

# FACE 400 SERIES

FACE MASKS AND RESPIRATORS CONVERTING LINE





## Table of contents

|  |    |
|--|----|
| SOLUTIONS FOR FACE MASKS AND RESPIRATORS | 4  |
| FACE 400                                 | 6  |
| FACE 400D                                | 7  |
| TECHNICAL DATA                           | 8  |
| TISSUE & NONWOVEN IN THE WORLD           | 11 |

# SOLUTIONS FOR FACE MASKS AND RESPIRATORS

THANKS TO ITS WIDE EXPERIENCE IN THE NONWOVENS INDUSTRY, TEKNOWEB STANDS AS RELIABLE PARTNER FOR THE MANUFACTURING OF CONVERTING LINES FOR FACE MASKS AND RESPIRATORS, ENSURING HIGH PERFORMANCE COMBINED TO EXTREME SANITARY DESIGN.

THE MACHINE RANGE INCLUDES TWO MODELS:

- **FACE 400** - CONVERTING SOLUTION FOR SURGICAL FACE MASKS
- **FACE 400D** - CONVERTING SOLUTION FOR FFP<sub>2/3</sub> OR N<sub>95</sub> CLASS RESPIRATORS

As main contractor for full manufacturing lines, downstream the converting machines Teknoweb can provide the most suitable solution for packing the finished products: this line can be completed by IMA's modular flow wrapper or integrated carton box, designed to handle face masks and ideal for the integration into complete lines thanks to an easy plug&play solution.



## MAIN FEATURES AND BENEFITS

- COMPLETE CONVERTING AND PACKING LINE DESIGNED FOR MAXIMUM FLEXIBILITY AND SUITABLE FOR PROCESSING DIFFERENT KINDS OF MATERIALS
- ULTRASONIC SEALING TECHNOLOGY FOR A SAFER OPERATION, SAFER BONDING, EASY SETTINGS AND HIGH FLEXIBILITY
- MANUFACTURED ACCORDING TO THE LATEST SANITARY DESIGN STANDARDS - EASY TO SANITISE, EASY TO ACCESS
- BOTH EARLOOP OR HEAD-BAND CONFIGURATION
- SIMPLE SPLICING OF NONWOVEN MATERIAL WITHOUT MACHINE STOPS OR WITH OPTIONAL AUTOSPLICE
- EASY TO USE MACHINE - NO SKILLED LABOR REQUIRED
- VARIABLE NUMBER OF LAYERS
- EASY MASK SIZE CHANGEOVER
- OPTIONAL PRINTING DEVICE FOR PERSONALIZATION
- LOW ENERGY CONSUMPTION



Earloop surgical mask



Head-band FFP2/3 respirator

- COMPACT AND REDUCED FOOTPRINT
- BEST BALANCE BETWEEN PERFORMANCE AND PRICE
- SHORT LEAD TIME
- FLEXIBLE PACKAGING SOLUTIONS FOR RETAIL, WHOLESALE AND INSTITUTIONS
- POSSIBILITY TO OPERATE 24/7 MAXIMISING EFFICIENCY AND MINIMISING PRODUCTION COSTS

## IMA SENTINEL: EFFICIENCY AT HAND

FACE 400 Series is IMA SENTINEL ready, the open platform to monitor autonomously machine conditions in real-time 24/7. Thanks to IMA Sentinel is now possible to collect raw data and translate them into **meaningful and valuable information** providing:

- **Intelligent and dynamic action list** for the operator to help improve efficiency;
- **Machine data statistics** for smart line harmonization;
- **Real average performance** for accurate production planning. SENTINEL can dialogue with all ERP and MES systems and receive and analyze data from all PLCs. IMA Sentinel is an IMA Digital project.



# FACE 400

CONVERTING AND PACKING LINE FOR  
SURGICAL FACE MASKS IN EARLOOP  
AND HEAD-BAND VERSION.



TECHNOLOGY THAT CARES.



## CONVERTING UNIT

FACE 400 mask converter is based on a well-consolidated platform used to convert products made by lamination and welding of different fabric webs by hot melt or ultrasonic sealing. The unit is able to produce surgical masks in 3 layers, with nose clip and elastic, with the possibility to manufacture either earloop or headband versions.

Elastics are seamed to mask body by hot melt and ultrasonic welding. FACE 400 includes an automatic stacking device and allows a quick and electronic counting changeover to be operated on its HMI avoiding any machine stop.

This unit is designed and manufactured according to the latest sanitary design standards. FACE 400 is capable to run from 200 up to 400 masks/min depending on raw materials and counting. It can be adjusted to produce different mask sizes by simply replacing the profile of the ultrasonic unit.

## PACKAGING UNIT

Face 400 packaging unit can be a modular flow wrapper designed to handle surgical masks. This platform is available in different configurations aimed to handle any size of mask.

Given this versatility, the machine allows to run stacks from 1 to 15 pieces. Machine speed capability is up to 200 ppm with a single mask. Complete with automatic splicing device and a quality control system, it can also be equipped with an in line printing unit. Easy machine cleaning and accessibility are guaranteed according to the latest design standards.

**The line can be also equipped with an integrated cartoner for primary or secondary packaging.**

Primary packaging consists of two modules: the first one assembles carton trays from open blanks and places them below the stacking unit, where they are filled with surgical masks. The second module completes the trays by adding a fixed or openable lid with a counterfeiting device.

The cartoner is able to pack from 20 up to 50 masks per single pack, with almost zero changeover time.



# FACE 400D

CONVERTING AND PACKING UNIT  
FOR HEAD-BAND FFP2/3 OR N95  
CLASS RESPIRATORS.



EVOLVING TECHNOLOGIES.



## ALL-IN-ONE SOLUTION

FACE 400D is the evolution of its forerunner and is able to convert the foldable, flat respirators in FFP2/3 or N95 class. This specific respirator is one of the most used as PPE in professional environments and the most convenient and comfortable when worn for long.

This converter is extremely flexible and handles different kind of raw materials in order not to be bound to a specific supplier or technology.

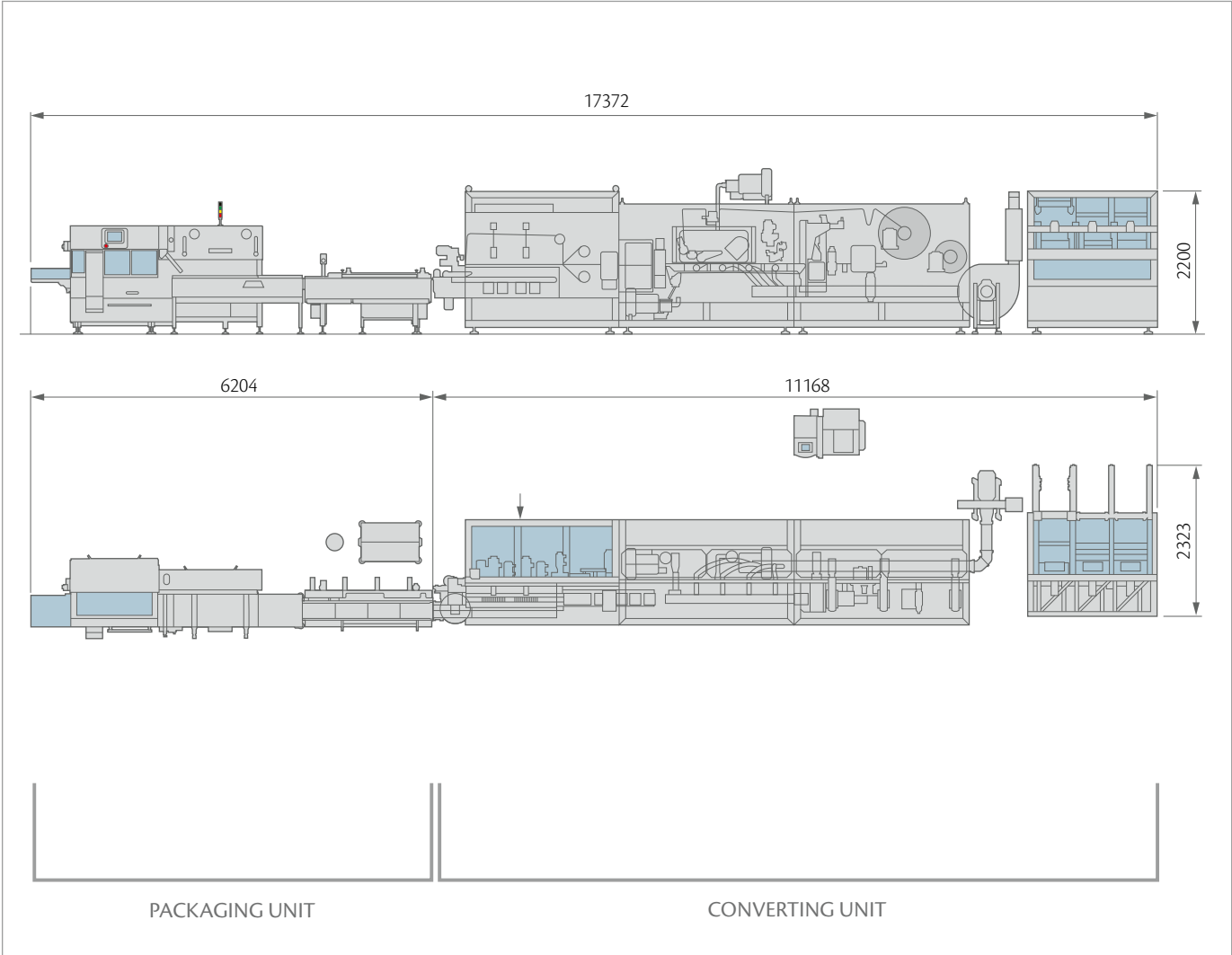
Respirators are ultimately wrapped individually and can be packed in carton boxes in one integrated solution. This operation requires only one operator and one partial support for raw material loading.

## RESPIRATORS MAIN FEATURES

- EITHER FISH-SHAPE OR DUCK-SHAPE AVAILABLE
- MASKS CAN BE COMPOSED OF UP TO 5 LAYERS
- NOSE-WIRE AND FOAM FOR PERFECT FIT
- HEADBAND VERSION FOR PROFESSIONAL USE
- POSSIBILITY TO FEATURE EXHALATION VALVES
- ULTRASONIC SEALING FOR SOFTER BONDS
- CUSTOMIZED OUTER PROFILE

# TECHNICAL DATA

## FACE 400

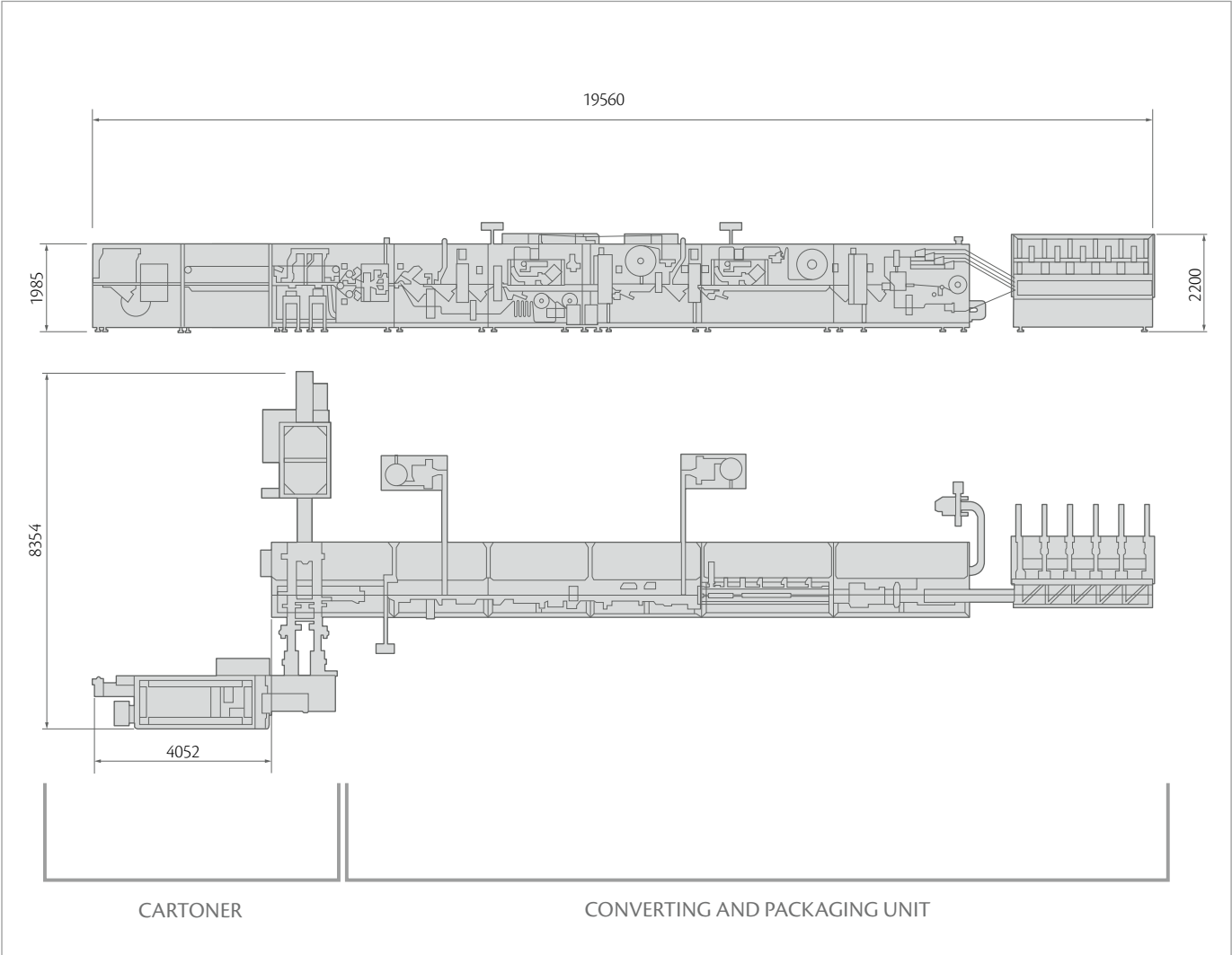


| CONVERTING UNIT |  |
|-----------------|--|
| Machine speed   | From 200 to 400 ppm (pieces per minute)  |
| Mask dimensions | 200 mm length x 100 mm width (standard) Different sizes available on request   |
| Mask materials  | 3 filtering layers: 2 layers of spun-bond on upper and lower edges – 1 layer of Melt Blown in central area<br>The unit is capable of handling different materials upon request |

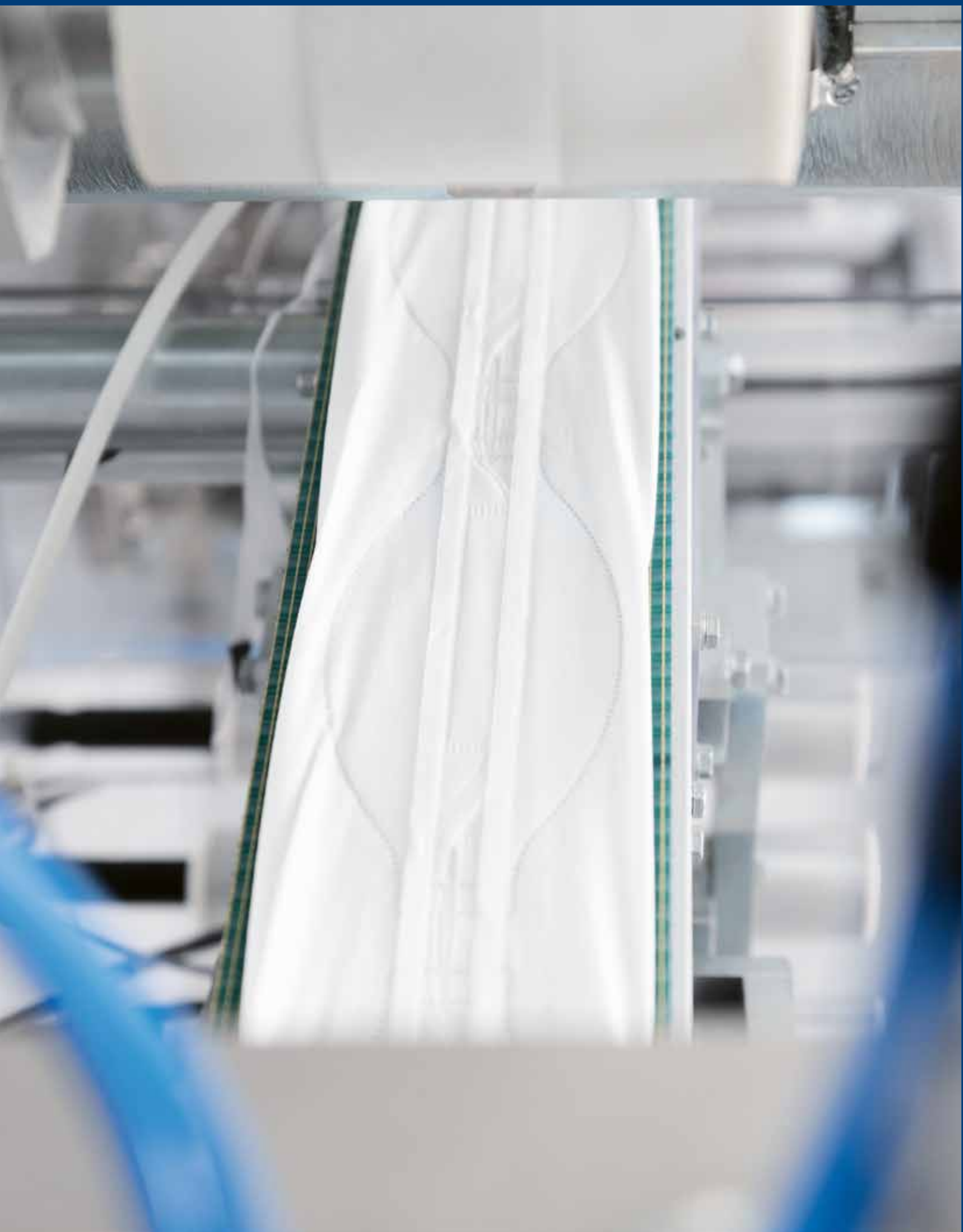
| PACKAGING UNIT     |   |              |                            |
|--------------------|---|--------------|----------------------------|
| Machine speed      | Up to 200 cpm with single mask packed in a pouch.<br>Production output dependent upon product, film and machine specifications<br>Up to 400 ppm with masks packed in carton boxes (flip tops or with lid) |              |                            |
| Maximum mask size  | Length 250 mm   | Width 110 mm | Maximum stack height 65 mm |
| Stacks             | Suitable heat-sealable films or thin carton   |              |                            |
| Wrapping materials | Suitable heat-sealable films  |              |                            |



FACE 400D



| CONVERTING UNIT                      |   |              |                            |
|--------------------------------------|---|--------------|----------------------------|
| Machine speed                        | Up to 300 ppm (pieces per minute) depending on raw materials and respirator configuration   |              |                            |
| Mask dimensions                      | 210 mm length x 90 mm width (standard)<br>Different sizes available on request  |              |                            |
| Mask materials                       | Up to 5 filtering layers: 2 layers of spun-bond on upper and lower edges, 1-2 reinforcement layers of flatbond – 1 or 2 layers of Melt Blown in central area The unit is capable of handling different materials upon request |              |                            |
| PACKAGING UNIT                       |   |              |                            |
| Machine Speed                        | Up to 300 cpm with single respirator in a pouch. Production output dependent upon product, film and machine specifications  |              |                            |
| Maximum mask size                    | Length 250 mm   | Width 110 mm | Maximum stack height 65 mm |
| Stacks                               | From 1 to 20+ pieces  |              |                            |
| Wrapping materials for pouch packing | Suitable heat-sealable films, such as plain, or co-extruded polypropylene (PP), laminate films (e.g. OPP+PE), polythene films (PE) as well as cold sealable films of suitable quality.<br>Rigid thin carton, glued on line.   |              |                            |



# TISSUE & NONWOVEN IN THE WORLD



## **TEKNOWEB CONVERTING S.R.L.**

Via dei Salici, 7 - 26020 Palazzo Pignano  
(Cremona) - Italy  
Tel. +39 0373 951311

## **TEKNOWEB North America**

506-B Plantation Park Dr. Loganville,  
GA 30052 - (USA)  
Tel. +1 770 466 1890



## **ILAPAK INTERNATIONAL S.A.**

P.O. Box 756 CH-6916 Grancia  
(Lugano) - Switzerland  
Tel. +41 (0) 91 960 5900



## **CIEMME S.R.L.**

Via Padre Meroni, 10/B  
22031 Albavilla  
(Como) - Italy  
Tel. +39 031 631 623

FOR INFORMATION ON THE IMA SUBSIDIARIES AND SALES OFFICES SEND AN  
EMAIL TO [SALES@TEKNOWEBCONVERTING.COM](mailto:SALES@TEKNOWEBCONVERTING.COM) OR [INFO.IMAFACE400@IMA.IT](mailto:INFO.IMAFACE400@IMA.IT)  
OR VISIT OUR WEBSITE: [IMA.IT/TISSUEANDNONWOVEN/](http://IMA.IT/TISSUEANDNONWOVEN/) (CONTACTS SECTION)

ima.it



IMA S.p.A. - **IMA Tissue & Nonwoven**

<https://ima.it/tissueandnonwoven/> • [info.imaface400@ima.it](mailto:info.imaface400@ima.it)

FOLLOW IMA    