



» Red wine mash tank / variable capacity storage tank FO-M

Speidel's FO-M tank is actually two tanks in one. Basically it is a typical variable capacity storage tank, but since it is equipped with long legs, crane and mash door the FO-M is attractive both from an economic and a practical point of view. It can, indeed, be used as mash tank or variable capacity storage tank.

If combined with a mobile plunger, the FO-M offers even another application. When you discover its flexibility, you won't look back.



Variable capacity tank
and mash fermentation
tank in one

STANDARD EQUIPMENT RED WINE MASH TANK/VARIABLE CAPACITY WINE STORAGE TANK FO-M

- › AISI 304 stainless steel, surface IIIId (2R), marbled outside
- › Tank open on top with strengthening rim
- › Standing on three long legs
- › External litres scale
- › Floating lid made of AISI 304 stainless steel with inflatable sealing tube, air hose, air pump and manometer
- › Crane made of AISI 304 stainless steel with wire rope for floating lid

RACKING OUTLET

- › Reinforcing plate with drilled hole \varnothing 48 mm (to hold flap valve Gr. 37 or weld-on thread NW 40, NW 50 DIN 11851)

MASH OUTLET

- › Up to tank \varnothing of 1,400 mm mash outlet B=310xH=420 mm at the bottom with door that opens in outward direction (the door is left hinged; door handle on the right)
- › From tank- \varnothing of 1,600 mm mash










outlet B=400xH=530 mm at the bottom with door that opens in outward direction (the door is left hinged; door handle on the right)

BOTTOM OUTLET

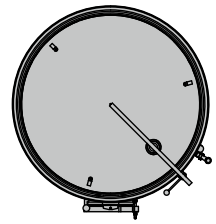
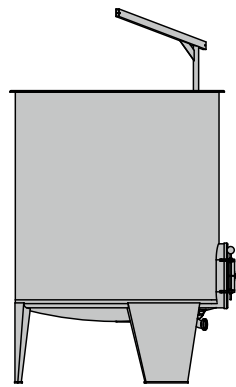
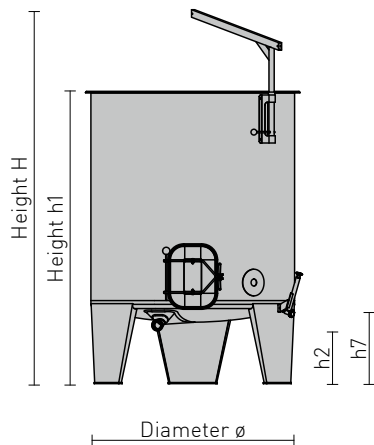
- › Vaulted, stable tank bottom with integrally moulded forward down-slope for complete draining, Total outlet neck with external thread NW50 DIN 11851



SET-UP RED WINE MASH TANK / VARIABLE CAPACITY STORAGE TANK FO-M

Item	Order No.
 <p>Red wine mash tank/Variable capacity storage tank FO-M-140-2200 litres</p> <ul style="list-style-type: none"> › h1 = 2,010 mm, H = 2,556 mm, Hges = 2,556 (H) + approx. 100 (height compensation) = approx. 2,656 mm › Standard equipment as on page 83 	FO-M-140 V0135
 <p>Sampling (page 174)</p> <ul style="list-style-type: none"> › With weld-on thread NW 10 DIN 11851 › With sampling tap NW 10 DIN 11851 	PE-100A 64949
 <p>Racking outlet (page 170)</p> <ul style="list-style-type: none"> › With mounted flap valve Gr. 37 	KA-120I
 <p>Fill level (page 175)</p> <ul style="list-style-type: none"> › With weld-on thread NW 10 DIN 11851 › Mounted fill level indicator NW 10 	FS-130A FS-130H
 <p>Bottom outlet (page 170)</p> <ul style="list-style-type: none"> › With disc valve NW 50 DIN 11851 	65158
 <p>Temperature measurement (page 177)</p> <ul style="list-style-type: none"> › Bi-metal dial thermometer ø 100 mm, measuring range - 20 °C to + 60 °C › Screwed sleeve for thermometer length = 125 mm 	TM-140C
 <p>Heating and cooling jacket (page 136)</p> <ul style="list-style-type: none"> › Double jacket shape C6 1,5 m² with welded gland thread G 1" for connection to available warm water/ cold water source › Version 1, connection position A2 	1A2
 <p>Juice extractor sieve with large surface (page 190)</p> <ul style="list-style-type: none"> › Easily removable › With juice extraction on tank shell NW 50 DIN 11851 › With ball valve NW 50 DIN 11851 	ESS-7 65158
 <p>Adjustable feet (page 183)</p> <ul style="list-style-type: none"> › With adjustable feet for tank legs (H = + approx. 100 mm) 	46125

RED WINE MASH TANK / VARIABLE CAPACITY STORAGE TANK FO-M

**Legend:**

h = Tank height
 h2 = Discharge height bottom outlet
 h7 = Discharge height mash flap
 H = Height with crane
 Hges = Total height

Capacity	ø	h1	h2	h7	H	Order No.
litres	mm	mm	mm	mm	mm	
1,100	1,000	2,010	429	520	2,435	FO-M- 100 V0113
1,600	1,200	2,007	406	520	2,532	FO-M- 120 V0097
2,200	1,400	2,006	408	520	2,556	FO-M- 140 V0135
3,300	1,400	2,744	408	520	3,294	FO-M- 140 V0136
2,850	1,600	2,006	363	520	2,646	FO-M- 160 V0140
3,850	1,600	2,494	363	520	3,134	FO-M- 160 V0141
4,800	1,600	2,994	363	520	3,634	FO-M- 160 V0142
5,800	1,600	3,494	363	520	4,134	FO-M- 160 V0143
6,800	1,600	3,982	363	520	4,622	FO-M- 160 V0144
7,700	1,600	4,482	363	520	5,122	FO-M- 160 V0145
8,700	1,600	4,982	363	520	5,622	FO-M- 160 V0146
9,700	1,600	5,470	363	520	6,110	FO-M- 160 V0147
3,700	1,800	2,019	361	520	2,694	FO-M- 180 V0052
4,900	1,800	2,507	361	520	3,182	FO-M- 180 V0053
6,100	1,800	3,007	361	520	3,682	FO-M- 180 V0054
7,400	1,800	3,507	361	520	4,182	FO-M- 180 V0055
8,600	1,800	3,995	361	520	4,670	FO-M- 180 V0056
9,800	1,800	4,495	361	520	5,170	FO-M- 180 V0057
11,000	1,800	4,995	361	520	5,670	FO-M- 180 V0058
12,200	1,800	5,483	361	520	6,158	FO-M- 180 V0059
4,500	2,000	2,009	321	520	2,709	FO-M- 200 V0062
6,000	2,000	2,497	321	520	3,197	FO-M- 200 V0063
7,600	2,000	2,997	321	520	3,697	FO-M- 200 V0064
9,100	2,000	3,497	321	520	4,197	FO-M- 200 V0065
10,600	2,000	3,985	321	520	4,685	FO-M- 200 V0066
12,200	2,000	4,485	321	520	5,185	FO-M- 200 V0067
13,800	2,000	4,985	321	520	5,685	FO-M- 200 V0068
15,200	2,000	5,473	321	520	6,173	FO-M- 200 V0069

RED WINE MASH TANK/VARIABLE CAPACITY STORAGE TANK FO-M:
PE-TRANSPORTATION/STORAGE BASE

Capacity	ø	h1	h2	h7	H	Order No.
litres	mm	mm	mm	mm	mm	
1,100	1,000	1,718	135	225	2,145	FO-100 V220
1,600	1,200	1,718	115	225	2,245	FO-120 V212



You bet this one works!

» Mobile plunger

The mobile plunger complements the red wine mash tank FO-M perfectly. Some of our customers have several FO-Ms and one mobile plunger that can be used for all of them.

The mobile plunger is equipped with a floating lid for reliable sealing and with the well-tried Speidel immersion system for the gentle mash processing in flexible use.

It can be moved with a forklift and needs to be fixed with a fastener made of stainless steel.

Regulation is carried out either by means of a time-/interval control system or by means of a manual on/off system.



New version with
floating lid

STANDARD EQUIPMENT MOBILE PLUNGER

- › Floating lid with Speidel's tried and tested plunging system with sealing hose
- › Stainless steel forklift profiles 140x80 mm for transportation, internal dimension shape 134x74 mm
- › Stainless steel fastener for fixation
- › Pneumatic cylinder, flange mounted on the reinforced lid, plunger rod and immersion unit made of stainless steel
- › Immersion depth 1,000 mm

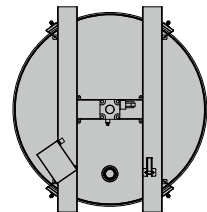
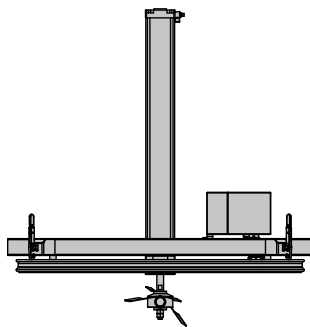
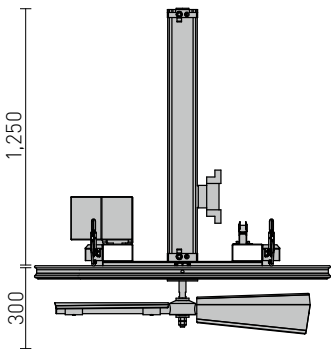
OPTIONS MOBILE PLUNGER

- TIME-/INTERVAL CONTROL SYSTEM**
 - › Small, electronic control cabinet with time and interval control system, connection 220V, 50Hz, IP44
- › Immersion time and pause time steplessly variable
- MANUALLY**
 - › Operating controlled manually, by pressurised air with on/off switch as low-priced alternative without electricity supply

SYSTEM REQUIREMENTS MOBILE PLUNGER

- COMPRESSOR**
 - › Compressor volume at least 90 litres
 - › Fan efficiency 500 litres/minute at 6 bar
- › The compressor's pressurised air must be cleaned with an air preparation unit!
- › We recommend the following air preparation units: FESTO FRC-1/2-D-MIDI-A
- (Order No. 159591), SMC AC40A-FO4DE
- REQUIRED AIR MASS**
 - › Immersion depth 1,000 mm 12,3 litres / lifting force

MOBILE PLUNGER



Capacity

Order No. Time/Interval regulation

Order No. Manual

to tank ø 1,000 mm 1,100 litres capacity	46250	46310
to tank ø 1,200 mm 1,600 litres capacity	46260	46320
to tank ø 1,400 mm 2,200 litres capacity	46270	46330
to tank ø 1,400 mm 3,300 litres capacity	46270	46330
to tank ø 1,600 mm 2,850 litres capacity	46280	46340
to tank ø 1,600 mm 3,850 litres capacity	46280	46340
to tank ø 1,800 mm 4,900 litres capacity	46290	46350
to tank ø 2,000 mm 6,000 litres capacity	46300	46360

Quality is what we are all about!



» Red wine tank with mash plunger FD-MT

The immersion of the marc executed by Speidel's red wine mash plunger has been inspired by the typical manual pushing that is still practised today. Due to the low mechanic pressure the grapes are almost undamaged. This way – and despite the greatest possible extraction of the mash – a low sludge content is achieved.

A reinforced pneumatic cylinder moves the immersion unit up and down. At the moment of the immersion, namely when 'impacting' the marc, two cone-shaped folding wings facing each other put themselves in a flat position and immerse the grapes into the juice.

When moved upwards the folding wings adopt an inclined position and generate a twisting effect of approx. 30°. This is repeated until the entire marc is fully disintegrated, immersed and drenched with the must.

The immersion and interval times can be pre-selected at your convenience. This grants the winemaker the opportunity to produce individual and complex red wines. The system itself is simple and highly effective: spacious installations that could cause sedimentary depositions or dirt corners are not required.



OUR ADVANTAGES

- › Gentle processing of the grape material
- › High colour and aroma extraction
- › Single systems can be combined
- › State-of-the-art technology
- › Low content of sludge
- › Optional grape seed output
- › Controllable cooling/heating of the tanks
- › Cooperation with wine growing institutes
- › Tried and tested for generations

STANDARD EQUIPMENT RED WINE MASH PLUNGER FD-MT

TANK TOP

- › Up to tank-ø of 2,000 mm made of AISI 316 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 316 stainless steel, surface IIld (2R)/IIlc (2B)
- › Ladder safety bow, lifting lugs

TANK SHELL

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

TANK BOTTOM

- › Up to tank-ø of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)

- › Free standing on welded box-shaped legs

FILLER NECK

- › Filler neck NW400, located in tank top with an upright forward position (tank top with bead extrusion for complete ventilation)
- › Flap lid with vent neck NW50 Rd 78x 1/6"

TEMPERATURE MEASUREMENT

- › Weld-on thread NW10 DIN 11851
- › Threaded sleeve with locking screw and cap nut NW10 DIN 11851
- › Bi-metal dial thermometer ø 100 mm, measurement range -20 °C to +60 °C

SAMPLING

- › Weld-on thread NW20 DIN 11851
- › Sampling tap with cap nut NW20 DIN 11851

RACKING OUTLET

- › Reinforced plate with drilled hole ø 48 mm (to hold flap valve or weld-on thread NW50 DIN 11851)

JUICE TOTAL OUTLET/-FILLING

- › Welded-on neck NW65 DIN 11851

MASH IMMERSION SYSTEM

- › Electronic control system (Stainless steel control cabinet, by default located on the right), Connection 220V, 50 Hz, IP44
- › Immersion time and pause time inverter controlled
- › Pneumatic cylinder flange mounted on the reinforced top
- › Piston rod and immersion unit made of stainless steel

SYSTEM REQUIREMENTS RED WINE MASH PLUNGER FD-MT

COMPRESSOR

- › Tank volume minimum 90 litres
- › Fan efficiency 500 litres/ minimum at 6 bar
- › The compressor's pressurised air must be prepared with an air preparation unit!

- › We recommend the following air preparation units: FESTO FRC-1/2-D-MIDI-A (Order No. 159591), SMC AC40A-F04DE

REQUIRED AIR MASS

- › Immersion depth 1,000 mm 12.3 litres/lifting force
- › Immersion depth 1,250 mm 15.3 litres/lifting force
- › Immersion depth 1,500 mm 18.3 litres/lifting force
- › Immersion depth 1,750 mm 21.4 litres/lifting force

OPTIONS RED WINE MASH PLUNGER FD-MT

FD-MTTK: MASH BOTTOM OUTLET + HINGED DOOR

- › Mash B=530xH=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-MTAK: AUTOMATIC MASH RELEASE + HINGED DOOR

- › Mash B=530xH=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 380V, 50 Hz
- › Discharge height A=see chart










FD-MTTS: MASH BOTTOM OUTLET + SLIDE FEED PROPORTIONING

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

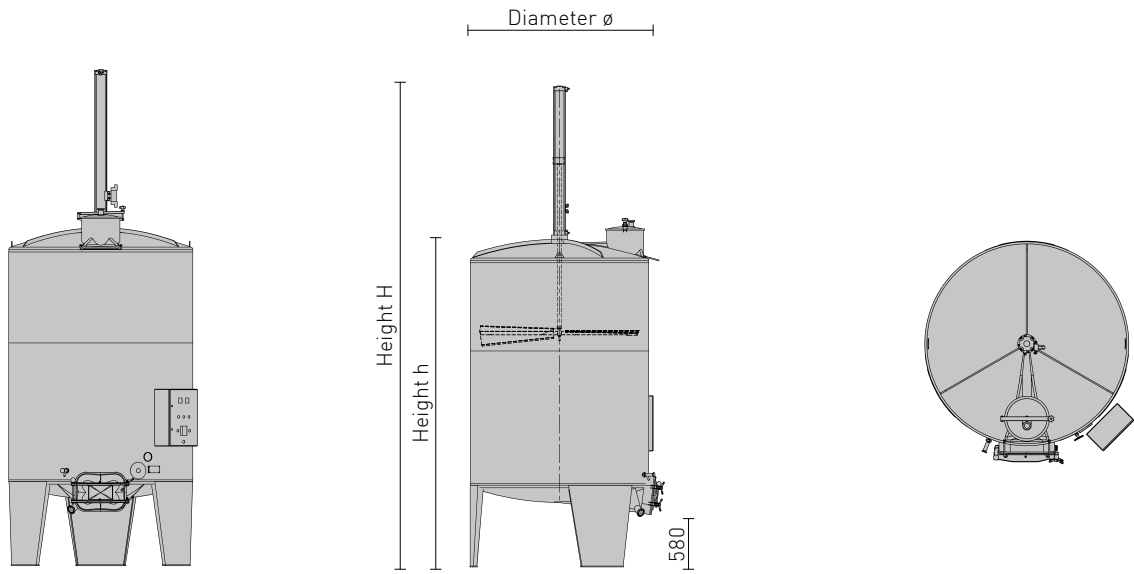
FD-MTAS: AUTOMATIC MASH RELEASE + SLIDE FEED PROPORTIONING

- › Mash outlet B=530xH=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 380V, 50 Hz
- › Discharge height B=see chart

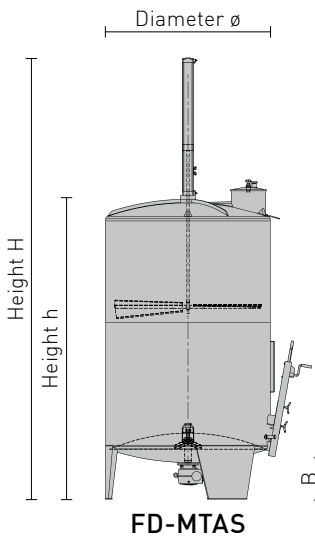
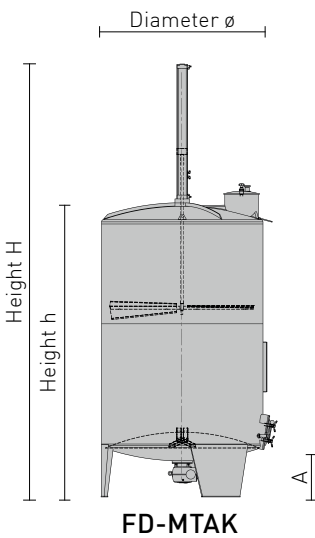
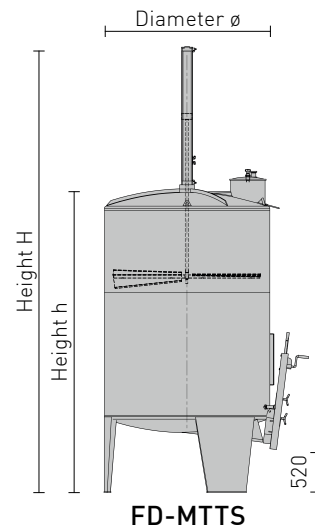
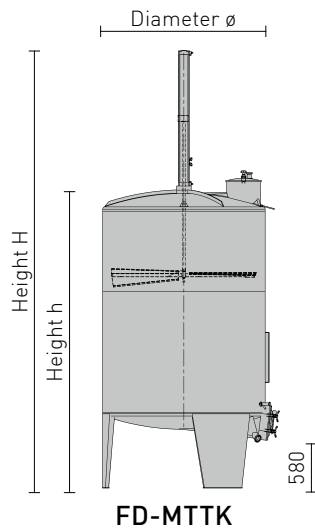
SET-UP EXAMPLE FOR RED WINE MASH PLUNGER FD-MTTK

Item	Order No.
 <p>Red wine mash plunger with Bottom outlet and hinged door FD-MTTK-240-11200</p> <ul style="list-style-type: none"> › h=3,570 mm, H=5,330 mm, Hges=5,330 (H)+ approx. 100 (height compensation)=approx. 5,430 mm › Standard equipment as on page 89 	FD-MTTK-240-11200
 <p>Racking outlet (page 170)</p> <ul style="list-style-type: none"> › Welded gland with thread NW50 › With ball valve NW50 DIN 11851 	KA-120D 65158
 <p>Fill level (page 175)</p> <ul style="list-style-type: none"> › Fill level indicator NW20 mounted 	FS-130W
 <p>Juice total outlet/-filling (page 173)</p> <ul style="list-style-type: none"> › With ball valve NW65 DIN 11851 	65159
 <p>Heating and cooling jacket (page 136)</p> <ul style="list-style-type: none"> › Double jacket B6 7,4m² with welded gland thread G 1" for the connection to available warm water/cold water sources › Version 1, layout 63, connection position B6 	1B6
 <p>Automatic temperature control with target indicator and actual indicator (page 188)</p> <ul style="list-style-type: none"> › Mash heating/cooling via local warm water/cold water source is automatically regulated according to target value input by the control system via magnet valve 	DMS-1
 <p>Juice pumpover (page 185)</p> <ul style="list-style-type: none"> › Stainless steel pipeline NW 50 with self-rotating sprinkling system with self-rotating sprinkling system and thread NW 50 DIN 11851 › With ball valve NW 50 DIN 11851 	ÜF-2 65158
 <p>3 juice extracting sieves with large surface (page 190)</p> <ul style="list-style-type: none"> › Easily removable › With juice extraction on tank shell NW50 DIN 11851 › With ball valve NW50 DIN 11851 	ESS-3 65158
 <p>Adjustable feet (page 183)</p> <ul style="list-style-type: none"> › With adjustable feet for tank legs (H=+ approx. 100 mm) 	46125

RED WINE MASH PLUNGER FD-MTTK



RED WINE MASH PLUNGER FD-MTTK/FD-MTTS / FD-MTAK / FD-MTAS



RED WINE MASH PLUNGER MODEL FD-MTTK BOTTOM OUTLET AND HINGED DOOR

RED WINE MASH PLUNGER TYPE FD-MTTS BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Immersion depth	ø	h	H	Legs	Order No.	Order No.
litres	% max./min.	mm	mm	mm	mm	pieces	type MTTK	type MTTS
5,300	75/45	1,000	2,000	2,667	3,883	3	FD-MTTK-200- 5300	FD-MTTS-200- 5300
6,000	75/50	1,000	2,000	2,917	4,133	3	FD-MTTK-200- 6000	FD-MTTS-200- 6000
6,800	75/50	1,250	2,000	3,155	4,621	3	FD-MTTK-200- 6800	FD-MTTS-200- 6800
7,600	75/50	1,250	2,000	3,405	4,871	3	FD-MTTK-200- 7600	FD-MTTS-200- 7600
8,400	75/45	1,500	2,000	3,655	5,371	3	FD-MTTK-200- 8400	FD-MTTS-200- 8400
9,200	75/50	1,500	2,000	3,905	5,621	3	FD-MTTK-200- 9200	FD-MTTS-200- 9200
10,000	75/55	1,500	2,000	4,155	5,871	3	FD-MTTK-200-10000	FD-MTTS-200-10000
10,000	75/50	1,000	2,400	3,320	4,536	4	FD-MTTK-240-10000	FD-MTTS-240-10000
11,200	75/50	1,250	2,400	3,570	5,036	4	FD-MTTK-240-11200	FD-MTTS-240-11200
12,300	75/50	1,250	2,400	3,820	5,286	4	FD-MTTK-240-12300	FD-MTTS-240-12300
13,500	75/45	1,500	2,400	4,070	5,786	4	FD-MTTK-240-13500	FD-MTTS-240-13500
14,500	75/50	1,500	2,400	4,320	6,036	4	FD-MTTK-240-14500	FD-MTTS-240-14500
15,500	75/55	1,500	2,400	4,570	6,286	4	FD-MTTK-240-15500	FD-MTTS-240-15500
16,500	75/55	1,750	2,400	4,820	6,786	4	FD-MTTK-240-16500	FD-MTTS-240-16500
18,000	75/55	1,750	2,400	5,070	7,036	4	FD-MTTK-240-18000	FD-MTTS-240-18000
19,000	75/60	1,750	2,400	5,320	7,286	4	FD-MTTK-240-19000	FD-MTTS-240-19000
20,000	75/60	1,750	2,400	5,570	7,536	4	FD-MTTK-240-20000	FD-MTTS-240-20000
17,000	75/50	1,250	2,800	3,920	5,386	4	FD-MTTK-280-17000	FD-MTTS-280-17000
18,500	75/50	1,500	2,800	4,170	5,886	4	FD-MTTK-280-18500	FD-MTTS-280-18500
20,000	75/50	1,500	2,800	4,420	6,136	4	FD-MTTK-280-20000	FD-MTTS-280-20000
21,500	75/60	1,500	2,800	4,670	6,386	4	FD-MTTK-280-21500	FD-MTTS-280-21500
23,000	75/55	1,750	2,800	4,920	6,886	4	FD-MTTK-280-23000	FD-MTTS-280-23000
24,500	75/55	1,750	2,800	5,170	7,136	4	FD-MTTK-280-24500	FD-MTTS-280-24500
26,000	75/60	1,750	2,800	5,420	7,386	4	FD-MTTK-280-26000	FD-MTTS-280-26000
27,500	75/60	1,750	2,800	5,670	7,636	4	FD-MTTK-280-27500	FD-MTTS-280-27500
29,400	75/60	1,750	2,800	5,920	7,886	4	FD-MTTK-280-29400	FD-MTTS-280-29400

Convenient manual mash release

RED WINE MASH PLUNGER FD-MTAK WITH AUTOMATIC MASH RELEASE AND HINGED DOOR
RED WINE MASH PLUNGER TYPE FD-MTAS WITH AUTOMATIC MASH RELEASE AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Immersion depth	ø	h	H	Legs	Discharge height A/B	Order No.	Order No.
litres	% max./min.	mm	mm	mm	mm	pieces		type MTAK	type MTAS
6,300	75/50	1,000	2,000	2,899	4,032	3	580/520	FD-MTAK-200- 6300	FD-MTAS-200- 6300
7,000	75/50	1,250	2,000	3,149	4,532	3	580/520	FD-MTAK-200- 7000	FD-MTAS-200- 7000
7,800	75/50	1,250	2,000	3,399	4,782	3	580/520	FD-MTAK-200- 7800	FD-MTAS-200- 7800
8,500	75/45	1,500	2,000	3,649	5,282	3	580/520	FD-MTAK-200- 8500	FD-MTAS-200- 8500
9,300	75/50	1,500	2,000	3,899	5,532	3	580/520	FD-MTAK-200- 9300	FD-MTAS-200- 9300
10,000	75/50	1,500	2,000	4,149	5,782	3	580/520	FD-MTAK-200-10000	FD-MTAS-200-10000
10,000	75/40	1,250	2,400	3,400	4,930	4	740/670	FD-MTAK-240-10000	FD-MTAS-240-10000
11,200	75/50	1,250	2,400	3,650	5,180	4	740/670	FD-MTAK-240-11200	FD-MTAS-240-11200
12,300	75/45	1,500	2,400	3,900	5,680	4	740/670	FD-MTAK-240-12300	FD-MTAS-240-12300
13,500	75/50	1,500	2,400	4,150	5,930	4	740/670	FD-MTAK-240-13500	FD-MTAS-240-13500
14,500	75/55	1,500	2,400	4,400	6,180	4	740/670	FD-MTAK-240-14500	FD-MTAS-240-14500
15,500	75/55	1,750	2,400	4,650	6,680	4	740/670	FD-MTAK-240-15500	FD-MTAS-240-15500
16,500	75/55	1,750	2,400	4,900	6,930	4	740/670	FD-MTAK-240-16500	FD-MTAS-240-16500
18,000	75/60	1,750	2,400	5,150	7,180	4	740/670	FD-MTAK-240-18000	FD-MTAS-240-18000
19,000	75/60	1,750	2,400	5,400	7,430	4	740/670	FD-MTAK-240-19000	FD-MTAS-240-19000
15,500	75/50	1,250	2,800	3,750	5,280	4	760/685	FD-MTAK-280-15500	FD-MTAS-280-15500
17,000	75/50	1,500	2,800	4,000	5,780	4	760/685	FD-MTAK-280-17000	FD-MTAS-280-17000
18,500	75/55	1,500	2,800	4,250	6,030	4	760/685	FD-MTAK-280-18500	FD-MTAS-280-18500
20,000	75/58	1,500	2,800	4,500	6,280	4	760/685	FD-MTAK-280-20000	FD-MTAS-280-20000
21,500	75/55	1,750	2,800	4,750	6,780	4	760/685	FD-MTAK-280-21500	FD-MTAS-280-21500
23,000	75/55	1,750	2,800	5,000	7,030	4	760/685	FD-MTAK-280-23000	FD-MTAS-280-23000
24,500	75/60	1,750	2,800	5,250	7,280	4	760/685	FD-MTAK-280-24500	FD-MTAS-280-24500
26,000	75/60	1,750	2,800	5,500	7,530	4	760/685	FD-MTAK-280-26000	FD-MTAS-280-26000
27,500	75/60	1,750	2,800	5,750	7,780	4	760/685	FD-MTAK-280-27500	FD-MTAS-280-27500

Automatic mash release at the push of a button



Open top tanks
 Closed tanks
 Tanks for mixing, transportation and storage
 Container for fruit mash
 Pressure tanks
 Cooling and heating
 Accessories



The rest is in the tank

» Red wine mash tank with internal plunger FD-IT

The mounting of the pneumatic cylinder on the tank top requires more space. In low-ceilinged cellar rooms this can sometimes pose a problem and often there is no possibility to use such tank systems.

Speidel's innovative "internal plunger" solves this problem once and for all. Speidel's well-tried immersion system via pneumatics is an integral part of the tank's interior,

thus allowing to reduce the tank's height considerably. At a comparable total height of the tank systems the reduction of height allows 50 % more capacity.

Due to the new level adjustment of the immersion wings the minimum filling amount can be reduced up to 40 % of mash tank's nominal volume. This way even smaller amounts can be processed.



European
patent

OUR ADVANTAGES

- › Little space required
- › Gentle processing of the grape material
- › High colour and aroma extraction
- › Single systems can be combined
- › Perfect grape seed output
- › Controllable heating/cooling of the tanks
- › Tried and tested immersion technique

STANDARD EQUIPMENT RED WINE MASH INTERNAL PLUNGER FD-IT

TANK TOP

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

TANK SHELL

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

TANK BOTTOM

- › Up to tank- \varnothing of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R)
- › From tank- \varnothing of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)

- › Free-standing on welded-on box-shaped legs

FILLER NECK

- › Filler neck NW400, located in tank top with an upright forward position (tank top with bead extrusion for complete ventilation)
- › Flap lid with vent neck NW50 Rd 78 x 1/6"

TEMPERATURE MEASUREMENT

- › Weld-on thread NW10 DIN 11851
- › Threaded sleeve with locking screw and cap nut NW10 DIN 11851
- › Bi-metal dial thermometer \varnothing 100 mm, measuring range - 20 °C to + 60 °C

SAMPLING

- › Weld-on thread NW20 DIN 11851
- › Sampling 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 NW50 DIN 11851)

JUICE TOTAL OUTLET/-FILLING

- › Welded-on neck NW65 DIN 11851

MASH IMMERSION SYSTEM

- › Electronic control system (stainless steel control cabinet, by default located on the right)
- › Connection 220V, 50 Hz, IP 44
- › Immersion time and pause time inverter controlled
- › Pneumatic cylinder flange-mounted inside on the reinforced top, piston rod and immersion unit made of stainless steel

SYSTEM REQUIREMENTS RED WINE MASH INTERNAL PLUNGER FD-IT

COMPRESSOR

- › Compressor capacity minimum 90 litres
- › Fan efficiency 500 litres/minimum at 6 bar
- › The compressor's pressurised air must be cleaned with an air preparation unit!

- › We recommend the following air preparation units: FESTO FRC-1/2-D-MIDI-A (Order No. 159591), SMC AC40A-F04DE

REQUIRED AIR MASS

- › Immersion depth 1,000 mm 12.3 litres/lifting force
- › Immersion depth 1,500 mm 18.3 litres/lifting force
- › Immersion depth 1,250 mm 15.3 litres/lifting force
- › Immersion depth 1,750 mm 21.4 litres/lifting force

OPTIONS RED WINE MASH INTERNAL PLUNGER FD-IT

FD-ITTK: WITH MASH BOTTOM OUTLET+HINGED DOOR

- › Mash bottom outlet B=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-ITAK: AUTOMATIC MASH RELEASE+HINGED DOOR

- › Mash outlet B=530 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 U/min), Electricity supply 380V, 50 Hz
- › Discharge height A=see chart










FD-ITTS: WITH MASH BOTTOM OUTLET+SLIDE FEED PROPORTIONING

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

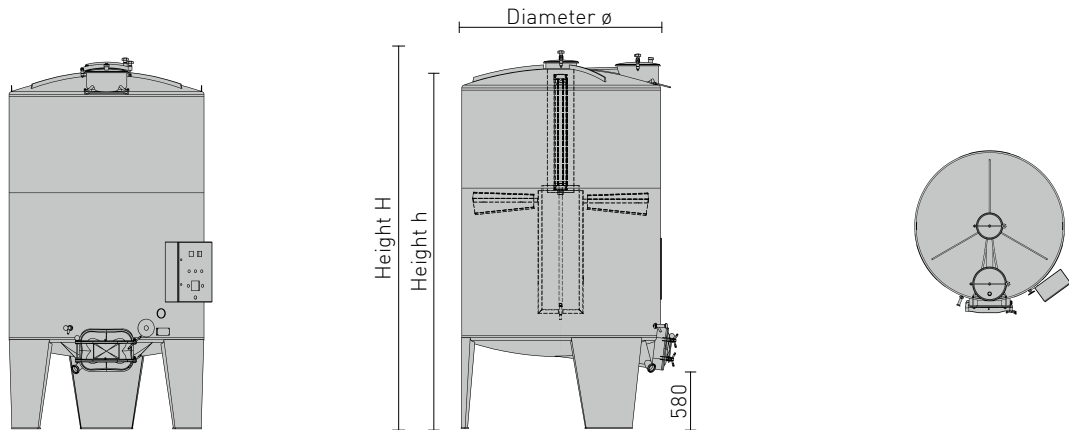
FD-ITAS: AUTOMATIC MASH RELEASE+SLIDE FEED PROPORTIONING

- › Mash outlet B=530 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 380V, 50 Hz
- › Discharge height B=see chart

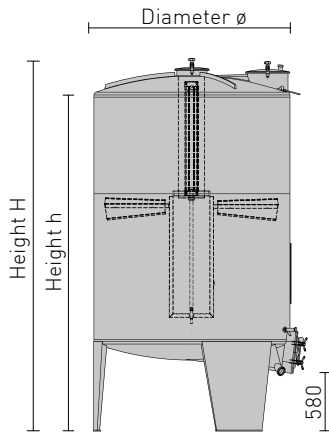
SET-UP EXAMPLE FOR RED WINE MASH INTERNAL PLUNGER FD-ITTS

Item	Order No.
	<p>Red wine mash internal plunger with bottom outlet and slide feed proportioning FD-ITTS-200-10000</p> <ul style="list-style-type: none"> › h=4,155 mm, H=4,410 mm, Hges=4,410 (H) + approx. 100 (height compensation) = approx. 4,510 mm › Standard equipment as on page 95 <p>FD-ITTS-200-10000</p>
	<p>Racking outlet (page 170)</p> <ul style="list-style-type: none"> › Welded gland with thread NW50 › With ball valve NW50 DIN 11851 <p>KA-120D 65158</p>
	<p>Fill level (page 175)</p> <ul style="list-style-type: none"> › Fill level indicator NW20 mounted <p>FS-130W</p>
	<p>Juice total outlet/filling (page 170)</p> <ul style="list-style-type: none"> › With ball valve NW65 DIN 11851 <p>65159</p>
	<p>Heating and cooling jacket (page 136)</p> <ul style="list-style-type: none"> › Double jacket B6 6,2m² with welded gland onto thread G 1" for the connection to available warm water/cold water sources › Version 1, layout 61, connection position B1 <p>1B1</p>
	<p>Automatic temperature control with target indicator and actual indicator (page 188)</p> <ul style="list-style-type: none"> › Mash heating/cooling via local warm water/cold water source is automatically regulated according to target value input by the control system via magnet valve <p>DMS-1</p>
	<p>Juice pumpover (page 185)</p> <ul style="list-style-type: none"> › Stainless steel pipeline NW50 with self-rotating sprinkling system and connection thread connection NW50 DIN 11851 › With ball valve NW50 DIN 11851 <p>ÜF-2 65158</p>
	<p>3 juice extracting sieves with large surface (page 190)</p> <ul style="list-style-type: none"> › Easily removable › With juice extraction on tank shell NW50 DIN 11851 › With ball valve NW50 DIN 11851 <p>ESS-7 65158</p>
	<p>Adjustable feet (page 183)</p> <ul style="list-style-type: none"> › With adjustable feet for tank legs (H=+ approx. 100 mm) <p>46125</p>

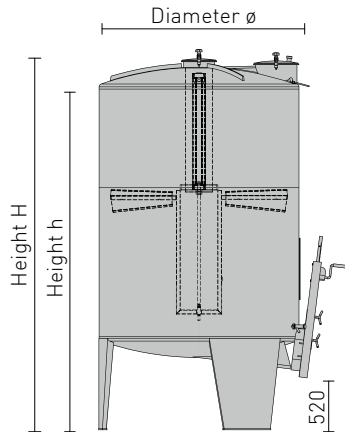
RED WINE MASH INTERNAL PLUNGER FD-ITTK



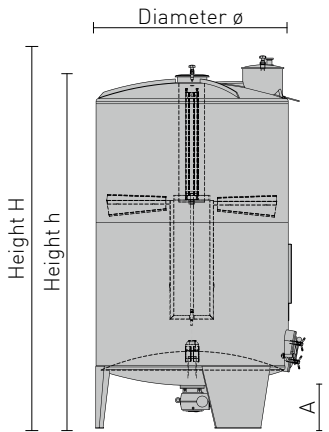
RED WINE MASH INTERNAL PLUNGER FD-ITTK/FD-ITTS/FD-ITAK/FD-ITAS



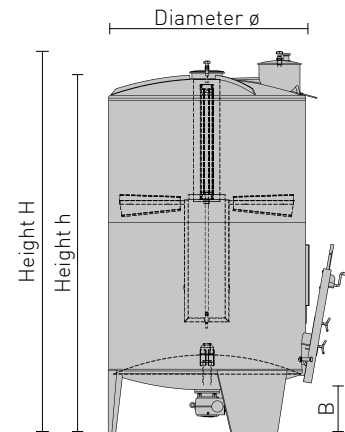
FD-ITTK



FD-ITTS



FD-ITAK



FD-ITAS

RED WINE MASH INTERNAL PLUNGER MODEL FD-ITTK WITH MASH BOTTOM OUTLET AND HINGED DOOR
RED WINE MASH INTERNAL PLUNGER MODEL FD-ITTS WITH MASH BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Immersion depth	ø	h	H	Legs	Order No.	Order No.
litres	% max./min.	mm	mm	mm	mm	pieces	type ITTK	type ITTS
6,000	75/40	750	2,000	2,905	3,160	3	FD-ITTK-200- 6000	FD-ITTS-200- 6000
6,800	75/40	750	2,000	3,155	3,410	3	FD-ITTK-200- 6800	FD-ITTS-200- 6800
7,600	75/40	1,000	2,000	3,405	3,660	3	FD-ITTK-200- 7600	FD-ITTS-200- 7600
8,400	75/40	1,000	2,000	3,655	3,910	3	FD-ITTK-200- 8400	FD-ITTS-200- 8400
9,200	75/40	1,250	2,000	3,905	4,160	3	FD-ITTK-200- 9200	FD-ITTS-200- 9200
10,000	75/40	1,250	2,000	4,155	4,410	3	FD-ITTK-200-10000	FD-ITTS-200-10000
11,200	75/40	1,000	2,400	3,570	3,875	4	FD-ITTK-240-11200	FD-ITTS-240-11200
12,300	75/40	1,000	2,400	3,820	4,125	4	FD-ITTK-240-12300	FD-ITTS-240-12300
13,500	75/40	1,250	2,400	4,070	4,375	4	FD-ITTK-240-13500	FD-ITTS-240-13500
14,500	75/40	1,250	2,400	4,320	4,625	4	FD-ITTK-240-14500	FD-ITTS-240-14500
15,500	75/40	1,500	2,400	4,570	4,875	4	FD-ITTK-240-15500	FD-ITTS-240-15500
16,500	75/40	1,500	2,400	4,820	5,125	4	FD-ITTK-240-16500	FD-ITTS-240-16500
18,000	75/40	1,750	2,400	5,070	5,375	4	FD-ITTK-240-18000	FD-ITTS-240-18000
19,000	75/40	1,750	2,400	5,320	5,625	4	FD-ITTK-240-19000	FD-ITTS-240-19000
20,000	75/40	1,750	2,400	5,570	5,875	4	FD-ITTK-240-20000	FD-ITTS-240-20000
17,000	75/40	1,000	2,800	3,920	4,305	4	FD-ITTK-280-17000	FD-ITTS-280-17000
18,500	75/40	1,250	2,800	4,170	4,555	4	FD-ITTK-280-18500	FD-ITTS-280-18500
20,000	75/40	1,250	2,800	4,420	4,805	4	FD-ITTK-280-20000	FD-ITTS-280-20000
21,500	75/40	1,500	2,800	4,670	5,055	4	FD-ITTK-280-21500	FD-ITTS-280-21500
23,000	75/40	1,500	2,800	4,920	5,305	4	FD-ITTK-280-23000	FD-ITTS-280-23000
24,500	75/40	1,750	2,800	5,170	5,555	4	FD-ITTK-280-24500	FD-ITTS-280-24500

Convenient manual mash release



RED WINE MASH INTERNAL PLUNGER MODEL FD-ITAK WITH AUTOMATIC MASH RELEASE AND HINGED DOOR
RED WINE MASH INTERNAL PLUNGER MODEL FD-ITAS WITH AUTOMATIC MASH RELEASE AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Immersion depth	ø	h	H	Legs	Discharge height A/B	Order No.	Order No.
litres	% max./min.	mm	mm	mm	mm	pieces		type ITAK	type ITAS
7,000	75/40	750	2,000	3,149	3,400	3	580/520	FD-ITAK-200- 7000	FD-ITAS-200- 7000
7,800	75/40	750	2,000	3,399	3,650	3	580/520	FD-ITAK-200- 7800	FD-ITAS-200- 7800
8,500	75/40	1,000	2,000	3,649	3,900	3	580/520	FD-ITAK-200- 8500	FD-ITAS-200- 8500
9,300	75/40	1,000	2,000	3,899	4,150	3	580/520	FD-ITAK-200- 9300	FD-ITAS-200- 9300
10,000	75/40	1,250	2,000	4,149	4,400	3	580/520	FD-ITAK-200- 10000	FD-ITAS-200-10000
10,000	75/40	750	2,400	3,400	3,705	4	740/670	FD-ITAK-240- 10000	FD-ITAS-240-10000
11,200	75/40	750	2,400	3,650	3,955	4	740/670	FD-ITAK-240- 11200	FD-ITAS-240-11200
12,300	75/40	1,000	2,400	3,900	4,205	4	740/670	FD-ITAK-240- 12300	FD-ITAS-240-12300
13,500	75/40	1,000	2,400	4,150	4,455	4	740/670	FD-ITAK-240- 13500	FD-ITAS-240-13500
14,500	75/40	1,250	2,400	4,400	4,705	4	740/670	FD-ITAK-240- 14500	FD-ITAS-240-14500
15,500	75/40	1,250	2,400	4,650	4,955	4	740/670	FD-ITAK-240- 15500	FD-ITAS-240-15500
16,500	75/40	1,250	2,400	4,900	5,205	4	740/670	FD-ITAK-240- 16500	FD-ITAS-240-16500
18,000	75/40	1,500	2,400	5,150	5,455	4	740/670	FD-ITAK-240- 18000	FD-ITAS-240-18000
19,000	75/40	1,750	2,400	5,400	5,705	4	740/670	FD-ITAK-240- 19000	FD-ITAS-240-19000
15,500	75/40	750	2,800	3,750	4,135	4	760/685	FD-ITAK-280- 15500	FD-ITAS-280-15500
17,000	75/40	1,000	2,800	4,000	4,385	4	760/685	FD-ITAK-280- 17000	FD-ITAS-280-17000
18,500	75/40	1,000	2,800	4,250	4,635	4	760/685	FD-ITAK-280- 18500	FD-ITAS-280-18500
20,000	75/40	1,250	2,800	4,500	4,885	4	760/685	FD-ITAK-280- 20000	FD-ITAS-280-20000
21,500	75/40	1,250	2,800	4,750	5,135	4	760/685	FD-ITAK-280- 21500	FD-ITAS-280-21500
23,000	75/40	1,500	2,800	5,000	5,385	4	760/685	FD-ITAK-280- 23000	FD-ITAS-280-23000
24,500	75/40	1,500	2,800	5,250	5,635	4	760/685	FD-ITAK-280- 24500	FD-ITAS-280-24500

Automatic mash release at the push of a button





» Red wine mash flooder FD-MÜ

Speidel's FD-MÜ is an upright standing red wine mash fermentation tank with a simple but efficient technology. After the fermentation has started and a marc cake has formed about half of the content is discharged into an interim tank. The marc cake descends to the ground, breaks into pieces and is 'opened' by a system of rods.

Afterwards the juice is pumped in again via a self-rotating sprinkling system and the smashed marc cake is flooded. The pigments are washed out. This procedure is repeated several times. The principle of the 'remontage' or reassembly has been practised successfully all over the world.



OUR ADVANTAGES

- › State-of-the-art technology
- › Efficient, hygienic distribution system
- › Marc breakers included
- › Gentle processing of the grape material
- › High colour and aroma extraction
- › Ideally suited for the combination with other systems
- › Permanently installed controllable pump as option
- › Optional grape seed output
- › Controllable heating/cooling of the tanks
- › Experience rooted in tradition

STANDARD EQUIPMENT RED WINE MASH FLOODER FD-MÜ

TANK TOP

- › Up to tank-ø of 2,000 mm made of AISI 316 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 316 L/316 stainless steel surface IIld (2R)/IIlc (2B)
- › Ladder safety bow, lifting lugs

TANK SHELL

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

TANK BOTTOM

- › Up to tank-ø of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)

- › Free-standing on welded-on box-shaped legs perfect stability and force transmission into the tank

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 NW50 Rd 78 x 1/6"

TEMPERATURE MEASUREMENT

- › Weld-on thread NW10 DIN 11851
- › Threaded sleeve with locking screw and cap nut NW10 DIN 11851
- › Bi-metal dial thermometer 100 mm ø, measuring range -20 ° to +60 °C

SAMPLING

- › Weld-on thread NW20 DIN 11851
- › Sampling tap with cap nut NW20 DIN 11851

RACKING OUTLET

- › Reinforcing plate with drilled hole 48 mm ø (to hold flap valve Gr. 37 or weld-on thread NW50 DIN 11851)

JUICE FLOODING

- › Stainless steel pipeline NW50 with self-rotating sprinkling system
- › Connecting thread NW50 DIN 11851, from ø 2,800 mm upwards with two flooding heads

MARC BREAKERS

- › Horizontally staggered moulded pipes break the descending marc into pieces

JUICE TOTAL OUTLET/-FILLING

- › Welded-on neck with thread NW65 DIN 11851

OPTIONS RED WINE MASH FLOODER FD-MÜ

FD-MÜTK: MASH BOTTOM OUTLET + HINGED DOOR

- › Mash bottom outlet B = 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-MÜAK: AUTOMATIC MASH RELEASE + HINGED DOOR

- › Mash outlet B = 530 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 380V, 50 Hz
- › Discharge height A = see chart










FD-MÜTS: MASH BOTTOM OUTLET + SLIDE FEED PROPORTIONING

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

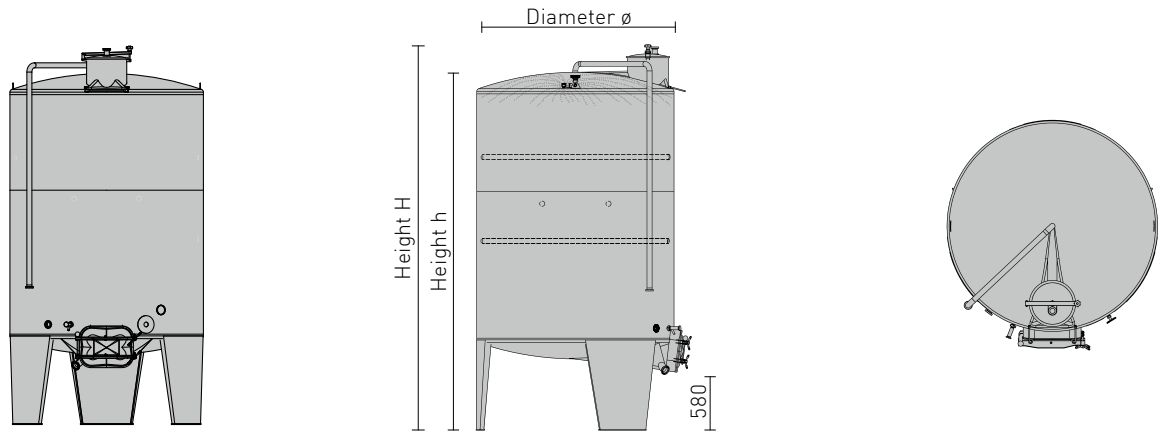
FD-MÜAS: AUTOMATIC MASH RELEASE + SLIDE FEED PROPORTIONING

- › Mash outlet B = 530 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 380V, 50 Hz
- › Discharge height B = see chart

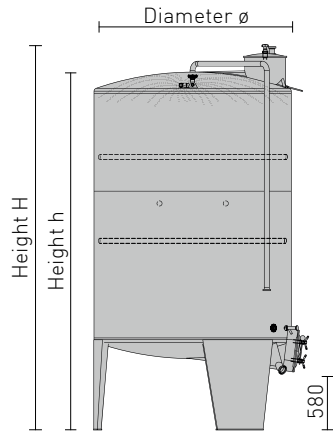
SET-UP EXAMPLE FOR RED WINE MASH FLOODER FD-MÜAK

Item	Order No.
	<p>Red wine mash flooder with automatic mash release and hinged door FD-MÜAK-200-7800</p> <p>› h=3,399 mm, H=3,650 mm, Hges=3,650 (H) + approx. 100 (height compensation) = approx. 3,750 mm</p> <p>› Standard equipment as on page 101</p> <p>FD-MÜAK-200-7800</p>
	<p>Racking outlet (page 170)</p> <p>› With mounted flap valve Gr. 37</p> <p>KA-1201</p>
	<p>Fill level (page 175)</p> <p>› Mounted fill level indicator NW20</p> <p>FS-130W</p>
	<p>Juice flooding (page 185)</p> <p>› With ball valve NW50 DIN 11851</p> <p>65158</p>
	<p>Juice total outlet/-filling (page 170)</p> <p>› With ball valve NW65 DIN 11851</p> <p>65159</p>
	<p>Heating and cooling jacket (page 136)</p> <p>› Double jacket B6 6,2m² with welded gland thread G 1" for the connection to available warm water/cold water sources</p> <p>› Version 1, layout 61, connection position B2</p> <p>1B2</p>
	<p>Automatic temperature control with target indicator and actual indicator (page 188)</p> <p>› Mash heating/cooling via local warm water/cold water source is automatically regulated according to target value input by the control system via magnet valve</p> <p>DMS-2</p>
	<p>2 juice extracting sieves with large surface (page 190)</p> <p>› Easily removable</p> <p>› With juice extraction on tank shell NW50 DIN 11851</p> <p>› With ball valve NW50 DIN 11851</p> <p>ESS-2</p> <p>65158</p>
	<p>Adjustable feet (page 183)</p> <p>› With adjustable feet for tank legs (H=+approx. 100 mm)</p> <p>46125</p>

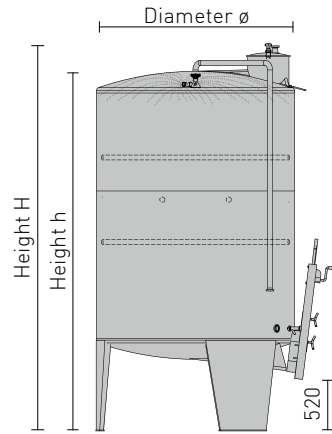
DIMENSIONS RED WINE MASH FLOODER FD-MÜTK



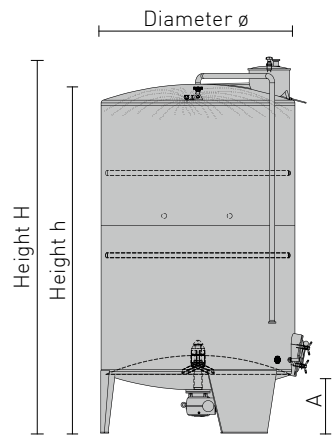
DIMENSIONS RED WINE MASH FLOODER FD-MÜTS/FD-MÜAK/FD-MÜAS



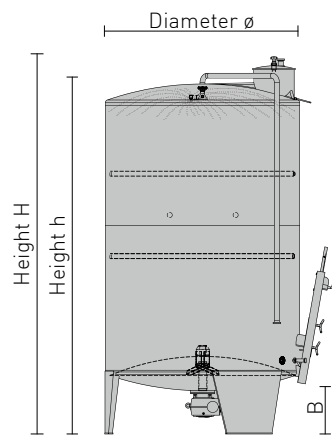
FD-MÜTK



FD-MÜTS



FD-MÜAK



FD-MÜAS

RED WINE MASH FLOODER MODEL FD-MÜTK WITH MASH BOTTOM OUTLET AND HINGED DOOR
RED WINE MASH FLOODER MODEL FD-MÜTS WITH MASH BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Marc breakers	ø	h	H	Legs	Order No.	Order No.
litres	% max./min.	pair	mm	mm	mm	pieces	type MÜTK	type MÜTS
3,300	75	2	1,600	2,543	2,870	3	FD-MÜTK-160- 3300	FD-MÜTS-160- 3300
5,300	75	2	2,000	2,667	2,910	3	FD-MÜTK-200- 5300	FD-MÜTS-200- 5300
6,000	75	2	2,000	2,905	3,160	3	FD-MÜTK-200- 6000	FD-MÜTS-200- 6000
6,800	75	2	2,000	3,155	3,410	3	FD-MÜTK-200- 6800	FD-MÜTS-200- 6800
7,600	75	3	2,000	3,405	3,660	3	FD-MÜTK-200- 7600	FD-MÜTS-200- 7600
8,400	75	3	2,000	3,655	3,910	3	FD-MÜTK-200- 8400	FD-MÜTS-200- 8400
9,200	75	3	2,000	3,905	4,160	3	FD-MÜTK-200- 9200	FD-MÜTS-200- 9200
10,000	75	3	2,000	4,155	4,410	3	FD-MÜTK-200-10000	FD-MÜTS-200-10000
10,000	75	2	2,400	3,320	3,625	4	FD-MÜTK-240-10000	FD-MÜTS-240-10000
11,200	75	2	2,400	3,570	3,875	4	FD-MÜTK-240-11200	FD-MÜTS-240-11200
13,500	75	3	2,400	4,070	4,375	4	FD-MÜTK-240-13500	FD-MÜTS-240-13500
14,500	75	3	2,400	4,320	4,625	4	FD-MÜTK-240-14500	FD-MÜTS-240-14500
15,500	75	3	2,400	4,570	4,875	4	FD-MÜTK-240-15500	FD-MÜTS-240-15500
16,500	75	3	2,400	4,820	5,125	4	FD-MÜTK-240-16500	FD-MÜTS-240-16500
18,000	75	3	2,400	5,070	5,375	4	FD-MÜTK-240-18000	FD-MÜTS-240-18000
19,000	75	3	2,400	5,320	5,625	4	FD-MÜTK-240-19000	FD-MÜTS-240-19000
20,000	75	3	2,400	5,570	5,875	4	FD-MÜTK-240-20000	FD-MÜTS-240-20000
17,000	75	3	2,800	3,920	4,305	4	FD-MÜTK-280-17000	FD-MÜTS-280-17000
18,500	75	3	2,800	4,170	4,555	4	FD-MÜTK-280-18500	FD-MÜTS-280-18500
20,000	75	3	2,800	4,420	4,805	4	FD-MÜTK-280-20000	FD-MÜTS-280-20000
21,500	75	3	2,800	4,670	5,055	4	FD-MÜTK-280-21500	FD-MÜTS-280-21500
23,000	75	3	2,800	4,920	5,305	4	FD-MÜTK-280-23000	FD-MÜTS-280-23000
24,500	75	3	2,800	5,170	5,555	4	FD-MÜTK-280-24500	FD-MÜTS-280-24500
26,000	75	3	2,800	5,420	5,805	4	FD-MÜTK-280-26000	FD-MÜTS-280-26000
27,500	75	3	2,800	5,670	6,055	4	FD-MÜTK-280-27500	FD-MÜTS-280-27500
29,400	75	3	2,800	5,920	6,305	4	FD-MÜTK-280-29400	FD-MÜTS-280-29400

Convenient manual mash release



RED WINE MASH FLOODER MODEL FD-MÜAK WITH AUTOMATIC MASH RELEASE AND HINGED DOOR
RED WINE MASH FLOODER MODEL FD-MÜAS WITH AUTOMATIC MASH RELEASE AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Marc breakers	ø	h	H	Legs	Discharge height A/B	Order No.	Order No.
litres	% max./min.	pair	mm	mm	mm	pieces		type MÜAK	type MÜAS
6,300	75	2	2,000	2,899	3,125	3	580/520	FD-MÜAK-200- 6300	FD-MÜAS-200- 6300
7,000	75	2	2,000	3,149	3,400	3	580/520	FD-MÜAK-200- 7000	FD-MÜAS-200- 7000
7,800	75	3	2,000	3,399	3,650	3	580/520	FD-MÜAK-200- 7800	FD-MÜAS-200- 7800
8,500	75	3	2,000	3,649	3,900	3	580/520	FD-MÜAK-200- 8500	FD-MÜAS-200- 8500
9,300	75	3	2,000	3,899	4,150	3	580/520	FD-MÜAK-200- 9300	FD-MÜAS-200- 9300
10,000	75	3	2,000	4,149	4,400	3	580/520	FD-MÜAK-200-10000	FD-MÜAS-200-10000
10,000	75	2	2,400	3,400	3,705	4	740/670	FD-MÜAK-240-10000	FD-MÜAS-240-10000
11,200	75	3	2,400	3,650	3,955	4	740/670	FD-MÜAK-240-11200	FD-MÜAS-240-11200
12,300	75	3	2,400	3,900	4,205	4	740/670	FD-MÜAK-240-12300	FD-MÜAS-240-12300
13,500	75	3	2,400	4,150	4,455	4	740/670	FD-MÜAK-240-13500	FD-MÜAS-240-13500
14,500	75	3	2,400	4,400	4,705	4	740/670	FD-MÜAK-240-14500	FD-MÜAS-240-14500
15,500	75	3	2,400	4,650	4,955	4	740/670	FD-MÜAK-240-15500	FD-MÜAS-240-15500
16,500	75	3	2,400	4,900	5,205	4	740/670	FD-MÜAK-240-16500	FD-MÜAS-240-16500
18,000	75	3	2,400	5,150	5,455	4	740/670	FD-MÜAK-240-18000	FD-MÜAS-240-18000
19,000	75	3	2,400	5,400	5,705	4	740/670	FD-MÜAK-240-19000	FD-MÜAS-240-19000
15,500	75	3	2,800	3,750	4,135	4	760/685	FD-MÜAK-280-15500	FD-MÜAS-280-15500
17,000	75	3	2,800	4,000	4,385	4	760/685	FD-MÜAK-280-17000	FD-MÜAS-280-17000
18,500	75	3	2,800	4,250	4,635	4	760/685	FD-MÜAK-280-18500	FD-MÜAS-280-18500
20,000	75	3	2,800	4,500	4,885	4	760/685	FD-MÜAK-280-20000	FD-MÜAS-280-20000
21,500	75	3	2,800	4,750	5,135	4	760/685	FD-MÜAK-280-21500	FD-MÜAS-280-21500
23,000	75	3	2,800	5,000	5,385	4	760/685	FD-MÜAK-280-23000	FD-MÜAS-280-23000
24,500	75	3	2,800	5,250	5,635	4	760/685	FD-MÜAK-280-24500	FD-MÜAS-280-24500
26,000	75	3	2,800	5,500	5,885	4	760/685	FD-MÜAK-280-26000	FD-MÜAS-280-26000
27,500	75	3	2,800	5,750	6,135	4	760/685	FD-MÜAK-280-27500	FD-MÜAS-280-27500

Automatic mash release at the push of a button





» 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 IIld (2R), marbled outside
- › From tank- \varnothing of 2,200 mm upwards made of AISI 316 stainless steel, surface IIld (2R)/IIlc (2B)
- › Ladder safety bow, lifting lugs

TANK SHELL

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

TANK BOTTOM

- › Up to tank- \varnothing of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R)
- › From tank- \varnothing of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)

- › Free-standing on welded-on box-shaped legs

FILLER NECK

- › Filler neck NW400, located in tank top with an upright forward position (tank top with bead extrusion for complete ventilation)
- › Flap lid with vent neck NW50 Rd 78x 1/6"

TEMPERATURE MEASUREMENT

- › Weld-on thread NW10 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 $+60^{\circ}\text{C}$

SAMPLING

- › Weld-on thread NW20 DIN 11851
- › Sample tap with cap nut NW 20 DIN 11851

RACKING OUTLET

- › Reinforcing plate with drilled hole 48 mm \varnothing (to hold flap valve Gr. 37 or weld-on thread NW50 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 + HINGED DOOR

- › Mash bottom outlet B=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 + HINGED DOOR

- › Mash outlet B=530 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 380V, 50 Hz
- › Discharge height A=see chart










FD-DFTS: MASH BOTTOM OUTLET + SLIDE FEED PROPORTIONING

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

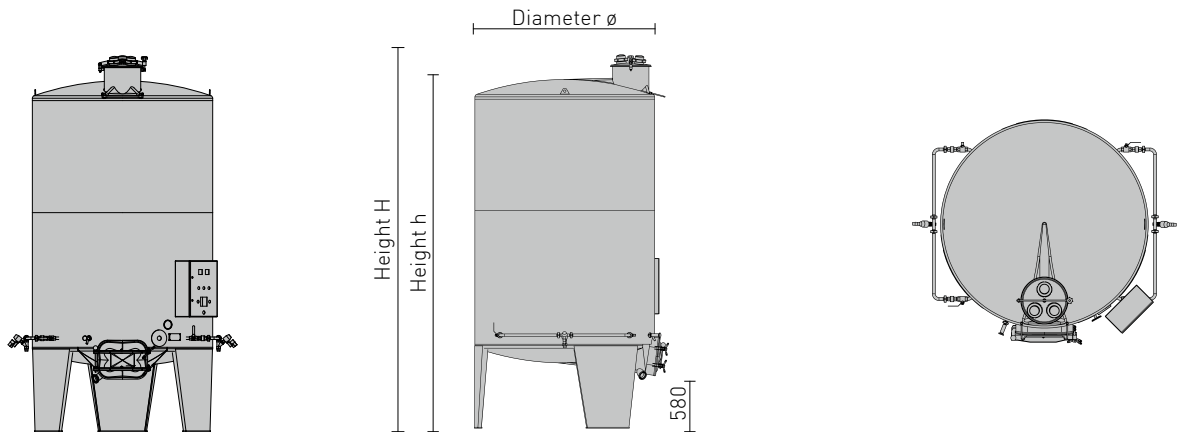
FD-DFAS: AUTOMATIC MASH RELEASE UND SLIDE FEED PROPORTIONING

- › Mash outlet B=530 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 380V, 50 Hz
- › Discharge height B=see chart

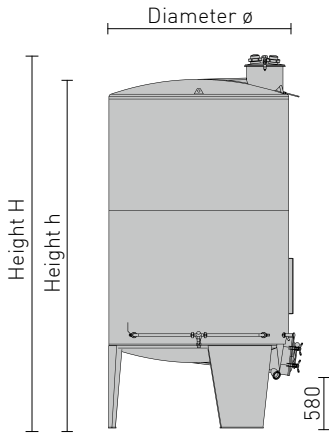
SET-UP EXAMPLE FOR RED WINE MASH PRESSURE FLOODER FD-DFTS

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, Hges=4,160 (H) + approx. 100 (height compensation) = approx. 4,260 mm</p> <p>› Standard equipment as on page 107</p>
	<p>Racking outlet (page 170)</p> <p>› With mounted flap valve Gr. 37</p> <p>KA-1201</p>
	<p>Fill level (page 175)</p> <p>› Mounted fill level indicator NW20</p> <p>FS-130W</p>
	<p>Juice flooding (page 185)</p> <p>› Stainless steel pipeline NW50 with self-rotating sprinkling system and connection thread NW50 DIN 11851</p> <p>› With ball valve NW50 DIN 11851</p> <p>ÜF-4 65158</p>
	<p>Juice total outlet/-filling (page 170)</p> <p>› With ball valve NW 65 DIN 11851</p> <p>65159</p>
	<p>Heating and cooling jacket (page 136)</p> <p>› Double jacket B2 6,2m² with welded gland thread G 1" for connection to available warm water/cold water source</p> <p>› Version 1, layout 61, connection position B2</p> <p>1B2</p>
	<p>3 juice extracting sieves with large surface (page 190)</p> <p>› Easily removable</p> <p>› With juice extraction on tank shell NW50 DIN 11851</p> <p>› with ball valve NW50 DIN 11851</p> <p>ESS-3 65158</p>
	<p>Grape seed output (page 190)</p> <p>› With outlet NW65 DIN 11851</p> <p>› With ball valve NW65 DIN 11851</p> <p>KF-1 65159</p>
	<p>Adjustable feet (page 183)</p> <p>› With adjustable feet for tank legs (H=+ approx. 100 mm)</p> <p>46128</p>

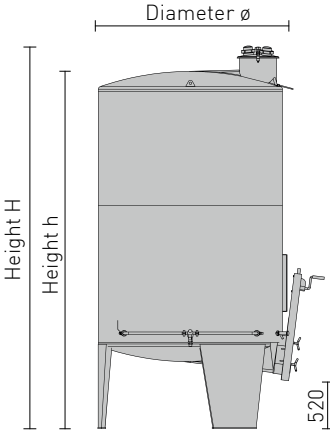
DIMENSIONS RED WINE MASH PRESSURE FLOOder FD-DFTK



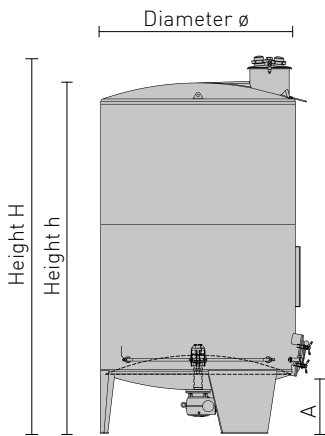
DIMENSIONS RED WINE MASH PRESSURE FLOOder FD-DFTK/FD-DFTS / FD-DFAK/FD-DFAS



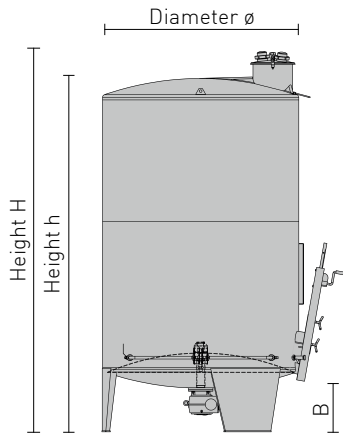
FD-DFTK



FD-DFTS



FD-DFAK



FD-DFAS

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

Capacity litres	Mash fill quantity % max./min.	ø mm	h mm	H mm	Legs pieces	Order No. type DFTK	Order No. type 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 MODEL FD-DFAK WITH AUTOMATIC MASH RELEASE AND HINGED DOOR
RED WINE MASH PRESSURE FLOODER MODEL FD-DFAS WITH AUTOMATIC MASH RELEASE AND 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		type DFAK	type 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



What is good for you is good for us:
only good labour generates good results



» Mash storage tank FD-MBT

Speidel's upright mash storage tank serves for the interim storage of fruit and grape mash in between the delivery and the processing of the mash. In addition, the FD-MBT can also be used as processing tank for the treatment with enzymes of liquid fruit mashes.

The robust stirring device allows for the mash to be constantly moved and homogenised. A stainless steel remover arm with scrapers made of vulkollan ensures the automatic release. This allows the complete release of the material/content.



For the storage of grape mash
or liquid fruit mash

STANDARD EQUIPMENT MASH STORAGE TANK FD-MBT

TANK TOP

- › Up to tank- ø 2,000 mm made of AISI 316 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø 2,200 mm upwards made of AISI 316 stainless steel, surface IIld (2R)/IIlc (2B)
- › Ladder safety bow, lifting lugs

TANK SHELL

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

TANK BOTTOM

- › Up to tank-ø of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)
- › Free-standing on welded-on box-shaped legs

FILLER NECK

- › Filler neck NW400, located in tank top with an upright forward position (tank top with bead extrusion for complete ventilation)
- › Flap lid with vent neck NW50 Rd 78x1/6"

STIRRING DEVICE / REGULATION

- › Stable stirring shaft, stirring blades for the homogenisation and release of the mash
- › Electronic control system (stainless steel control cabinet, by default arranged on right), On/Off, connection 380V, 50 Hz, IP44
- › Stainless steel remover with scraper made of vulkollan (polyurethan) with gear motor (approx. 8 rpm), power output 3 kW up to ø 2,400 mm, electric connection on site
- › Stainless steel remover with scraper made of vulkollan with gear motor (approx. 8 rpm), power output 5,5 kW at ø 2,800 mm, electric connection on site

MANHOLE

- › 420x320 mm, door with bow and hand wheel with electric fuse

RACKING OUTLET








- › Reinforcing plate with drilled hole 48 mm ø (to hold flap valve Gr. 37 or weld-on thread NW50 DIN 11851)

MASH OUTLET

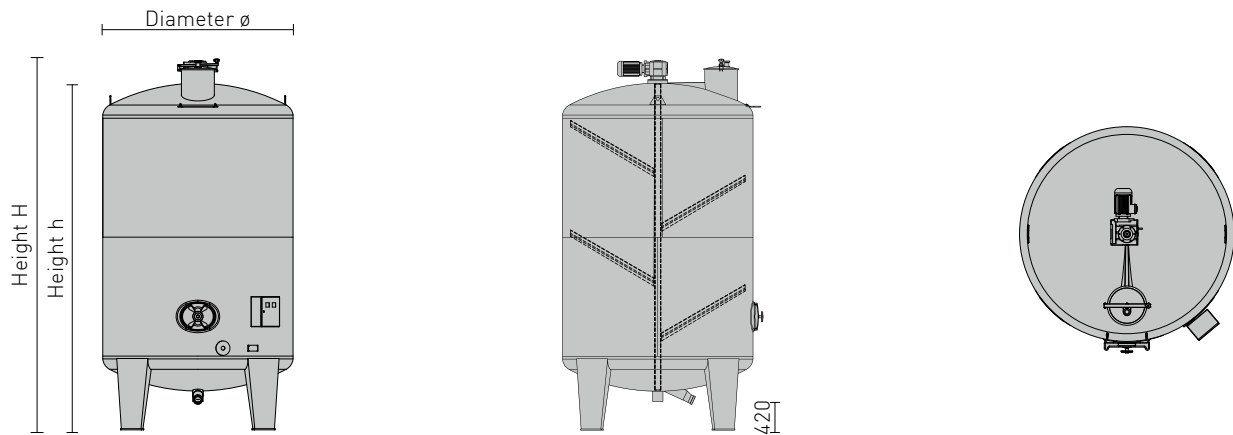
- › Welded-on neck with thread NW125
- › Discharge height X=420 mm



SET-UP EXAMPLE FOR MASH STORAGE TANK FD-MBT

Item	Order No.
 <p>Mash storage tank FD-MBT-240-15500</p> <ul style="list-style-type: none"> › h=4,570 mm, H=4,870mm, Hges=4,870 (H) + approx. 150 (cleaning pipe) + approx. 100 (height compensation)=approx. 5,120 mm › Standard equipment as on page 113 	FD-MBT-240-15500
 <p>Racking outlet (page 170)</p> <ul style="list-style-type: none"> › With mounted flap valve Gr. 37 	KA-120I
 <p>Mash outlet (page 173)</p> <ul style="list-style-type: none"> › With ball valve NW125 DIN 11851 	65684
 <p>Automatic temperature regulation with target indicator and actual indicator (page 188)</p> <ul style="list-style-type: none"> › Mash heating/cooling via local warm water/cold water source is automatically regulated according to target value input by the control system via magnet valve 	DMS-1
 <p>Temperature measurement (page 177)</p> <ul style="list-style-type: none"> › Bi-metal dial thermometer ø 100mm, measuring range -20°C to +60°C › Screwed sleeve for thermometer length = 125mm 	TM-140C
 <p>Heating and cooling jacket (page 136)</p> <ul style="list-style-type: none"> › Double jacket B7 11,0 m² with welded gland thread G 1" for connection to available warm water/cold water source › Version 1, layout 33, connection position B7 	1B7
 <p>Adjustable feet (page 183)</p> <ul style="list-style-type: none"> › With adjustable feet for tank legs (approx. 100 mm) 	46129

MASH STORAGE TANK FD-MBT



Capacity	ø	h	H	Stirring device wing	Legs	Order No.
litres	mm	mm	mm	pieces	pieces	
5,200	2,000	2,608	2,948	2	3	FD-MBT-200- 5200
6,000	2,000	2,858	3,198	4	3	FD-MBT-200- 6000
6,700	2,000	3,096	3,436	4	3	FD-MBT-200- 6700
7,500	2,000	3,346	3,686	4	3	FD-MBT-200- 7500
8,300	2,000	3,596	3,936	4	3	FD-MBT-200- 8300
9,200	2,000	3,846	4,186	5	3	FD-MBT-200- 9200
9,800	2,000	4,096	4,436	5	3	FD-MBT-200- 9800
10,600	2,000	4,346	4,686	5	3	FD-MBT-200-10600
10,000	2,400	3,320	3,620	4	4	FD-MBT-240-10000
11,200	2,400	3,570	3,870	4	4	FD-MBT-240-11200
12,300	2,400	3,820	4,120	4	4	FD-MBT-240-12200
13,500	2,400	4,070	4,370	4	4	FD-MBT-240-13500
14,500	2,400	4,320	4,620	5	4	FD-MBT-240-14500
15,500	2,400	4,570	4,870	5	4	FD-MBT-240-15500
16,500	2,400	4,820	5,120	6	4	FD-MBT-240-16500
18,000	2,400	5,070	5,370	6	4	FD-MBT-240-18000
19,000	2,400	5,320	5,620	6	4	FD-MBT-240-19000
20,000	2,400	5,570	5,870	6	4	FD-MBT-240-20000
17,000	2,800	3,920	4,270	4	4	FD-MBT-280-17000
18,500	2,800	4,170	4,520	4	4	FD-MBT-280-18500
20,000	2,800	4,420	4,770	4	4	FD-MBT-280-20000
21,500	2,800	4,670	5,020	5	4	FD-MBT-280-21500
23,000	2,800	4,920	5,270	6	4	FD-MBT-280-23000
24,500	2,800	5,170	5,520	6	4	FD-MBT-280-24500
26,000	2,800	5,420	5,770	6	4	FD-MBT-280-26000
27,500	2,800	5,670	6,020	6	4	FD-MBT-280-27500
29,400	2,800	5,920	6,270	6	4	FD-MBT-280-29400

Version with conical bottom
available





» Red wine mash fermentor SD-MGRL (horizontal)

The horizontal edition of our red wine mash fermentation tank was especially developed for low-ceilinged cellar rooms. The slow-moving wings gently immerse the marc cake piece by piece. After approx. 5 rotations the cake is fully immersed. By means of a freely programmable regulation the immersion time and pause time can be pre-selected at your convenience. Slightly tilted wings ensure the automatic release of the mash.

By means of an optional double jacket it is possible to either obtain the desired fermentation temperature in a short time or to cool the content in case the temperatures are too high. The horizontal red wine mash fermentation tank allows for the homogeneously stirred mash to be forwarded into the press and released from the press either in a direct way or, more efficiently, with a mash pump via a ball valve NW 125. The entire tank is made of AISI 304.



OUR ADVANTAGES

- › Homogeneous mash
- › Automatic release
- › Mash outlet with thread NW 125
- › Efficient and gentle at the same time

STANDARD EQUIPMENT RED WINE MASH FERMENTOR SD-MGRL (HORIZONTAL)

- › Tank top and tank bottoms made of AISI 304 stainless steel, surface IIId (2R), marbled outside
- › Ladder safety bow
- › Free-standing on welded-on support saddles

FILLER NECK

- › Filler neck NW400, positioned up front, Flap lid with vent neck NW50 Rd 78x1/6", secured by protection bar

TEMPERATURE MEASUREMENT

- › Weld-on thread NW10 DIN 11851
- › Threaded sleeve with locking screw and cap nut NW10
- › Bi-metal dial thermometer 100 mm D, measuring range -20 °C to +60 °C

RACKING OUTLET

- › Reinforced plate with drilled hole 48 mm Ø (to hold flap valve Gr. 37 or weld-on thread NW50 DIN 11851)

SAMPLING

- › Weld-on thread NW20 DIN 11851
- › Sampling tap with cap nut NW20 DIN 11851

MASH OUTLET

- › Welded-on neck with thread NW125







MASH IMMERSION SYSTEM

- › Electronic control system (stainless steel control cabinet, by default arranged on the left), Connection 380V, 50 Hz, IP44

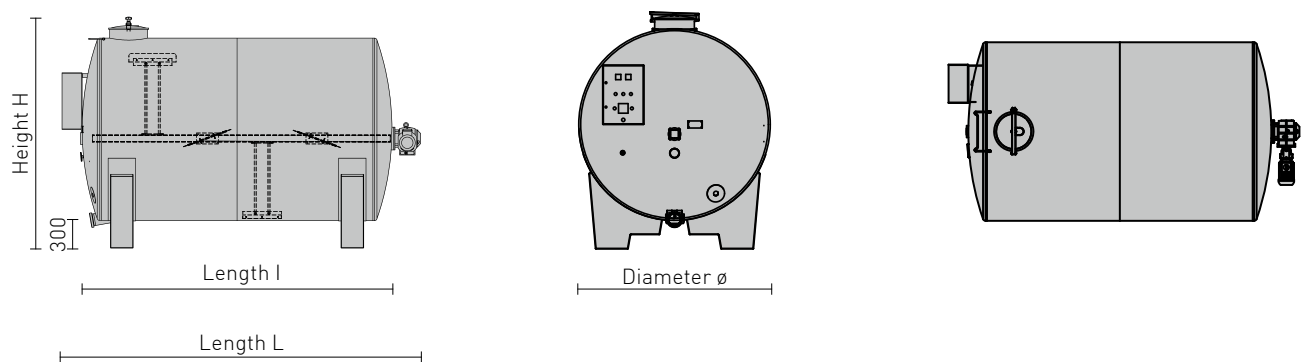
- › Immersion time and pause time steplessly variable, stable stirring shaft
- › Immersion arms with scrapers for the immersion and release of the mash
- › Gear motor for two rotational speeds 380V, 50Hz, IP44 one slow rotational speed (approx. 3 rpm) for the re-circulation/regroupment during the mash fermentation and one fast rotational speed (approx. 6 rpm) for efficient release



SET-UP EXAMPLE FOR RED WINE MASH FERMENTOR SD-MGRL (HORIZONTAL)

Item	Order No.
 Red wine mash fermentor SD-MGRL-200-8400 <ul style="list-style-type: none"> › L=3,581 › l=2,906 › H=2,461 mm › Standard equipment as on page 117 	SD-MGRL-200-8400
 Racking outlet (page 170) <ul style="list-style-type: none"> › With mounted flap valve Gr. 37 	KA-120I
 Manhole (page 188) <ul style="list-style-type: none"> › Door with bow and hand wheel with electric fuse › 420x320 LW 	ML-110S
 Bottom outlet/mash outlet (page 170) <ul style="list-style-type: none"> › With ball valve NW 125 	65684
 Automatic temperature regulation with target indicator and actual indicator (page 188) <ul style="list-style-type: none"> › Mash heating/cooling via local warm water/cold water source is automatically regulated according to target value input by the control system via magnet valve 	DMS-1
 Heating and cooling jacket (page 136) <ul style="list-style-type: none"> › Double jacket B1 5,6m² with welded gland thread G 1" for connection to available warm water/cold water source › Version 1, layout 85, connection position B1 	1B1

RED WINE MASH FERMENTOR SD-MGRL (HORIZONTAL)



Capacity	Mash fill quantity	ø	L	l	H	Order No.
litres	%	mm	mm	mm	mm	
6,800	80	2,000	3,081	2,406	2,461	SD-MGRL-200- 6800
8,400	80	2,000	3,581	2,906	2,461	SD-MGRL-200- 8400
10,000	80	2,000	4,081	3,406	2,461	SD-MGRL-200-10000
11,000	80	2,400	3,400	2,880	2,530	SD-MGRL-240-11000
13,500	80	2,400	3,900	3,380	2,930	SD-MGRL-240-13500
16,000	80	2,400	4,400	3,880	2,930	SD-MGRL-240-16000
18,000	80	2,400	4,900	4,380	2,930	SD-MGRL-240-18000
20,000	80	2,400	5,400	4,880	2,930	SD-MGRL-240-20000





» Red wine mash fermentation tank FD-MK

This red wine mash fermentation tank with its cone-shaped shell is based on the classical wooden fermentation rack. This model is primarily used in the red wine growing areas of France and Spain.

Thanks to the cone-shaped version the mash cake easily breaks into pieces upon immersion. The FD-MK is equipped with a mash bottom outlet and a hinged door.



Easy disintegration
upon immersion due to
cone-shaped design

STANDARD EQUIPMENT RED WINE MASH FERMENTATION TANK FD-MK

TANK TOP

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

TANK SHELL

- › Made of AISI 304 stainless steel, Surface IIld (2R)
- › Surface outside optionally marbled or brushed

TANK BOTTOM

- › Up to tank- \varnothing of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R)
- › From tank- \varnothing of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B)

- › Free-standing on welded-on boxed, closed legs, perfect stability and force transmission into the tank

FILLER NECK

- › Filler neck NW 1000, located in the tank' top centre, flap lid with vent neck NW 50 Rd 78 x 1/6 ", secured by bars

SAMPLING

- › Weld-on thread NW 10 DIN 11851

FILL LEVEL

- › Weld-on thread NW 10 DIN 11851 with sealing cap including fastening points at tank top (for installation of fill level indicator)

RACKING OUTLET

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

JUICE TOTAL OUTLET/-FILLING









- › Welded-on neck NW 65 DIN 11851

MASH OUTLET: FD-MKTK: MASH BOTTOM OUTLET AND HINGED DOOR

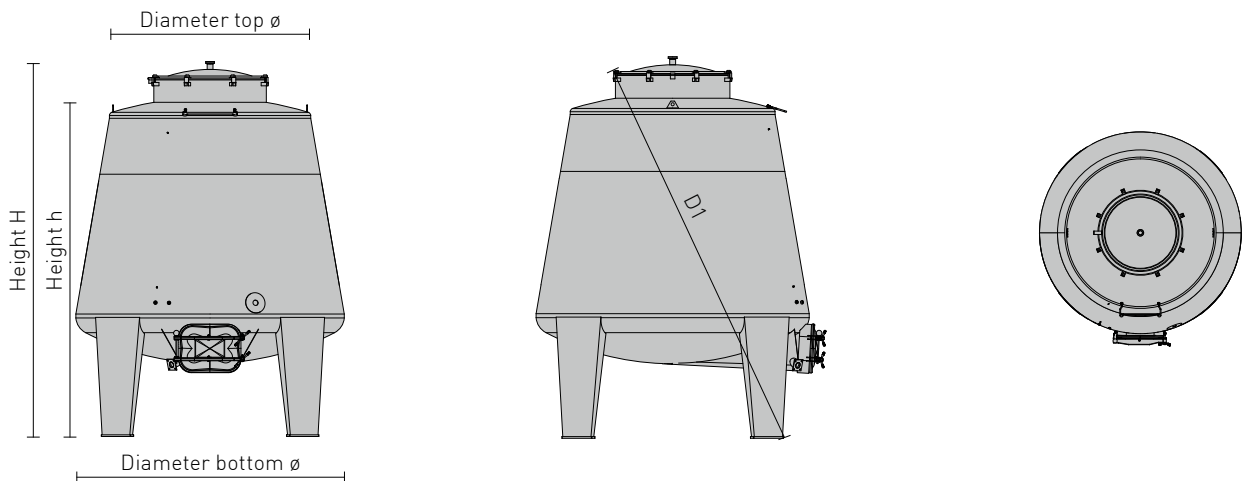
- › Mash bottom outlet B = 530 x H = 400 mm with outwards opening hinged door: the door is left hinged; door handle on the right (extract a sufficient amount of juice in order to avoid the emission of wine while opening)
- › Discharge height X = 580 mm



SET-UP EXAMPLE FOR RED WINE MASH FERMENTATION TANK FD-MK

Item	Order No.
 <p>Red wine fermentation tank FD-MKTK-240-7400 litres</p> <ul style="list-style-type: none"> › h=3,031 mm, H=3,375 mm, Hges=3,375 (H) + approx. 100 (height compensation)=3,475 mm › Standard equipment as on page 121 	FD-MKTK-240-7400
 <p>Sampling (page 174)</p> <ul style="list-style-type: none"> › With sampling tap NW 10 DIN 11851 	64949
 <p>Racking outlet (page 170)</p> <ul style="list-style-type: none"> › Welded gland with thread NW 50 DIN 11851 › With ball valve NW 50 DIN 11851 	KA-120D 65158
 <p>Fill level (page 175)</p> <ul style="list-style-type: none"> › Mounted fill level indicator NW 10, without scale 	FS-130I
 <p>Juice total outlet/-filling (page 170)</p> <ul style="list-style-type: none"> › With ball valve NW 65 DIN 11851 	65159
 <p>Temperature measurement (page 177)</p> <ul style="list-style-type: none"> › Bi-metal dial thermometer ø 100mm, measuring range -20°C to +60°C › Screwed sleeve for thermometer length = 125mm 	TM-140C
 <p>Heating and cooling jacket (page 136)</p> <ul style="list-style-type: none"> › Double jacket B1 6,2m² with welded gland thread G 1" for connection to available warm water/cold water source › Version 1, layout 90, connection position B1 	1B1
 <p>Adjustable feet (page 182)</p> <ul style="list-style-type: none"> › With adjustable feet for tank legs (H=+ approx. 100 mm) 	46129

RED WINE MASH FERMENTATION TANK FD-MK



Capacity	Mash fill quantity	ø-top ø-bottom		h	H	D1	Order No.
litres	%	mm	mm	mm	mm	mm	
6,000	80	1,600	2,200	2,979	3,299	3,500	FD-MKTK-220- 6000
7,400	80	1,800	2,400	3,031	3,375	3,600	FD-MKTK-240- 7400
10,000	80	2,000	2,600	3,355	3,695	3,950	FD-MKTK-260-10000
12,000	80	2,000	2,800	3,600	3,980	4,200	FD-MKTK-280-12000
15,400	80	2,200	3,000	3,945	4,155	4,550	FD-MKTK-300-15400



Over 100 years of experience in oak barrel production

Faßfabrik Georg Speidel
Offendingen / Tübingen



» Red wine mash fermentation tank with oak shell FD-MKEH

Since we began making wooden barrels over 100 years ago Speidel's latest developments have benefited from our multi-generational experience: the FD-MKEH tank unites all the advantages of a Speidel tank with the characteristics of a real oak barrel.

The respiration and perfect temperature equalisation guaranteed by the tank's wooden shell permits a sensory balancing of the aroma. The connection of oak and stainless steel creates a significant improvement in quality.

The unique groove joint connection of oak and stainless steel guarantees two things: you will obtain better wines and be able to enjoy this Speidel-made 'gem' for many years to come.

The red wine mash fermentation tank with oak shell comes with a mash bottom outlet and a hinged door. The bottom outlet is made of stainless steel and – in contrast to tanks that are entirely made of wood – guarantees easier draining and cleaning.



Combines the advantages
of wood and stainless
steel

STANDARD EQUIPMENT RED WINE MASH FERMENTATION TANK WITH OAK SHELL FD-MKEH

TANK TOP

- › Up to tank-ø of 2,000 mm made of AISI 316 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 316 stainless steel, surface IIld (2R)/IIlc (2B), not marbled outside
- › Ladder safety bow, lifting lugs

TANK SHELL

- › Oak 55 mm wall thickness with unique matched joint of wood and stainless steel

TANK BOTTOM

- › Up to tank-ø of 2,000 mm made of AISI 304 stainless steel, surface IIld (2R), marbled outside
- › From tank-ø of 2,200 mm upwards made of AISI 304 stainless steel, surface IIld (2R)/IIlc (2B), not marbled outside

- › Free-standing on welded-on box-shaped legs

FILLER NECK

- › Up to 5,300 litres filler neck NW800, located in the centre of the tank top, flap lid with vent neck NW50 Rd 78 x 1/6", secured by bars
- › From 6,100 litres upwards filler neck NW1000, located in the centre of the tank top, flap lid with vent neck NW50 Rd 78 x 1/6", secured by bars

SAMPLING

- › Weld-on thread NW10 DIN 11851

FILL LEVEL

- › Weld-on thread NW10 DIN 11851 with sealing cap including fastening points at tank shell (for the installation of fill level indicator)

RACKING OUTLET

- › Reinforcing plate with drilled hole ø 48 mm, to hold the mounted flap valve or weld-on thread NW50 DIN 11851

JUICE TOTAL OUTLET/-FILLING

- › Weld-on neck NW65

MASH OUTLET: FD-MKEHTK: MASH BOTTOM OUTLET AND HINGED DOOR

- › Mash bottom outlet B = 530 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

ADVANTAGES RED WINE MASH FERMENTATION TANK WITH OAK SHELL FD-MKEH










- › Respiration via wooden shell
- › Perfect temperature equalisation via the wooden shell
- › Sensory balancing/perfection of the aroma

- › Compared to a tank entirely made of wood: remarkably better cleaning/draining via the stainless steel bottom outlet

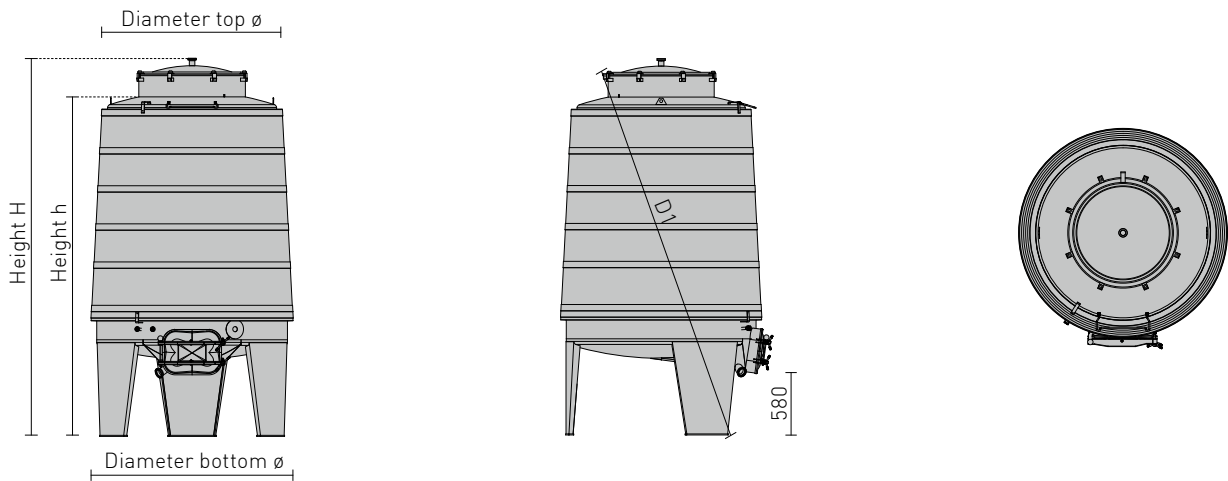
- › Significant improvement in quality due to the combination of oak timber and stainless steel
- › Unique matched joint of oak timber and stainless steel in typical Speidel quality



SET-UP EXAMPLE FOR RED WINE MASH FERMENTATION TANK WITH OAK SHELL FD-MKEH

Item	Order No.
 <p>Red wine mash fermentation tank with oak shell Cone-shaped shell FD-MKEHTK-180-5300 litres › h=3,204 mm, H=3,575 mm, Hges=3,575 (H+approx. 100 (height compensation) = 3,675 mm › Standard equipment as on page 125</p>	FD-MKEHTK-180-5300
 <p>Sampling (page 174) › With sampling tap NW 10 DIN 11851</p>	64949
 <p>Racking outlet (page 170) › With mounted flap valve Gr. 37</p>	KA-120I
 <p>Fill level (page 175) › Mounted fill level indicator NW 10, without scale</p>	FS-130I
 <p>Juice total outlet/-filling (page 170) › With ball valve NW 65 DIN 11851</p>	65159
 <p>Temperature measurement (page 177) › Bi-metal dial thermometer ø 100mm, measuring range -20°C to +60°C › Screwed sleeve for thermometer length = 125mm</p>	TM-140C
 <p>2 juice extractor sieves with large surface (page 190) › Easily removable › With juice extraction at tank shell NW 50 DIN 11851 › Ball valve NW 50 DIN 11851</p>	ESS-2 65158
 <p>Juice pumpover (page 185) › Stainless steel pipeline NW 50 DIN 11851 with self-rotating sprinkling system with connection thread connection NW 50 DIN 11851 › Ball valve NW 50 DIN 11851</p>	ÜF-1 65158
 <p>Adjustable feet (page 183) › With adjustable feet for tank legs (H=+approx. 100mm)</p>	46128

DIMENSIONS RED WINE MASH FERMENTATION TANK WITH OAK SHELL FD-MKEH



Capacity	Mash fill quantity	ø-top	ø-bottom	h	H	D1	Order No.
litres	%	mm	mm	mm	mm	mm	
3,000	80	1,500	1,706	2,670	3,010	3,100	FD-MKEHTK-160- 3000
5,300	80	1,700	1,906	3,204	3,575	3,665	FD-MKEHTK-180- 5300
6,100	80	1,900	2,106	3,250	3,625	3,725	FD-MKEHTK-200- 6100

