

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 FOR RED WINE MASH PLUNGER FD-MT

TANK TOP

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

TANK SHELL

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

TANK BOTTOM

- › Up to tank- \varnothing of 2,000 mm made of AISI 304 stainless steel, surface IIIId (2R), marbled outside
- › From tank- \varnothing of 2,200 mm upwards made of AISI 304 stainless steel, surface IIIId (2R) / IIIc (2B)
- › Free standing on welded 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 thermometer \varnothing 100 mm, measurement range - 20 °C to +60 °C

SAMPLING

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

RACKING OUTLET

- › Reinforced 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 IMMERSION SYSTEM

- › Electronic control system (stainless steel control cabinet, by default located on the right), Connection 220 V, 50 Hz, IP 44
- › 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 FOR 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 unit: Parker G 1/2" Order No. 90476 (see accessories page 194)

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 FOR RED WINE MASH PLUNGER FD-MT

FD-MTTK: MASH BOTTOM OUTLET AND HINGED DOOR

- › Mash 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-MTAK: AUTOMATIC MASH RELEASE AND HINGED DOOR

- › Mash 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 IIIc (2B)











FD-MTTS: MASH BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

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

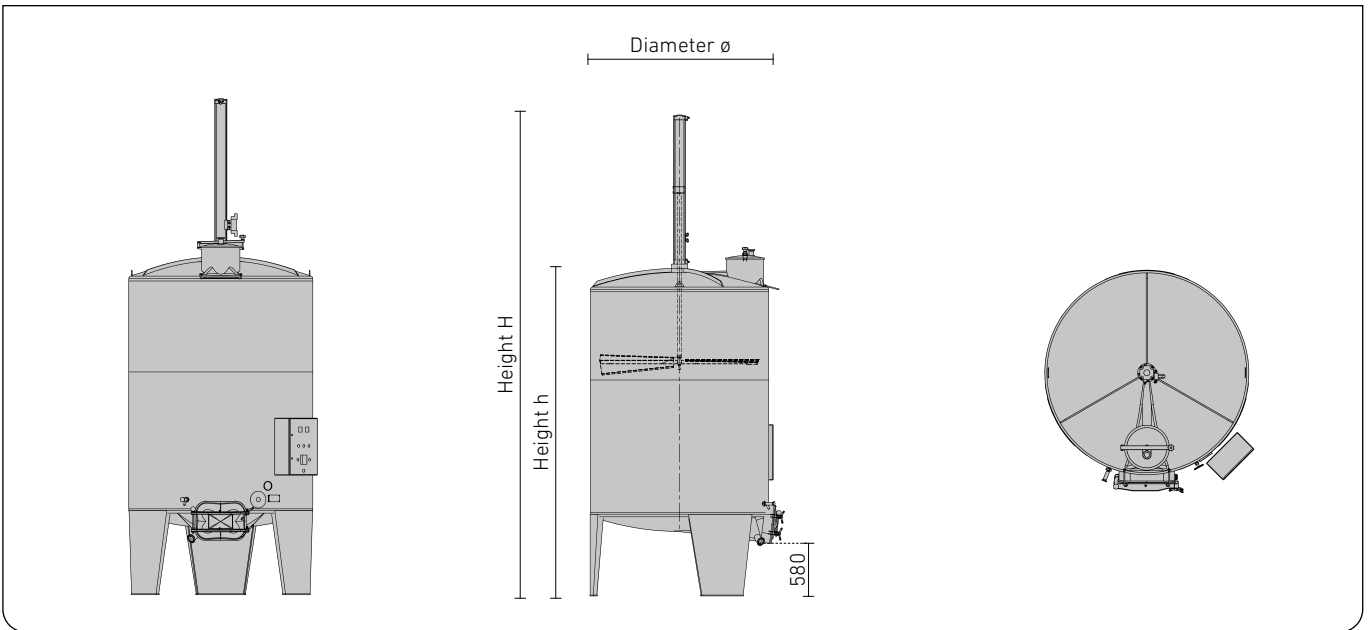
FD-MTAS: AUTOMATIC MASH RELEASE AND SLIDE FEED PROPORTIONING

- › 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 IIIc (2B)

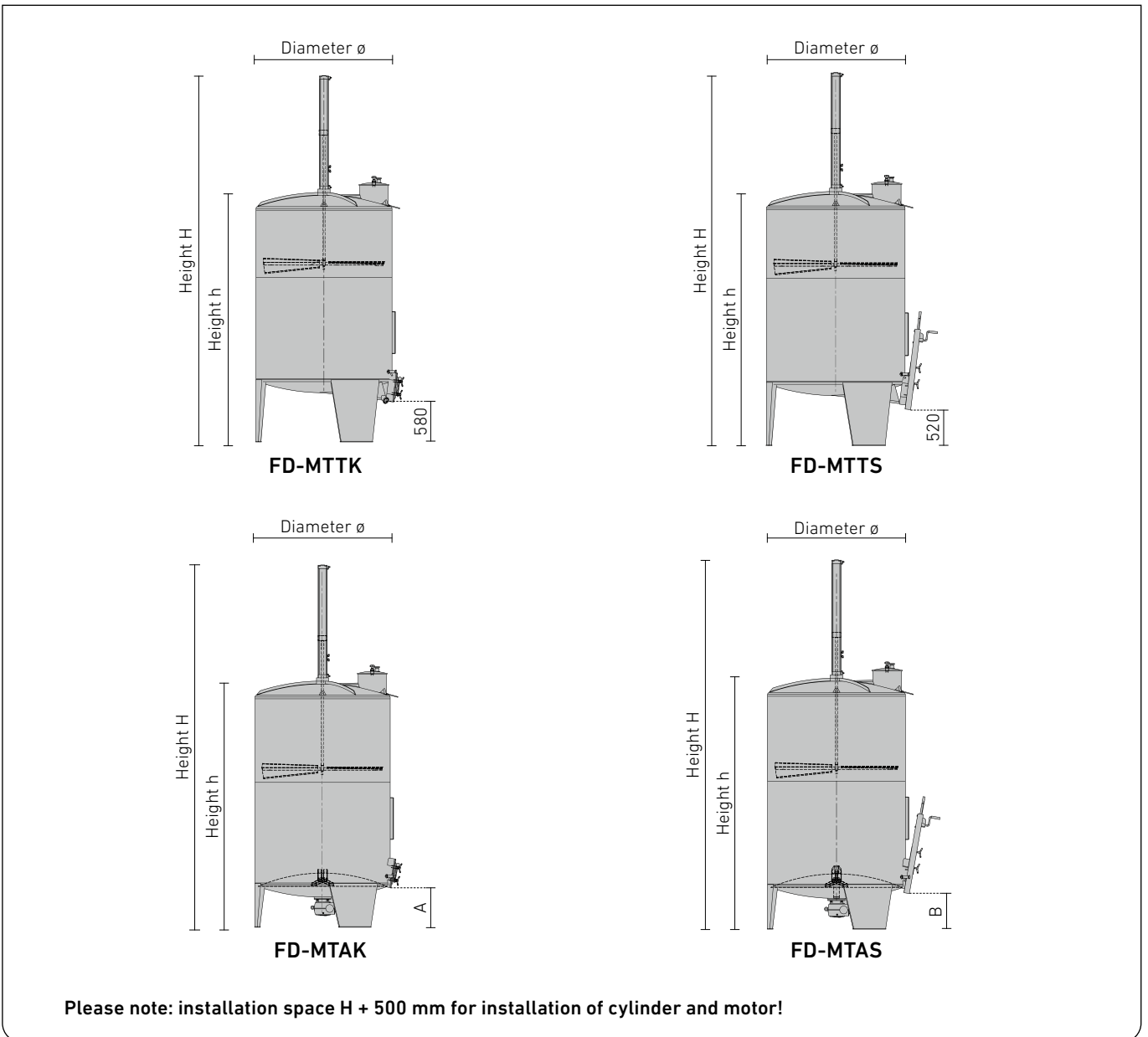
SET-UP EXAMPLE FOR RED WINE MASH PLUNGER FD-MTTK

Item	Order No.
	<p>Red wine mash plunger with Bottom outlet and hinged door FD-MTTK-240-11200</p> <p>› h = 3,570 mm, H = 5,330 mm, $H_{ges} = 5,330 \text{ mm (H)} + \text{approx. } 100 \text{ mm (height compensation)} = \text{approx. } 5,430 \text{ mm}$ › Standard equipment as on page 83</p>
	<p>Racking outlet (page 175)</p> <p>› Welded gland with thread NW 50 › With ball valve NW 50 DIN 11851</p>
	<p>Fill level (page 180)</p> <p>› Fill level indicator NW 20 mounted</p>
	<p>Juice total outlet / -filling (page 175)</p> <p>› With ball valve NW 65 DIN 11851</p>
	<p>Heating and cooling jacket (page 130)</p> <p>› Double jacket B6 7,4 m² with welded gland thread G 1" for the connection to available warm water / cold water sources › Version 1, layout 63, connection position B6</p>
	<p>Automatic temperature control with target indicator and actual indicator (page 192)</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>Juice pumpover (page 189)</p> <p>› 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</p>
	<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>
	<p>Adjustable feet (page 186)</p> <p>› With adjustable feet for tank legs (H = + approx. 100 mm)</p>
	<p>Maintenance unit mash plunger (page 194)</p> <p>› Parker G 1/2"</p>

DIMENSIONS OF RED WINE MASH PLUNGER FD-MTTK



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



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

RED WINE MASH PLUNGER FD-MTTK BOTTOM OUTLET AND HINGED DOOR
RED WINE MASH PLUNGER FD-MTTS BOTTOM OUTLET AND SLIDE FEED PROPORTIONING

Capacity	Mash fill quantity	Immersion depth	∅	h	H	Legs	Order No.	
							MTTK	MTTS
litres	% max./min.	mm	mm	mm	mm	pieces		
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 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.	
								MTAK	MTAS
litres	% max./min.	mm	mm	mm	mm	pieces			
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

