



» Red wine mash pressure flooder FD-DF

Speidel's pressure flooder is a mash fermentation tank for pressureless applications with air impulse blast pipes for a gentle and smooth re-circulation. Over the last years a constant development of quality-improving technologies to obtain a possibly high aroma and lots of colour from the berries has taken place. In the meantime the fundamental understanding of the direct contact of wine with aerial oxygen has been defined in a new way. Once being partly defined as 'the enemy of wine', air can however – at least in certain phases of the fermentation and maturation process – cause positive effects on the wine.

This is why we at Speidel have developed a mash fermentation tank that penetrates and gently mixes the emerging marc by means of air jets that use purified pressurised air during the process of fermentation. This way we combine a gentle type of re-circulation with intensive air contact during the main fermentation phase.

The tanks are equipped with four lateral air impulse jets that are safeguarded by non-return valves.

An electronic control system regulates the intervals of the injections. This way injections that mix the marc cake can be released in specific time intervals during the mash fermentation. For approx. 15 seconds jets release air at an air-pressure of 6 to 8 bar. As a result, the CO₂ is released from the grapes, thus leading to a regroupment of the mash.

The mash is washed over with the wine and mixed at the same time. The grapes end up in a new position which allows for a better extraction of both colour and aroma. The air released into the tank can escape through valves at the tank's top. The pressure flooder is an economic option for the gentle mash fermentation of top-quality red wines with intense fruit shades and early mature character. We recommend to additionally equip this system with the flooder option.



STANDARD EQUIPMENT RED WINE MASH PRESSURE FLOODER FD-DF

TANK TOP

- › Up to tank- \varnothing of 2,000 mm made of AISI 316 stainless steel, surface III d (2R), marbled outside
- › From tank- \varnothing of 2,200 mm upwards made of AISI 316 stainless steel, surface III d (2R) / III c (2B)
- › Ladder safety bow, lifting lugs

TANK SHELL

- › Made of AISI 304 stainless steel, surface III d (2R), marbled outside

TANK BOTTOM

- › Up to tank- \varnothing of 2,000 mm made of AISI 304 stainless steel, surface III d (2R)
- › From tank- \varnothing of 2,200 mm upwards made of AISI 304 stainless steel, surface III d (2R) / III c (2B)
- › Free-standing on welded-on box-shaped legs

FILLER NECK

- › Filler neck NW 400, located in tank top with an upright forward position (tank top with bead extrusion for complete ventilation)
- › Flap lid with vent neck NW 50 Rd 78 x 1/6"

TEMPERATURE MEASUREMENT

- › Weld-on thread NW 10 DIN 11851
- › Threaded sleeve with locking screw and cap nut NW 10 DIN 11851
- › Bi-metal dial type thermometer 100 mm \varnothing , measuring range - 20 ° to + 60 °C

SAMPLING

- › Weld-on thread NW 20 DIN 11851
- › Sample tap with cap nut NW 20 DIN 11851

RACKING OUTLET

- › Reinforcing plate with drilled hole \varnothing 48 mm (to hold flap valve Gr. 37 or weld-on thread NW 50 DIN 11851)

PRESSURISED AIR SYSTEM

- › Four removable, individually lockable jets are laterally arranged at the tank
- › The jets provide the air impulses for the mixing of the mash

JUICE TOTAL OUTLET / -FILLING

- › Welded-on neck NW 65

SYSTEM REQUIREMENTS RED WINE MASH PRESSURE FLOODER FD-DF

- › Local air supply for purified pressurised air is 2 x 1"
- › The accumulator of the compressor or an interim accumulator has to provide oil-free, clean pressurised air
- › We recommend a pressure accumulator with a minimum volume of 1,000 litres at 6 bar
- › For a short time the flow rate output is at approx. 10,000 litres / min.
- › For the cleaning of the air a corresponding filter system needs to be connected ahead of the accumulator

OPTIONS RED WINE MASH PRESSURE FLOODER FD-DF

FD-DFTK: MASH BOTTOM OUTLET AND HINGED DOOR

- › Mash bottom outlet W = 530 mm x H = 400 mm, with outwards opening hinged door: the door is left hinged; door handle on the right (extract a sufficient amount of juice in order to avoid the emission of wine while opening)
- › Discharge height X = 580 mm

FD-DFAK: AUTOMATIC MASH RELEASE AND HINGED DOOR

- › Mash outlet W = 530 mm x H = 400 mm with outwards opening hinged door: the door is left hinged; door handle on the right (extract a sufficient amount of juice in order to avoid the emission of wine while opening)
- › Stainless steel remover with gear motor (approx. 4 rot. / min), electricity supply 380 V, 50 Hz
- › Discharge height A = see chart
- › Tank bottom made of AISI 304 stainless steel, surface III c (2B)









FD-DFTS: MASH BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

- › Mash bottom outlet W = 530 mm x H = 400 mm, with slide feed proportioning, easy to dose, also for thin mash release
- › Discharge height X = 520 mm

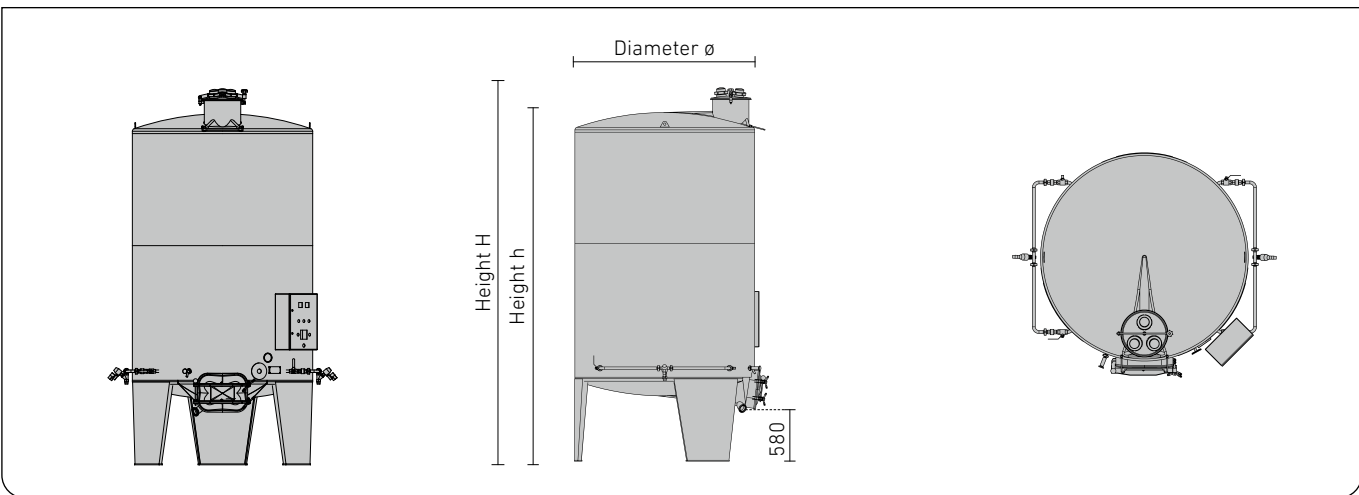
FD-DFAS: AUTOMATIC MASH RELEASE AND SLIDE FEED PROPORTIONING

- › Mash outlet W = 530 mm x H = 400 mm with slide feed proportioning – easy to dose, also for thin mash release
- › Stainless steel remover with gear motor (approx. 4 rot. / min), electricity supply 380 V, 50 Hz
- › Discharge height B = see chart
- › Tank bottom made of AISI 304 stainless steel, surface III c (2B)

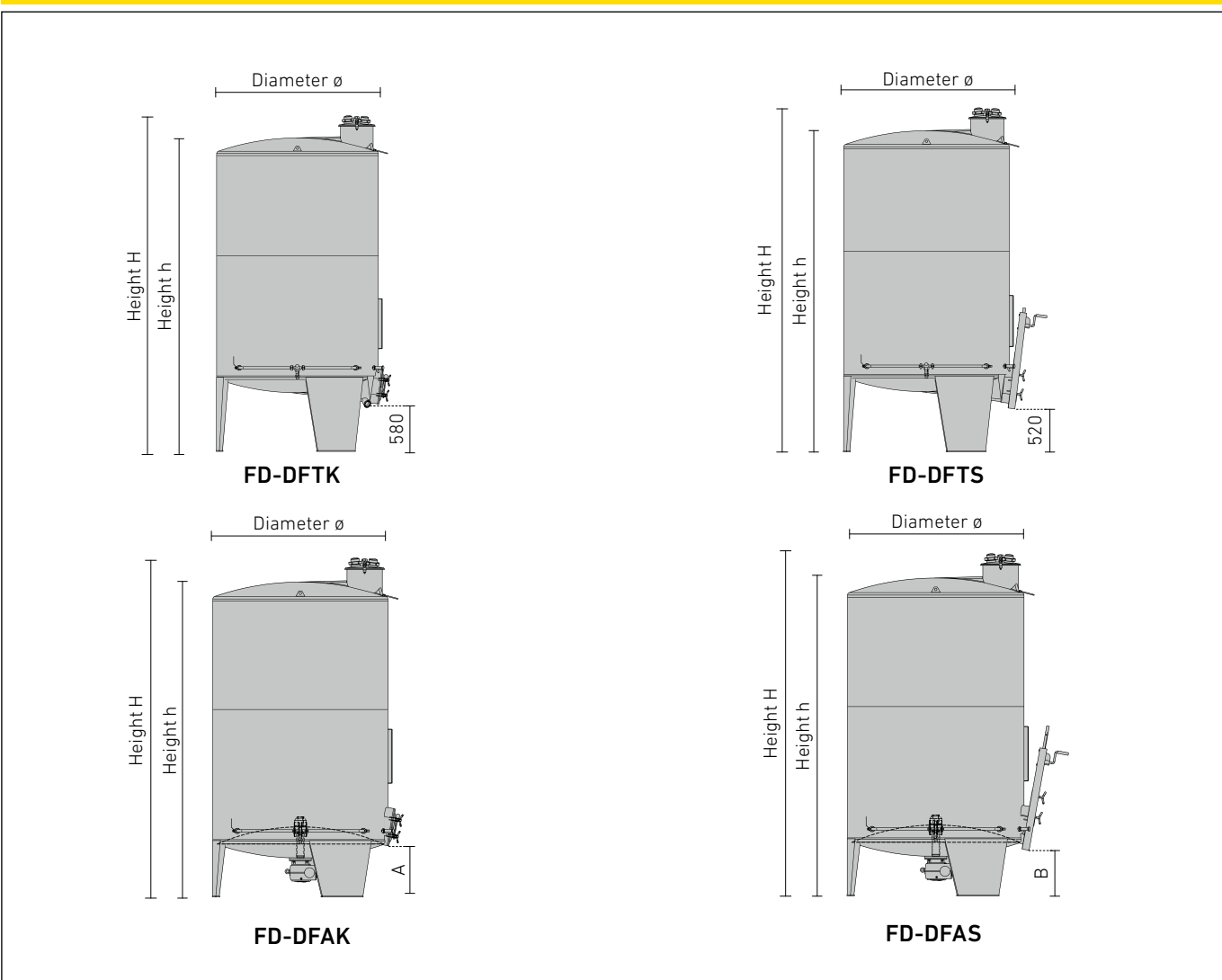
SET-UP EXAMPLE FOR RED WINE MASH PRESSURE FLOODER FD-DFTS

Item	Order No.	
	<p>Red wine mash pressure flooder slide feed proportioning FD-DFTS-200-9200</p> <p>> h = 3,905 mm, H = 4,160 mm, $H_{ges} = 4,160 \text{ mm (H)} + \text{approx. } 100 \text{ mm (height compensation)} = \text{approx. } 4,260 \text{ mm}$ > Standard equipment as on page 101</p>	FD-DFTS-200-9200
	<p>Racking outlet (page 175)</p> <p>> With mounted flap valve Gr. 37</p>	KA-120I
	<p>Fill level (page 180)</p> <p>> Mounted fill level indicator NW 20</p>	FS-130W
	<p>Juice flooding (page 189)</p> <p>> Stainless steel pipeline NW 50 with self-rotating sprinkling system and connection thread NW 50 DIN 11851 > With ball valve NW 50 DIN 11851</p>	ÜF-1 65158
	<p>Juice total outlet / -filling (page 175)</p> <p>> With ball valve NW 65 DIN 11851</p>	65159
	<p>Heating and cooling jacket (page 130)</p> <p>> Double jacket B2 6,2m² with welded gland thread G 1" for connection to available warm water / cold water source > Version 1, layout 61, connection position B2</p>	1B2
	<p>Three juice extracting sieves with large surface (page 193)</p> <p>> Easily removable > With juice extraction on tank shell NW 50 DIN 11851 > with ball valve NW 50 DIN 11851</p>	ESS-3 65158
	<p>Adjustable feet (page 186)</p> <p>> With adjustable feet for tank legs (H = + approx. 100 mm)</p>	46128

DIMENSIONS OF RED WINE MASH PRESSURE FLOODER FD-DFTK



DIMENSIONS OF RED WINE MASH PRESSURE FLOODER FD-DFTK / FD-DFTS / FD-DFAK / FD-DFAS



Please note: installation space H + 500 mm for motor installation!

RED WINE MASH PRESSURE FLOODER FD-DFTK WITH MASH BOTTOM OUTLET + HINGED DOOR
RED WINE MASH PRESSURE FLOODER FD-DFTS WITH MASH BOTTOM OUTLET + SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	ø	h	H	Legs	Order No.	Order No.
litres	% max./min.	mm	mm	mm	pieces	DFTK	DFTS
3,300	75 / 40	1,600	2,543	2,870	3	FD-DFTK-160- 3300	FD-DFTS-160- 3300
5,300	75 / 40	2,000	2,667	2,910	3	FD-DFTK-200- 5300	FD-DFTS-200- 5300
6,000	75 / 40	2,000	2,905	3,160	3	FD-DFTK-200- 6000	FD-DFTS-200- 6000
6,800	75 / 40	2,000	3,155	3,410	3	FD-DFTK-200- 6800	FD-DFTS-200- 6800
7,600	75 / 40	2,000	3,405	3,660	3	FD-DFTK-200- 7600	FD-DFTS-200- 7600
8,400	75 / 40	2,000	3,655	3,910	3	FD-DFTK-200- 8400	FD-DFTS-200- 8400
9,200	75 / 40	2,000	3,905	4,160	3	FD-DFTK-200- 9200	FD-DFTS-200- 9200
10,000	75 / 40	2,000	4,155	4,410	3	FD-DFTK-200-10000	FD-DFTS-200-10000
10,000	75 / 40	2,400	3,320	3,625	4	FD-DFTK-240-10000	FD-DFTS-240-10000
11,200	75 / 40	2,400	3,570	3,875	4	FD-DFTK-240-11200	FD-DFTS-240-11200
12,300	75 / 40	2,400	3,820	4,125	4	FD-DFTK-240-12300	FD-DFTS-240-12300
13,500	75 / 40	2,400	4,070	4,375	4	FD-DFTK-240-13500	FD-DFTS-240-13500
14,500	75 / 40	2,400	4,320	4,625	4	FD-DFTK-240-14500	FD-DFTS-240-14500
15,500	75 / 40	2,400	4,570	4,875	4	FD-DFTK-240-15500	FD-DFTS-240-15500
16,500	75 / 40	2,400	4,820	5,125	4	FD-DFTK-240-16500	FD-DFTS-240-16500
17,000	75 / 40	2,800	3,920	4,305	4	FD-DFTK-280-17000	FD-DFTS-280-17000
18,500	75 / 40	2,800	4,170	4,555	4	FD-DFTK-280-18500	FD-DFTS-280-18500
20,000	75 / 40	2,800	4,420	4,805	4	FD-DFTK-280-20000	FD-DFTS-280-20000
21,500	75 / 40	2,800	4,670	5,055	4	FD-DFTK-280-21500	FD-DFTS-280-21500
23,000	75 / 40	2,800	4,920	5,305	4	FD-DFTK-280-23000	FD-DFTS-280-23000
24,500	75 / 40	2,800	5,170	5,555	4	FD-DFTK-280-24500	FD-DFTS-280-24500

Convenient manual mash release



RED WINE MASH PRESSURE FLOODER FD-DFAK WITH AUTOMATIC MASH RELEASE + HINGED DOOR
RED WINE MASH PRESSURE FLOODER FD-DFAS WITH AUTOMATIC MASH RELEASE + SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	ø	h	H	Legs	Discharge height A/B	Order No.	Order No.
litres	% max.	mm	mm	mm	pieces		DFAK	DFAS
6,300	75	2,000	2,899	3,125	3	580/520	FD-DFAK-200- 6300	FD-DFAS-200- 6300
7,000	75	2,000	3,149	3,400	3	580/520	FD-DFAK-200- 7000	FD-DFAS-200- 7000
7,800	75	2,000	3,399	3,650	3	580/520	FD-DFAK-200- 7800	FD-DFAS-200- 7800
8,500	75	2,000	3,649	3,900	3	580/520	FD-DFAK-200- 8500	FD-DFAS-200- 8500
9,300	75	2,000	3,899	4,150	3	580/520	FD-DFAK-200- 9300	FD-DFAS-200- 9300
10,000	75	2,000	4,149	4,400	3	580/520	FD-DFAK-200-10000	FD-DFAS-200-10000
10,000	75	2,400	3,400	3,705	4	740/670	FD-DFAK-240-10000	FD-DFAS-240-10000
11,200	75	2,400	3,650	3,955	4	740/670	FD-DFAK-240-11200	FD-DFAS-240-11200
12,300	75	2,400	3,900	4,205	4	740/670	FD-DFAK-240-12300	FD-DFAS-240-12300
13,500	75	2,400	4,150	4,455	4	740/670	FD-DFAK-240-13500	FD-DFAS-240-13500
14,500	75	2,400	4,400	4,705	4	740/670	FD-DFAK-240-14500	FD-DFAS-240-14500
15,500	75	2,400	4,650	4,955	4	740/670	FD-DFAK-240-15500	FD-DFAS-240-15500
16,500	75	2,400	4,900	5,205	4	740/670	FD-DFAK-240-16500	FD-DFAS-240-16500
15,500	75	2,800	3,750	4,135	4	760/685	FD-DFAK-280-15500	FD-DFAS-280-15500
17,000	75	2,800	4,000	4,385	4	760/685	FD-DFAK-280-17000	FD-DFAS-280-17000
18,500	75	2,800	4,250	4,635	4	760/685	FD-DFAK-280-18500	FD-DFAS-280-18500
20,000	75	2,800	4,500	4,885	4	760/685	FD-DFAK-280-20000	FD-DFAS-280-20000
21,500	75	2,800	4,750	5,135	4	760/685	FD-DFAK-280-21500	FD-DFAS-280-21500
23,000	75	2,800	5,000	5,385	4	760/685	FD-DFAK-280-23000	FD-DFAS-280-23000
24,500	75	2,800	5,250	5,635	4	760/685	FD-DFAK-280-24500	FD-DFAS-280-24500

Automatic mash release at the push of a button



Open top tanks

Closed tanks

Tanks for mixing, transportation and storage

Tanks for red wine

Pressure tanks/Black Eye

Cooling and heating

Accessories