

LABELER SACMI OPERA 500 COMBI

Manufactured:	Sacmi
Model:	Opera 500 Combi
Capacity:	12.000 bph
Label:	Roll fed label and cold glue label
YOM:	2008
Container diameter:	55 – 110 mm
Container height:	150- 370 mm

Important Details:

Machine already disassembled, immediate available



ROLL-FED LABELLING MACHINE

Automatic rotary labelling machine equipped with 1 (one) roll-fed labelling station, hot-melt glue type, to apply one plastic fullwrap label and 1 (one) cold glue labelling station to apply one front or one partial or full wrap around neck or one back pre-cut paper label on cylindrical/shaped filled PET containers.

Containers technical information

Container minimum diameter:	55 mm
Container maximum diameter:	110 mm
Container minimum height:	150 mm
Container maximum height:	370 mm

Roll-Fed Labels information

Label minimum length:	185 mm
Label maximum length:	360 mm
Label minimum height:	30 mm
Label maximum height:	175 mm

Cold Glue Label Specs

Label minimum length:	20 mm
Label maximum length:	180 mm
Label minimum height:	20 mm
Label maximum height:	150 mm

PRICE SUMMARY

Including:

- Double feedscrew infeed system;
- Platforms rotation by means of brushless motors;
- three glue heaters for cold glue labelling station.
- Motorisation of RF group
- Disconnecting system for CG groups
- Motorization to conveyor belt through inverter
- Lincoln automatic lubrication
- Air conditioner for main electric board
- SEW Motors
- Bottle dryer (P=15 kW, ACI manufacturer)

ADDITIONAL CHANGE PARTS

- Change parts for 1l PET beer bottle, 1,5 l beer bottle, 2,5l beer
- Change parts for three additional "ROLL-FED" label size **for 1 l, 1,5 l and 2,5l bottles**
- Change parts for three additional cold glue label size **for three full wrap around neck labels for 1 l, 1,5 l and 2,5 l beer bottles**

DESCRIPTION OF COMBI LABELLING MACHINE

MACHINE STANDARD FEATURES

The infeed and discharge conveyor configuration is **in-line**.

Different conveyor configurations (parallel "U" type or angular configuration) as per final Customer request are available.

Base Frame and General Structure

The support frame is made of welded strong iron steel profiles and is equipped with height adjustable feet. Anti-vibration and noise absorption principles have been applied everywhere.

The top surface is a heavy-machined carbon steel plate, covered with Aisi 304 stainless steel metal sheet.

Inspection is possible through side doors and frame side skirting clad with Aisi 304 stainless steel plate.

Castings and carbon steel parts are treated against corrosion. The treatment operations are: sanding, chemical cleaning process and epoxy painting (multi-layer process).

Machine standard colour is **RAL 7038**. Other colours on request.

Our strength: The general structure of the machine has been designed to work 24 hours a day even in a wet environment; a large use of corrosion resistant materials, such as stainless steel, non-ferrous alloys, plastic, etc. is made.

Main carousel

The machine head height can be electronically regulated from the operator panel.

Container headgripper jacks, controlled by a mechanical cam, have a triple parallel stem structure, with mechanical stroke compensation in the standard version, but a pneumatic compensation system for a fine regulation can be provided on request.

Self-centring type container platforms to allow a perfect positioning of the bottle; their surface is coated with friction improving material, to avoid container slippage during machine operation. Spoked type design container table, for easy debris removal.

Spoked type design container table, for easy debris removal.

Platforms rotation by brushless motors (electronic cam).

Safety guards

Safety guards are present along the whole base frame perimeter.

Guards are made in Aisi 304 stainless steel with transparent material windows. Also the guards on the lower part of the base frame can be transparent on request) to allow a complete visibility of the machine parts (Visual Maintenance).

Openable doors are fitted with interlock type micro-switches (opening possible with machine in shut down mode only).

Roll-fed labelling station

The standard labelling aggregate is equipped with two reel stand supports. A film tension control system operates on each reel stand.

During working process, the film vertical position is controlled and continuously adjusted by an automatic web tracking system before arriving to the feeding roller and the cutting drum.

The film feeding roller is driven by an independent servo motor that corrects the feeding speed according to the actual detection of a spotting mark or a reference on the film and according to the machine production speed via encoder.

The label is cut by the mechanical interference between the static blade and the rotary blade; regulation and fine tuning is very easy. Exact tuning is necessary to have long life blades.

Cut labels are transferred by an aluminium vacuum drum. **NO GRIPPERS ARE USED!**

Hot Melt glue is distributed on leading and trailing edges by a high precision stainless steel cylindrical glue roller; thin gravures are machined on the roller to have a very low glue consumption.

Vertical and horizontal labelling aggregate positioning is adjustable to allow different container diameters and different label heights.

Drive is given to label station by linear gear to gear transmission and an overload protection system (electrically interlocked synchronous clutch) protects mechanical parts from label jams.

Our strength:

- **No grippers to transfer cut labels:** this implies a higher speed, less mechanical parts, less wearing, a simple and easy cleaning and thus less costs for maintenance.
- **No slippage between label and transfer vacuum drum:** the different label material parameters and the transfer vacuum drum surface quality do not affect the machine efficiency. The labelling process is thus less critical.
- **Static blade and rotary blades easy to tune:** good cutting process and long life of blades.

Cold glue labelling stations

The labelling machine is equipped with cold glue labelling stations, conceived for an industrial use and built with highly resistant materials, which guarantee optimum performances with a great flexibility.

The base of each labelling station is fixed onto a cross sliding guide allowing longitudinal and transversal adjustments for a correct application of the label onto the container.

The mechanical moving components are collected in a single unit.

The lubrication of components is guaranteed by a continuous oil flow, constantly fed by means of a pump.

The label magazine is of fixed type.

The glue pallets are provided with a rubber outer covering, while the glue roller is made of rectified steel.

The glue is brought to the glue roller by means of a pneumatic pump directly inserted in the glue bucket. The thickness of the glue film is adjusted in accordance with the containers flow. An automatic device with the function "no-bottle, no-label" controls the label cession.

Machine drive

Main gear box is of crown-screw worm type and oil bath lubricated.

Machine speed follows the container infeed and discharge flow; the main electric motor is controlled through inverter.

In order to improve precision and to reduce noise the machine is equipped with linear gear system transmission, with gear wheels made of C40 steel and Zellamid, with alternate disposition.

Grease lubrication is centralised, with grouped and easy to reach feeding nipples.

Feed screw and starwheels transmission systems are complete with safety electro-mechanical clutch devices to shut the machine down in case of container jamming.

Infeed and discharge conveyors

Open section conveyor channel complete with drip pan, made in Aisi 304 stainless steel, with wear-proof plastic rollers and sliding profiles.

Tabletop type conveyor belt, Aisi 304 stainless steel (or Delrin) made.

Bottles are guided by stainless steel plus plastic contact profiles side guard-rails, adjustable both side-wise and vertically.

The infeed gate lock device can be manually or automatically operated.

Machine control system

The machine is delivered with complete electric and pneumatic plants, ready to be connected to the main factory plants.

Pneumatic plant is complete with pressure regulation unit and air filter.

The **stainless steel main electrical cabinet**, waterproof type, is integrated in the machine structure.

All machine controls and status/signal lights are centralised together with a multi-function operator interface display screen on a single operator panel, complete with removable push-button station (emergency stop + pulse motion buttons).

Push buttons (mushroom head type) for emergency machine shut down are available at strategic locations, easily accessible to the operator.

A PLC unit supervises the machine automatic operations.

Machine main motor controlled through inverter, plus set of sensors mounted on the conveyor, for an automatic-continuous speed variation, according to containers flow.

Machine infeed automatic closure starwheel, in case of containers build-back at discharge side.

All electric and pneumatic power and control circuits are built in accordance with the latest applicable international standards (CE Standard).

Something more

- ❑ Easy and quick maintenance and lubrication thanks to the high quality of components and materials used.
- ❑ Machine designed in order to have the maximum accessibility for cleaning and debris removal purposes.
- ❑ Quick bottle/label size changeovers.
- ❑ Colour or customized coded changeover parts and accessories for an easy and quick identification.