



WILLMES

*Specialists in
Pressing Technology*



MERLIN^{PLUS+}

Double membrane
and vertical juice channels

The plus side of quality and efficiency

MERLIN^{PLUS+} AT A GLANCE

The original with the
double-membrane
technology

> MERLIN^{PLUS+} that is supplied with the double membrane and the vertical electropolished stainless steel juice channels lets you obtain excellent press results that are of potential benefit to you.

Gentle pressing
for the best
juice quality

> MERLIN^{PLUS+} offers you a particularly large filling opening that spans the entire length of the press. This greatly simplifies and accelerates the filling and emptying processes.

Be it mash or whole-cluster filling, the unique filling opening ensures optimum distribution of the material to be pressed, while dispensing with all rotations for enhancing distribution.

The juice obtained from the mash can be discharged directly from the vertical juice channels, thus ensuring optimum pre-juicing and high filling capacities. These features significantly reduce the total pressing time, thus reducing the mechanical load on the material to be pressed.

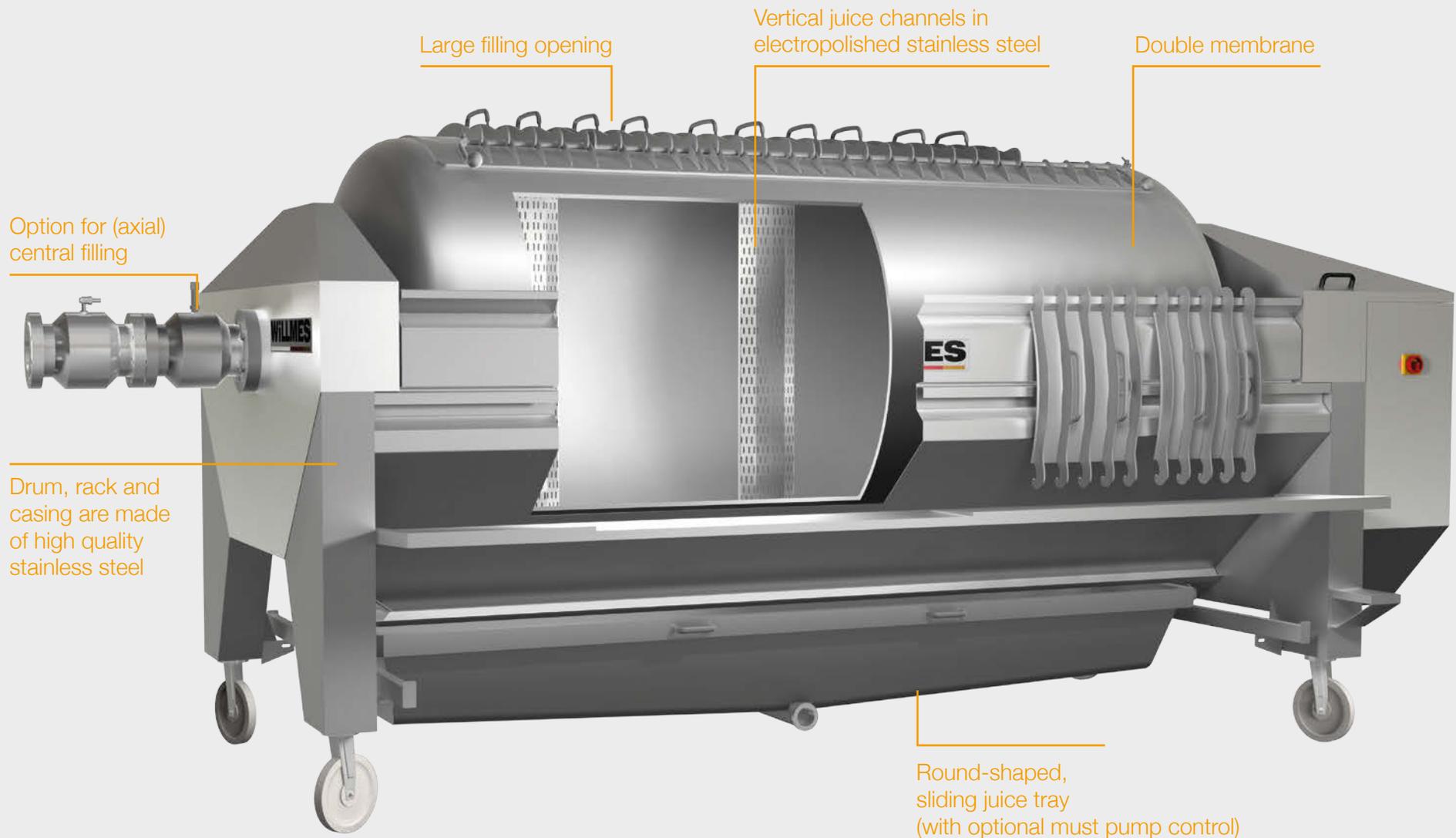
Easy to operate

> The easy and intuitive operation via a touch panel allows access to all pressing programs that have been developed and perfected over the years and that are favoured by leading oenologists and experienced users around the globe.

Thanks to the large filling opening, the pomace can be completely emptied within a short time. For easy cleaning, the vertical juice channels can be dismantled and installed manually in a few simple steps. In combination with the corner and edge-free press body, a drastic reduction in cleaning times is achieved. This, in turn, leads to a highly hygienic cleaning result.

MERLIN^{PLUS+} —

FEATURES IN DETAIL



FEATURES IN DETAIL



- > Double membrane and vertical juice channels



- > Large filling opening over the entire length of the cylinder press (optional filling hopper)



- > Touch panel for the control programs

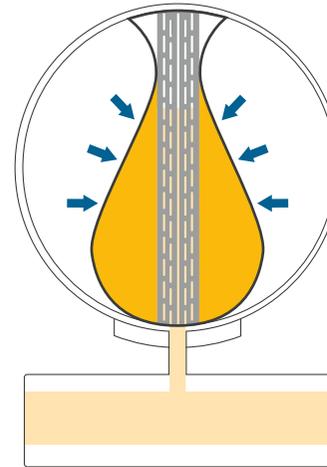


- > Control centre with touch panel and reversible blower for particularly efficient and energy-saving pre-pressure and evacuation control (optional: integrated compressor)



- > Sliding juice tray mounted on the press. The juice tray is extendible and is round-shaped to facilitate easy and residue-free cleaning. An integrated float is optionally available for automatic must pump control.

THE WILLMES PRESSING PRINCIPLE



Double-membrane technology

In contrast to a half-sided membrane, the double-sided membrane has a substantially larger (double) area of pressure application. In terms of physics, this means less pressure expenditure and less compression of the material to be pressed at the same force, which acts uniformly from all sides on the material to be pressed.

Vertical juice channels

The double-sided membrane presses the material to be pressed against the vertical juice discharge areas, which act like natural drains. Irrespective of the filling height, this always results in the same short juice paths, which allows the juice to drain more directly and quickly. If the membrane is relieved of pressure (vacuum released), the material to be pressed falls together.

This makes the rotational effort for crumbling negligible and fewer pressing cycles are required.

The mechanical load on the material to be pressed is kept to a minimum; therefore, there are less lees and a higher yield of juice of premium quality.

HIGHEST-QUALITY MUST – EVEN DOWN TO THE LAST LITRE!



50 % lower pressure

This is made possible by the double-membrane technology. Applied physics in simple terms:

$$P = F/A \text{ (P=pressure, F=force, A=area of application)}$$

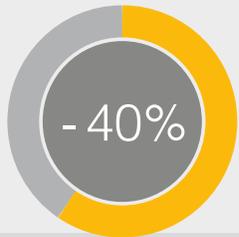
This physical law deals with the relations between pressure, force and bearing surface. If the area of application doubles, pressure is halved at the same force.



Higher juice yield – shorter pressing time

As compared to conventional systems, the short juice paths through the vertical juice channels and the double area of pressure application allow up to 90 % yield at pressures of less than 0.8 bar.

This results in extremely high-quality must. Due to the pressing principle, the pressing times are also reduced by up to 30 %, as compared to conventional systems.



40 % less lees

Less fine lees due to lower pressure, fewer rotations and fewer pressing cycles.

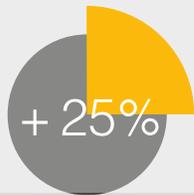
The amount of lees generated by pressing is up to 40 % lower than in conventional static presses and even multiple times lower than in non-static presses. Gentle processing of grapes frequently results in only 2 % lees. As a result, the net juice yield and the quality of the must are significantly increased by the low content of lees.



Intelligent pressing programs

These are programs that are perfectly adapted to all grades and types of grape harvest and that lead to optimum pressing results.

Of course, you can also enter different programs at your discretion, if you wish to pursue specific goals or try something new.



25 % more filling quantity

The especially large filling opening is suitable for vertical filling with mash or whole cluster, which has a considerably gentler effect on the material to be pressed.

Due to the special design of the press tank and the vertical juice channels, the juice can flow directly into the filling position, without any need to rotate the press body.

The result: The optimum pre-juicing results in a considerably higher amount of filling material (up to 25 %) as compared to conventional systems.



Better energy efficiency – high stable value

Lower pressing power and a reduction of up to 50 % of compressed air; shorter pressing times, faster and simplified cleaning – all of this means better energy efficiency, environmental friendliness and economic feasibility.

| | Whole cluster* Approximate pressing time 2.5 h | Fresh grapes* Approximate pressing time 2.0 h | Fermented grapes* Approximate pressing time 1.5 h | Dimensions L x W x H (mm) |
|------------------------------|--|---|---|------------------------------|
| MERLIN ^{PLUS+} 1200 | 0.9 t | 3.0 t | 4.8 t | 2710 x 1400 x 1655 |
| MERLIN ^{PLUS+} 1800 | 1.3 t | 4.5 t | 7.2 t | 3530 x 1400 x 1655 |
| MERLIN ^{PLUS+} 2500 | 1.8 t | 6.3 t | 10.0 t | 3300 x 1750 x 2070 |
| MERLIN ^{PLUS+} 3400 | 2.4 t | 8.5 t | 13.6 t | 4100 x 1750 x 2070 |
| MERLIN ^{PLUS+} 4300 | 3.0 t | 10.8 t | 17.2 t | 4100 x 1750 x 2140 |
| MERLIN ^{PLUS+} 5100 | 3.6 t | 12.8 t | 20.4 t | 4680 x 1750 x 2140 |

*Maximum weight

OUR SERVICE: PERFECTLY MATCHES YOUR MERLIN^{PLUS+}

- > Your MERLIN^{PLUS+} is extremely low-maintenance and stable in value – thanks to the double membrane and the gentle pressing technology.
Nevertheless, if things should go wrong: Nobody knows your MERLIN^{PLUS+} better than our experienced specialists. That is why we are here for you – whenever you need us.
Our tailor-made service agreements let you benefit from reliable long-term planning and transparent cost control.