



## CONDIBOX

World Class Conditioners and Heat-Setting Machines. Made in Germany.





## **CONDIBOX TYPES**











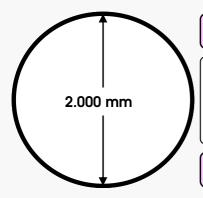






## ADVANTAGES OF CONDIBOX

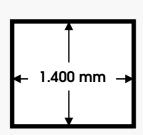
## **VOLUME DIFFERENCE**



## **CYLINDRICAL**

Diameter: 2.000 mm Length: 4.000 mm Capacity: 1.200 kg

**VOLUME= 14.900 mm<sup>3</sup>** 



## **WELKER ULTRAFLAT**

Height: 1.400 mm
Width: 1.400 mm
Length: 4.000 mm
Capacity: 1.200 kg

**VOLUME= 9.000 mm<sup>3</sup>** 

**VOLUME = - 40%** 

### LESS VOLUME = LESS ENERGY

The rectangular design of CONDIBOX improves the utilisation of space which represents a considerable reduction of volume inside the machines. It is quite clear that less volume to be heated up also needs less energy to do it, because not only the yarns have to be heated up, but the air and the steel mass of the machine itself

### **UP TO 40% SAVINGS**

Manufacturing cost of cylindrical designs is certainly cheaper than of box- type machines. However, the long term operating cost and energy balance are the other way around. In the chart above a cylindrical 1.200 kg machine is compared to a CONDIBOX. The volume difference is -40% with lower energy cost and space.

### ADVANCED TECHNOLOGY

There are a number of key improvements with the objective to increase the efficiency of the machines and to reduce the **cost of both water and energy**, making the CONDIBOX the most advanced conditioner available in the market:

- ULTRAFLAT design to reduce volume and loading height
- Indirect ECOHEATERS with optional CASCADE Energy Management
- NEW optional WATERFREE pumps,
- NEW optional PREVAP patent to increase moisture.







## LOW ENERGY WITH INDIRECT ECOHEATER











### HIGH TECH HEATING CONTROL

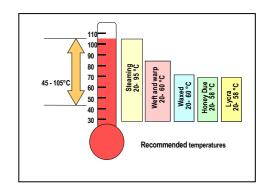
For better energy management and process control, CONDIBOX incorporates world class technology with fully insulated **INDIRECT ECOHEATERS**. This new generation of heaters work with the principle of thermic splitting and therefore, fully attends the new European Environ-mental Regulation 2005/25/EG. Thermic splitting means that there are two different environments under separate control:

The heating action, andThe conditioning action itself

With the thermic splitting, the control of temperature inside the conditioning vessel is more sensitive, especially when processing LYCRA, WAXED YARNS, HOSIERY YARNS etc.

### **CONNECTION TO STEAM**

Optionally, CONDIBOX can be connected to a steam supply. In this case, the machine will be equipped with a WELKER SATURATOR system to ensure high saturation.



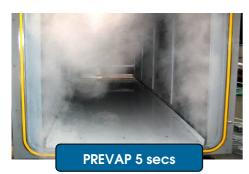
### TEMPERATURE RANGE

CONDIBOX machine versions are engineered for ranges between sensitive 32°C up to heat- setting at 110°C (optional HT version)



## BLUE LINE AND PREVAP/COOLVAP









### **INCREASE UP TO +3% MOISTURE**

Especially when using pin trucks and working in extremely warm climate conditions, PREVAP/COOLVAP is a true option to increase moisture in the cones.

In course of the continuous development, WELKER technicians have tested various possibilities of controlling the cooling of bobbins inside and outside the conditioning machines. WELKER detains the key patents of **PREVAP and COOLVAP** in this field.

With the utilisation of atomised water vapour molecules inside the conditioning machine with pre-conditioning and cooling treatments, PREVAP and COOLVAP offer better possibilities of increasing moisture efficiencies up to +2, 5/ +3% in only 60 minutes of treatment.

If you have any query, please do not hesitate to contact us.

## PRE-CONDITIONING WITH PREVAP

New patent of WELKER. With the new system, the bobbins are prepared for conditioning, then submitted to vacuum and saturated steam treatment.

## COOLVAP

Proven patent of WELKER. The bobbins cool out <u>inside the machine</u> after the saturated steam process helping to keep the moisture inside and reducing evaporation during the coolina time.

# CONDIBOX Blue Line



Blue Line machines add economy of cost to environmental protection. Optionally, DUPLEX FIT can also be equipped with these following items:

waterfree pumps avoid massive use of cooling water for the suction of vacuum. There are two types of pumps available: oil and air cooled.

consumption management system. Equipped with a preheater, the total energy demand is reduced by 25 - 30 %. Consequently, the installation cost is reduced as the plant needs only to provide 50% of installed KVA.

BLUE LINE is optional and these
TOP OF LINE machines are
characterized by having the
BLUE DOOR DESIGN.





## **AUTOMATION WITH WELKER PACKTRACK**





PACKTRACK automation includes entirely or partially automated solutions "from one hand" for conditioners, including:

- preparation,
- loading,
- unloading,
- cooling
- weighing
- ticketing and
- packaging.

WELKER engineers have automated many plants with partial or full automatic transport, packaging and ticketing lines, and this comprehensive experience is at your service.







## 100% MADE IN GERMANY, SINCE 1856.



### FROM NEUSTADT TO THE WORLD

Our plant is located approx. 110 km southwest of Frankfurt, Germany in an old traditional textile area. From here, all WELKER machines leave to their destinations around the world. Our skilled technicians take care that every machine is tested before it leaves the factory. Corrections, if any, are made before the machines leave the factory.













## **OUR PROFILE**



### 1856: FIRST IN BUSINESS

WELKER was founded in 1856 by Philip Welker, and is therefore, one of the most traditional suppliers for the Textile Industry. In the early 40's, WELKER started with the manufacturing of felt washing machines, paper processing machine lines with roller fulling and hammer die cutting machines.

In 1941 and the first generation of vacuum steaming equipment was developed and successfully introduced to the market. WELKER systems are installed world wide and are applied in all areas of heatsetting, conditioning and drying.



### **WELKER IN THE WORLD**

With more than 1900 machines installed over the world and agents in all textile markets we provide project sales, installation and services to all textile customers in all markets.





### **CONDIBOX**

Leading product for conditioning and heat-setting up to 105°C.

Unique technology with PREVAP and COOLVAP to achieve moisturisation up to +3%.

### **CONDIBOX GFY**

Leading product for conditioning and drying of GFY.

### **VAPOMAT**

Leading product for conditioning and heat- setting with temperatures up to 180°C in large scale.

### **PICCOLO**

Leading product for conditioning and heat- setting with temperatures up to 180°C for 100, 200 and 300 kg batches in standard trolleys.

### **CONDIBOX BLUE LINE**

First conditioning systems in the market designed to <u>PRESERVE</u> <u>WATER AND ENERGY</u>. Do not only improve the bottom line but show all people involved that care is taken of their future.

