3X10

Sublichromia Wood or Marble Grain imitation High Capacity Plant for Aluminium Profiles, Frames and Sheets with Automatic Transfer of the Loads on Frames.

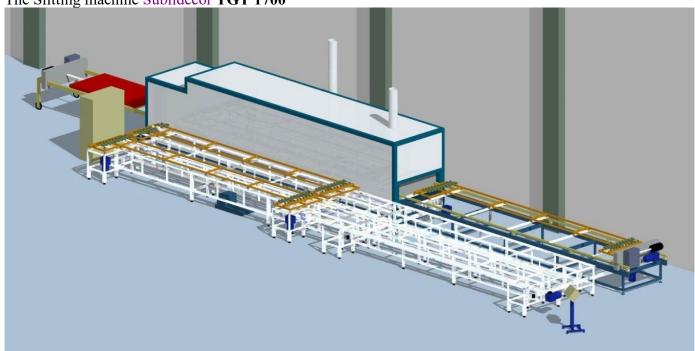
This is the main Machine of a Plant consisting of 3 Machines in total:

The Main Machine with the Loading Trolley Sublidecor 700 Sublibag 3x10

The Automatic Bagging Machine by Ultrasonic or Thermo Welding:

Auto Sublidecor AUTO US Weld 700 or THERMO Weld 700

The Slitting machine Sublidecor TGT 1700



ALCOLOS

SUBLIDECOR 700 SUBLIBAG 3X10 AUTOMATIC PLANT OF UNIQUE DESIGN.

AUTOMATIC HANDLING WITHOUT CRANES OF FABRICATION ALUMINIUM PROFILES, ALL HELD BY SPECIAL SCREW ATTACHMENTS.

PRODUCTION CAPACITY OF UP TO 120 PROFILES PER HOUR

The Main Machine consists from one Oven, One large Trolley with an Automatic Frames Traveling for the charging by 2 couples of operators at the same time.

The operators are charging the Alum Profiles inside the bags and then apply the Vacuum in the bags.

2 loading positions are available. Each loading position is served by 2 operators. See sketch below:



The Main Machine is consisted by:

- One printing oven as per attached drawing with air boiler and LPG or Natural Gas burner 240.000 Kcal/h.
- Two ventilators circulating the lot air, 9000m^3 /h each, 3KW power 50 Hz, 380 V. Air flow to length through 20 openings, to provide constant air flow and temperature distribution \pm 4°C inside the oven.
- One forwarding Trolley of the aluminium profiles by means of electronic inverter. Vacuum is applied directly to the transfer film which wraps each profile by means of electro powered vacuum pump loading of aluminium profiles is made on three (3) trolleys in total.

The film bags are being pulled before vacuum application by means of the springs mentioned above. Special mechanism for quick pulling by short hand – movement of operators. See attached drawing

Number of Trolleys in-out the Oven: 1

Related Electrical components: TELEMECHANIQUE.

Number of object temperature probes: 4 in total, 3 for the Frames on the trolley plus 1 for the sheet table at the other side of the oven.



Control Panel with PLC and 9 inverters for the control of the Automatic Frames' movements. Movements securted mechanically by multidirectional wheels and linear actuators.

Heating time inside the oven depends on the temperature indication of the probe attached onto one aluminium profile (object), placed on the trolley. Hence the trolley goes out of the oven automatically when the preselected heating time is reached.

i.e 1 minute after the object temperature reached 200°C.

Aluminium sheet manually operated trolley on the other side of the oven, equipped with 2,5 HP vacuum pump, so no big interruption of production with profiles is necessary when processing aluminium sheets. For the first time aluminium sheets and profiles can be processed without delays in sheets production like it is happening usually.

Frame – trolley on wheels for the manual introduction of the trolley of sheets in the oven.

Electrical board which includes sub-board for automatic control plus safety instruments control.

<u>Loading – unloading procedure of aluminium profiles:</u>

At Positions 5 and 6 loading of the stand by trolleys with 10 profiles each one connected with one pair of vacuum heads by means of the vacuum pump of loading stations (VPLS).

After the end of loading, the stand by trolley is forwarded automatically at position 3 in the meantime the finished trolley goes at positions 4, via position 3.

Afterwards the loaded trolley goes at position 2 via position 3 as mentioned before. Then follows manual connection with the vacuum pump of trolley (VPT). Afterwards the loaded trolley is forwarded automatically

towards the oven, while operators go on with loading at positions 5 and 6. The complete cycle is repeated. The movement of the trolleys is controlled by means of PLC and limit switches or photo-cells.

Number of Trolleys in-out the Oven: 1

Number of crossing-handling banks on floor: Four (4)

Number of Frames of 10 profiles each: Three (3)

Number of vacuum Pumps: Three (3)

Electro- controlled movement of the Frames to the length of the oven (in – out on the Trolley) to width of the oven and to length along outside the oven.

Control by means of Siemens PLC model S 7.

Related Electrical components: TELEMECHANIQUE.

Vacuum connection by means of quick, connectors at positions 5,6 and 2.

Number of temperature probes: Four (4). One per each of the 3 Frames plus one for sheet table at the other side of the oven.

Connection of the temperature probes by means of electrical Heat Resistant quick connector placed on the trolley, which enters the oven.

Heating time inside the oven depends on the temperature indication of the probe attached onto one aluminium profile (object), placed on the trolley. Hence the trolley goes out of the oven automatically when the preselected heating time is reached.

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Total installed motor power: 19 KW (380 V, 3 phases 50 Hz)

3 electrical vacuum systems with Turboblower and Vane type Vacuum pumps

Capacity of the main machine – oven: per frame on the loading stations up to 4 cycles per hour, with 10 profiles per cycle. <u>Total is up to 120 profiles per hour.</u>

Overall Dimensions of the Main Machine: 23.100 x 5.000 x 2.150 mm





SUBLIDECOR 700 SUBLIBAG 3X10: Gas heated Plant with 3 detachable vacuum application Frames with 10 Aluminium 7 meters long Profiles each in a fully automatic movement. One Trolley is handling the 3 separate loaded Frames in and out the Oven. Production of up to 120 Profiles per hour.





ALCOLO 5