

Leading Lab Technologies

# RΔYPΔ

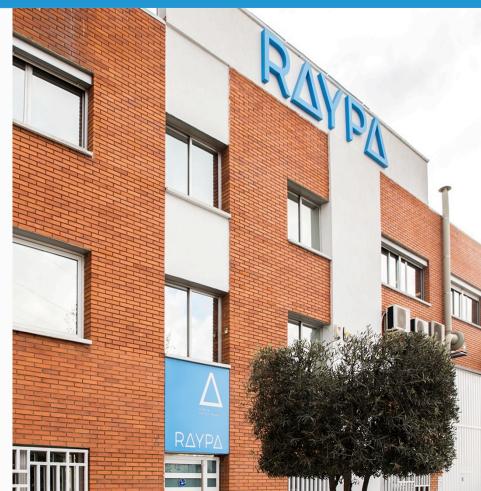
# INTRODUCTION

#### History

- 1970 RAYPA was founded by Mr. Ramón Espinar
- 2008 2<sup>nd</sup> generation take over
- 2016 New makeover

## 2019

- ✓ 30 employees
- ✓ Turn over: 3.6 M€
- ✓ 85% Sales on Export
- ✓ Sales in more than 70 countries
- ✓ More than 60.000 equipments manufactured



# PRODUCTS RANGE

Sterilization
Food analysis
Incubation and drying
Thermostatic baths

# Ø Sterilization

- ✓ From 8 to 150 L
- ✓ Vertical or horizontal loading
- ✓ Microprocessor controlled with connection to PC
- ✓ Solids or liquids programs
- ✓ Options: Heart probe and thermal printer
- ✓ Range:
  - ✓ WITHOUT DRYING
  - ✓ WITH DRYING
  - ✓ WITH EXTERNAL STEAM GENERATOR (FRACTIONED VACUUM)
  - ✓ WITH COUNTER-PREASURE
  - ✓ SMART AUTOCLAVE
  - ✓ MEDIA PREPARATORS



# Food analysis

## ✓ Digestion systems

- ✓ 100 ml or 250 ml tubes
- ✓ Precise control of temperature ramp

## ✓ Nitrogen distillers

- ✓ Several levels of automation
- ✓ Fiber extraction system
- ✓ Fat extraction system

## ✓ Oenologic Distiller







# // Incubation and drying

- ✓ Digital control
- ✓ Made in AISI-304 stainless steel
- ✓ From 20 to 720 L
- Incubators (from Amb. +5 °C to 80 °C)
- Refrigerated incubators (from 0 °C to 45 °C)
- Ovens (from Amb. +5 °C to 250 °C)
- ✓ Fan assisted ovens (from Amb.+5 °C to 250 °C)
- Vacuum drying ovens (from 35 °C to 200 °C)
- ✓ PC Conection





# Sterilization

# Media preparator

Processes

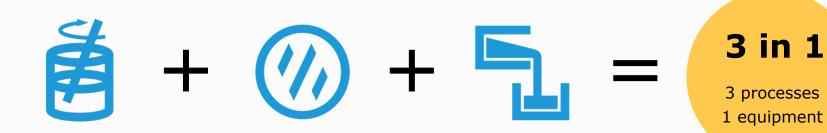
Characteristics Intended use Advantages Benefits Models Certifiactions Accessories



DISCOVER AE-MP



## PROCESSES



Media formulation: Mix the components in the internal

vessel while stirring.

## Sterilization:

autoclave mode while stirring.

## Dispensing

the product with peristaltic pump while stirring.

# CHARACTERISTICS

- All the process is controlled by a built-in heart probe to ensure that the media is on the right conditions.
- Self-cleaning and sterilization of the dispensing line using the same steam of the process.
- Once the cycle is completed, all the instruments used can be sterilized on the Media Preparator using like a normal autoclave (you do not need different equipment).



# INTENDED USE

# ✓ Basic food microbiology

#### • Peptone water:

suspension culture media for bacteria growing.

#### • Nutrient agar:

nutrient culture media for bacteria cultivation.





# INTENDED USE

# ✓ Plant Tissue

## • Nutrient agar:

nutritive culture media to grow the plant cuttings and multiply the production of a same variety.





# **ADVANTAGES**

- $\checkmark$  Control of sterilization with F<sub>0</sub> value.
- Full integration of media preparation, sterilization and dispensation.
- Selectable cooling / dispensing temperature between 30°C and 80°C.
- Automatic cleaning of dosing lines:
   before and after dispensation.
- Transfer of sterilization data to a PC for data traceability.



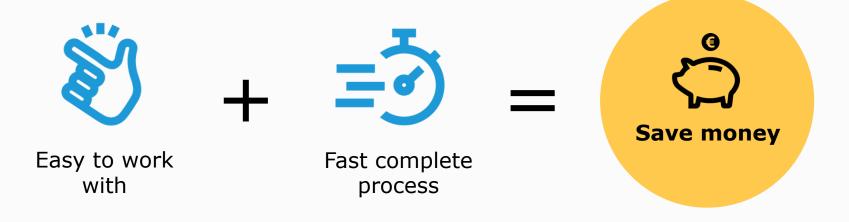
# MORE ADVANTAGES

- ✓ 50 user programs in a colour Touch Screen.
- Flexible heart probe included.
- Automatic water level control.
- Automatic water feeding (optional).
- Precise dosing of control media.
- Removable magnetic stirrer for easy cleaning.
- Exchangeable media vessel.
- Addition port for antibiotics or pH correction.

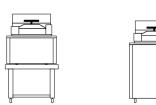


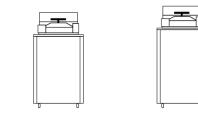


## BENEFITS



# MODELS





#### **General data**

	AE-20 MP <sup>1</sup>	AE-40 MP	AE-60 MP	AE-80 MP	AE-100 MP
Media preparation capacity min - max	2 - 18 L	3 - 37 L	3 - 57 L	5 - 78 L	5 - 97 L
Chamber dimensions $\emptyset \times H$	320 x 350 mm	320 x 500 mm	320 x 700 mm	420 x 500 mm	420 x 700 mm
Power <sup>2</sup>	3000 W	6000 W	9000 W	12000 W	15000 W
Electrical voltage <sup>3</sup>	230 (1P+N+E) V	400 (3P+N+E) V	400 (3P+N+E) V	400 (3P+N+E) V	400 (3P+N+E) V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
External dimensions L x D x H	615 x 815 x 735 mm	615 x 815 x 1100 mm	615 x 815 x 1320 mm	755 x 935 x 1285 mm	755 x 935 x 1385 mm
Weight	95 Kg	165 Kg	180 Kg	250 Kg	295 Kg

<sup>1</sup> Included stainless steel table with casters. Ref. TABLE-MP, ext. dimensions L x D x H: 700 x 700 x 600 mm and weight: 19 Kg

<sup>2</sup> Consult overpowered equipments

<sup>3</sup> Ask for other voltages.

# Certifications

#### Safety features

- Door blocking systems with
  - positive pressure.
- Open door sensor.
- Water level detector.
- ✓ Safety valve.
- ✓ Safety thermostat.

#### Regulations

**UNE-EN-ISO 9001:2015** Quality management system

**EN-61010-1** Safety requirements for electrical equipment for measurement, control and laboratory use. Part 1: General requirements

**EN-61010-2-040** Part 2-040: Requirements for laboratory autoclaves

**EN-61326** Electrical equipement for measurement, control and laboratory use. EMC Requirements

AD 2000 Merkblatt Pressure vessels

2014/35/UE Low Voltage

2014/30/UE Electromagnetic Compatibility

2014/68/UE Pressure equipment

#### Certifications







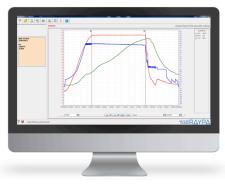


# Accessories

# ACCESSORIES



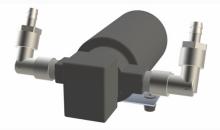
ADDITIONAL PERISTALTIC PUMP HEAD



SOFTWARE SW8000



#### DOSING STATION FOR CULTURE MEDIA



SET AUTOMATIC FILLING



CABLE GLAND 1/2"



INTEGRATED PRINTER





Leading Lab Technologies

DISCOVER AE-MP



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