

RELIABLE WINE FILTRATION

How to best prepare wine for finishing



Preparing wine for micro-filtration and bottling using recommended combinations of Hobrafil[®] depth filtersheets and Candefilt[®] cartridges

Proper wine preparation before bottling is 80 % of the success in high-quality bottling. The remaining 20 % is micro-filtration and sanitation.

Before we begin to consider bottling (which is usually 1–2 months before actual bottling), we have to be sure about the following:

1. no micro-biological processes or alcoholic and malolactic fermentation are present in the wine
2. all operations, such as blending the wine, reducing or increasing its acidic content or otherwise, have been completed
3. protein stabilisation = 100% clarified wine
4. the free SO₂ level and pH value, which is closely linked to it, are stable
5. all the required parameters are correct (recommended to verify in a laboratory)
6. all minor adjustments to fine tune organoleptic properties and stabilise the wine by adding polypeptides, mannoproteins and tannins are completed (finished by gentle polishing filtration using filtersheets Hobrafil[®] S 20 N or S 10 N)
7. the wine stabilization process, to prevent the precipitation of potassium bitartrate (cold stabilisation, tartaric acid, gum arabic, carboxymethyl cellulose (CMC), or recently the potassium polyaspartate) has been completed. Avoid errors such as failing to apply appropriate conditions (doses, temperature), technological time limits or the inappropriate combination of several products.

When any stabilisers or additives are used, following application procedures, proper mixing and sufficiently long reaction periods are the best preparation of the wine for finalization.

A stable wine prepared in this way will be easy to filter through sterile filtersheets Hobrafil[®] ST 7 N or ST 5 N, which offer the best protection for membrane filter cartridges. Sterile pre-filtration and membrane filtration should ideally be done simultaneously on the day of bottling. Alternatively, the wine can be prepared (using the sheets) a day before and the membrane cartridge on the day of bottling. If any problems with filterability occur during preparation, it is highly probable that these issues will continue during membrane filtration. Consider whether it would be better to delay filtering until the cause has been established and remedied.

Types of Candefilt[®] pre-filtration and membrane cartridges with recommended flow rate (for 10^{''}):

HPV	Deep pre-filtration cartridge, flow rate up to 300 l/h
HPF	Pleated pre-filtration cartridge, flow rate up to 500 l/h
HMVS	Membrane cartridge with borosilicate pre-filtration layer, flow rate up to 300 l/h
HMV	Standard membrane cartridge, flow rate up to 450 l/h
HMVX	Second generation membrane cartridge with reduced colloid affinity, flow rate up to 700 l/h

Recommended flow rates for individual types and dimensions of filtersheets Hobrafilt® (l/h/pc):

	20 x 20 cm	40 x 40 cm	60 x 61.4 cm
S 10 N	20	80	180
ST 9 N	17	68	153
ST 7 N	14	56	126
ST 5 N	12	48	108

Example: The optimum flow rate for pre-filtration using **ST 7 N** and **12 filtersheets** is **168 l/h**. If, for any reason, 200 l is filtered in just half an hour, the preparation is not optimal.

Recommended optimal combinations for final filtration:

■ Small wine producers – combination of filtersheet and cartridge for the Enolmatic White and rose wines:

– pre-filtration Hobrafilt® ST 7 N / ST 5 N, Candefilt® HMVS / HMV 04 BF 10 S

Red wines:

– pre-filtration Hobrafilt® S 10 N / ST 7 N, Candefilt® HMVS / HMV 06 BF 10 S

■ Medium and large wine producers – combination of filtersheets and cartridges White and rose wines:

– pre-filtration Hobrafilt® ST 7 N / ST 5 N / ST 3 N, Candefilt® HMV / HMVX 04 BS 30 S

Red wines:

– pre-filtration Hobrafilt® S 10 N / ST 9 N / ST 7 N, Candefilt® HMV / HMVX 06 BS 30 S

■ Medium and large wine producers – combination of filter cartridges alone White and rose wines:

– pre-filtration Candefilt® HPV / HPF 05 BS 30 S, Candefilt® HMV / HMVX 04 BS 30 S

Red wines:

– pre-filtration Candefilt® HPV / HPF 10 BS 30 S, Candefilt® HMV / HMVX 06 BS 30 S

For a high performance, and wines prepared using crossflow filters, we recommend a combination of pre-filtration cartridges HPF and membrane cartridges HMVX.

Following the basic conditions for filtering with depth filtersheets and filter cartridges, along with high-a quality sanitation plan applied to all technologies during bottling, minimises the risk of contaminating the final product. It is also important to regularly test the integrity of membrane cartridges. All information about filtration conditions and sanitation of Hobra products can be found at www.hobra.cz.

For a phone or in-person consultation, please contact our sales specialists.



Hobra – Školník s.r.o
Smetanova 348
550 01 Broumov
Czech Republic

T: +420 491 580 111
F: +420 491 580 140
E: hobra@hobra.cz
W: www.hobra.cz



RELIABLE
FILTRATION