

## 1 STAND-ALONE FILTERPRESS

# LAB200-SA

### **GENERAL OVERVIEW**

The laboratory filter offered here is called LAB200-SA, and is supplied in single mode, with no other auxiliary devices or accessories. It does not require the use of power sources, but opens and closes by manually acting on the hydraulic pump that drives the hydraulic cylinder



*Image could be different from what is in technical description*

### **TECHNICAL DESCRIPTION OF THE FEATURES INSTALLED**

#### **Filterpress:**

- ✓ Fixed head completely made of AISI 304 stainless steel
- ✓ Mobile head completely made of AISI 304 stainless steel
- ✓ Cylinder head in painted carbon steel
- ✓ Side beams made of AISI 304 stainless Steel
- ✓ Frame resistant to a maximum pressure of 15 bar
- ✓ Pressure gauge for measuring pressure on hydraulic power unit side
- ✓ Hydraulic power unit with manual pump for hydraulic cylinder movement forward and backward
- ✓ Hydraulic cylinder with painted carbon steel liner / Steel rod with high thickness Chrome coating



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- ✓ Drip Tray in AISI 304 stainless steel
- ✓ Compensation bag in Inox AISI 304 for damping the overpressure resulting from the piston pump
- ✓ Sludge-side pressure gauge for filtration pressure reading
- ✓ AISI 316 stainless steel exclusion valves on each filtrate outlet
- ✓ Inlet slurry valve made of AISI 316 stainless steel
- ✓ AISI 316 stainless steel valve for depressurization of residual pressure

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## 2 PLATES AND SPACERS INCLUDED IN LAB200-SA

**PLATES TYPE:**

LAB200-SA is able to install filtering plates with recessed chambers only.

No membrane plates can be installed as no High pressure generation system features is installed on board.

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**PLATES MATERIALS:**

As standard, all the plates (both membrane or recessed) installed in the LAB200-SA series are made of PP (Polypropylene).

PP is the most common material used all over the world also in industrial filterpresses.

In some applications, due to the kind of fluid or slurry that must be filtered, ore due to the T° of application, PP could be not be chemically compatible with the application.

For this reason, is also possible to install Stainless Steel AISI 304 or AISI 316 plates, with the limitation that plates is AISI 304/316 have no chamber thickness (chamber thickness=0) and because of this is mandatory to use a spacer between two filtering plates to have a filtering volume

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### EXAMPLE OF FILTERING VOLUMES AND FILTERING SURFACES WITH **POLYPROPYLENE PLATES**

These are the value of filtering volume and filtering areas of the plates and spacer available to install in LAB200 pilot filterpress unit

#### RECESSED PLATE

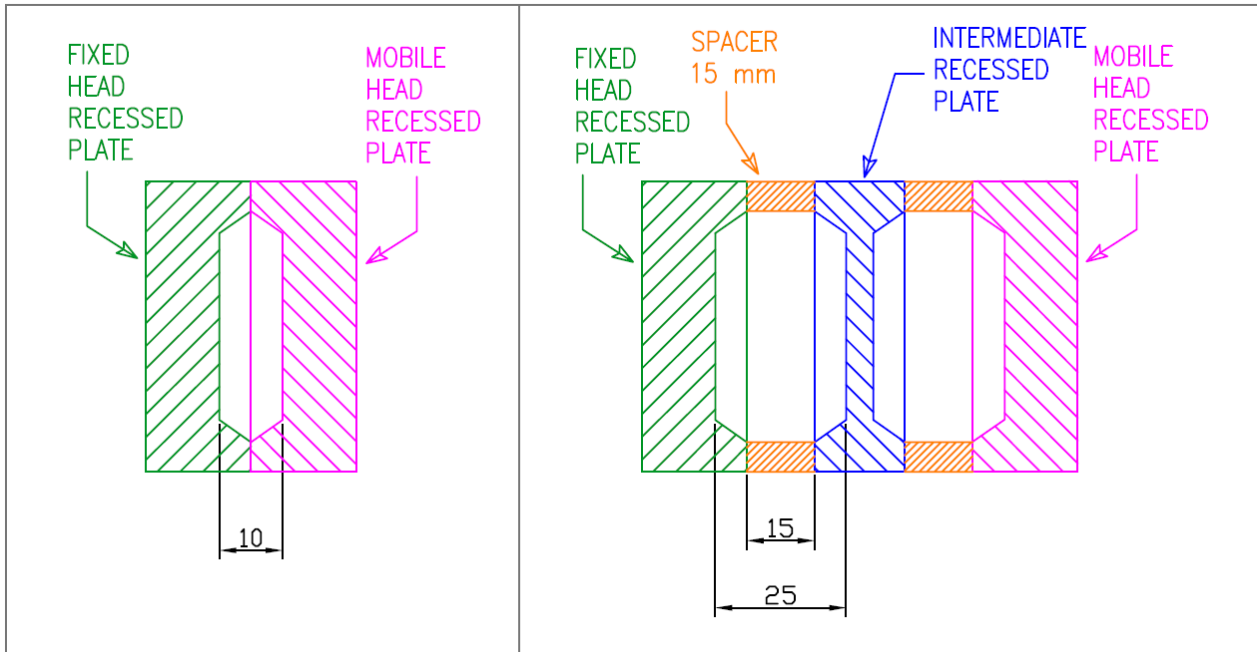
Standard Chamber Thickness: 10 mm  
Standard Recessed Chamber Volume = 0.190 liters  
Standard Filtration Area = 4.23 dm<sup>2</sup>

#### MEMBRANE PLATE

Standard Chamber Thickness: 14 mm (before squeezing)  
Standard Recessed Chamber Volume = 0.413 liters  
Standard Filtration Area = 4.23 dm<sup>2</sup>

#### SPACERS

Recessed Chamber Volume with +5 mm spacer = +0.116 liters  
Recessed Chamber Volume with +10 mm spacer = +0.231 liters  
Recessed Chamber Volume with +15 mm spacer = +0.347 liters

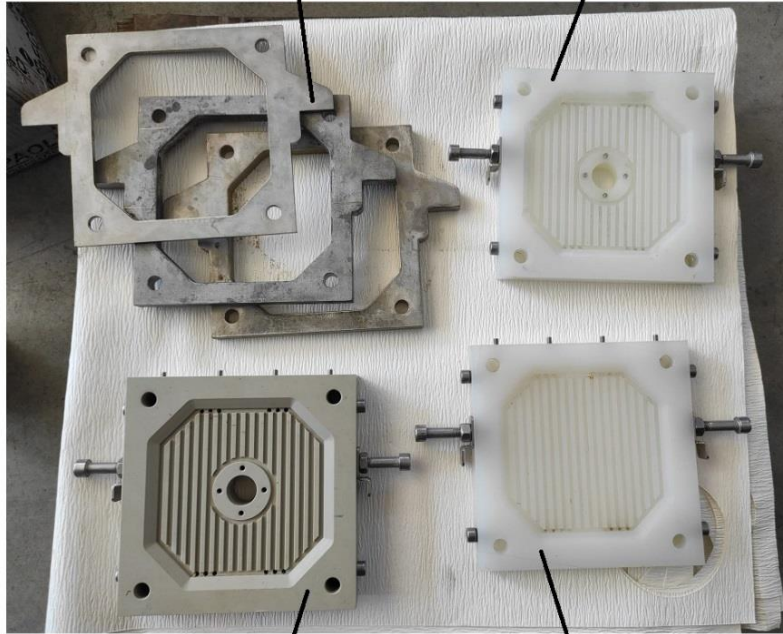


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**N° 3 THICKNESS**

**(+5, +10, +15mm)**

**N°1 FIXED HEAD  
RECESSED PLATE**



**N°1 INTERMEDIATE  
RECESSED PLATE**

**N°1 MOBILE HEAD  
RECESSED PLATE**

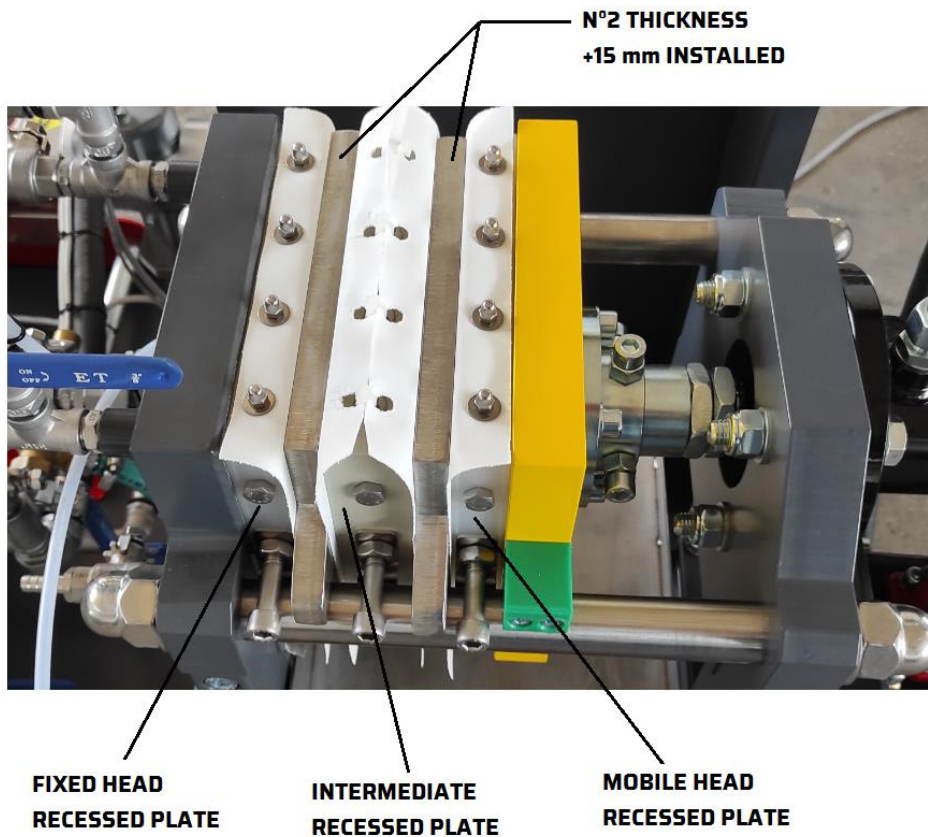
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Example of configuration with:

N°1 FIXED HEAD RECESSED CHAMBER

N°1 INTERMEDIATE RECESSED CHAMBER

N°1 MOBILE HEAD INTERMEDIATE CHAMBER

N°2 SPACERS (THICKNESS) + 15 mm

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## FILTERING VOLUMES AND FILTERING SURFACES WITH STAINLESS STEEL

These are the value of filtering volume and filtering areas of the plates and spacer available to install in LAB200 pilot filterpress unit

### PLATES

Standard Chamber Thickness: 0 mm

Standard Recessed Chamber Volume = 000 liters

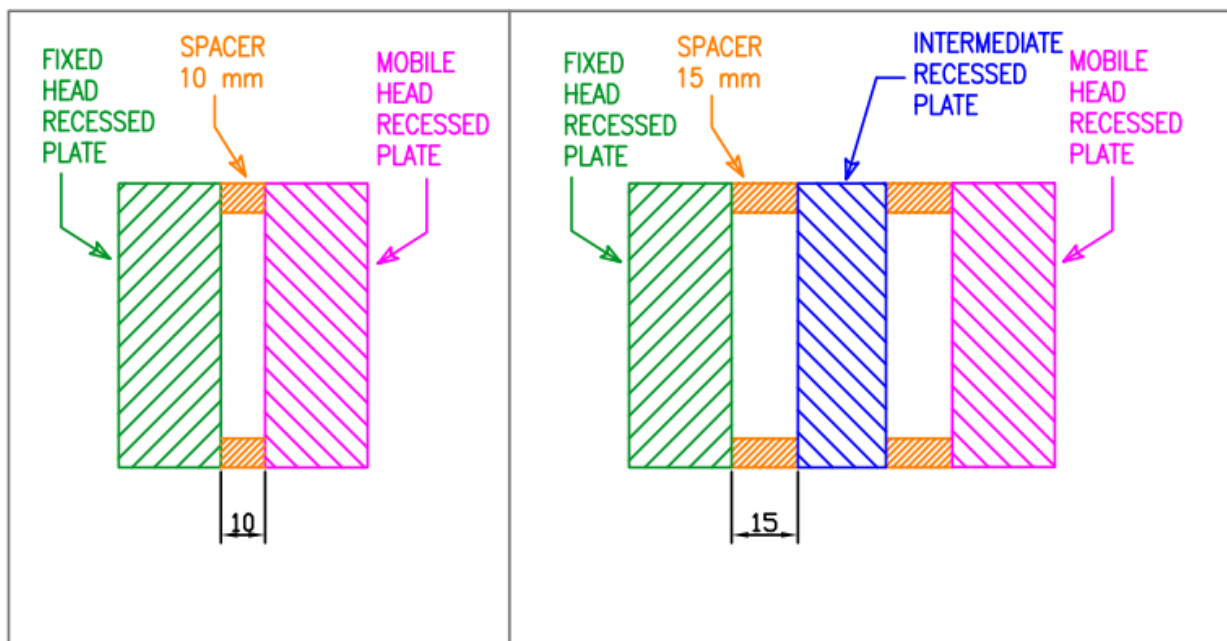
Standard Filtration Area = 4.23 dm<sup>2</sup>

### SPACERS

Recessed Chamber Volume with +5 mm spacer = +0.116 liters

Recessed Chamber Volume with +10 mm spacer = +0.231 liters

Recessed Chamber Volume with +15 mm spacer = +0.347 liters



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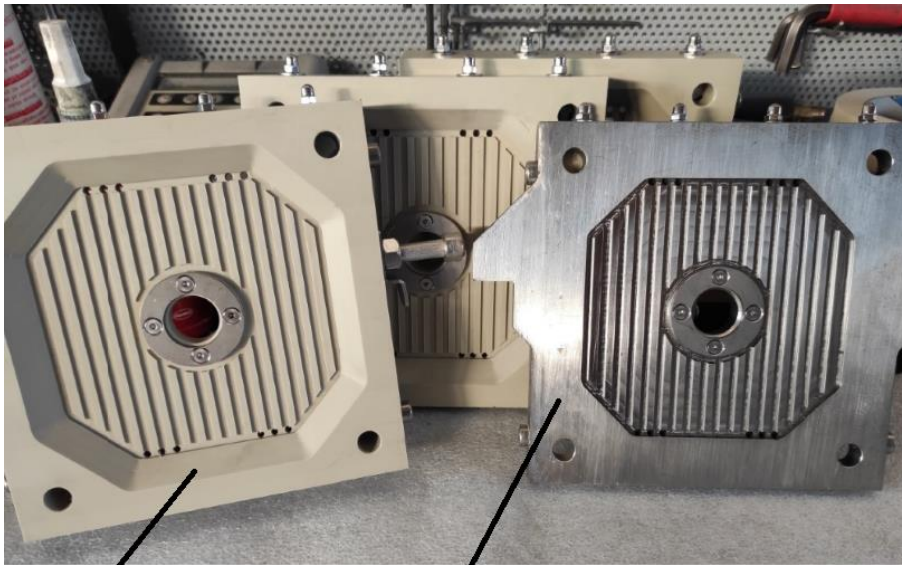
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**PLATES IN  
POLYPROPYLENE:  
CHAMBER=10mm  
VOLUME=0.190 liters**

**PLATES IN  
STAINLESS STEEL  
CHAMBER=0mm  
VOLUME=0.000 liters**



**FIXED HEAD  
PLATE IN SS**    **THICKNESS  
+25mm INSTALLED**    **INTERMEDIATE  
PLATE IN SS**    **MOBILE HEAD  
PLATE IN SS**

Example of configuration with:

N°1 FIXED HEAD RECESSED CHAMBER

N°1 INTERMEDIATE RECESSED CHAMBER

N°4 MOBILE HEAD INTERMEDIATE CHAMBER

N°5 SPACERS (THICKNESS) + 25 mm

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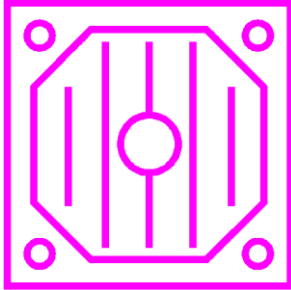
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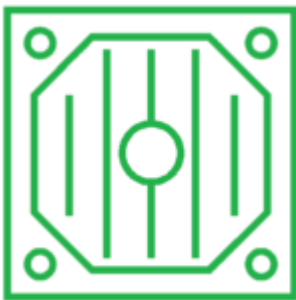
## RECAP - RECESSED PLATES:



### MOBILE HEAD RECESSED PLATE

Material: Polypropylene  
Standard chamber thickness: 10 mm

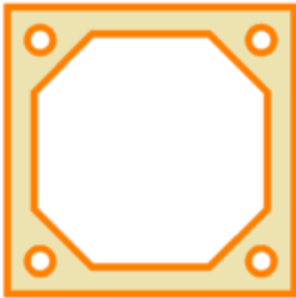
Material: STAINLESS STEEL  
Standard chamber thickness: 0 mm



### FIXED HEAD RECESSED PLATE

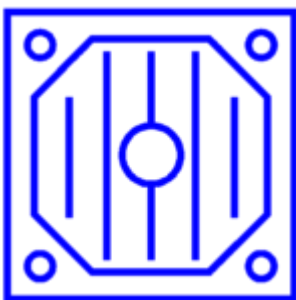
Material: Polypropylene  
Standard chamber thickness: 10 mm

Material: STAINLESS STEEL  
Standard chamber thickness: 0 mm



### SPACERS

Material: AISI 304 (standard) / AISI 316 (on request)  
Thicknesses available: 5mm / 10mm / 15mm / 25 mm



### INTERMEDIATE RECESSED PLATE

Material: Polypropylene  
Standard chamber thickness: 10 mm

Material: STAINLESS STEEL  
Standard chamber thickness: 0 mm