# **SOLOMIX 1**



# SOLOMIX 1

Mixer feeder wagons model 500 - 1400



## Trioliet feeding technology | since 1950



## Feeding with perfect precision

Trioliet was established by the three Liet brothers in 1950. This family business specialises in the development, production and delivery of mechanised and automated customised solutions for the feeding of ruminant livestock. Sustainability and efficiency are important objectives for modern and professional dairy and beef farmers. The latest technological innovations are used in the development of the machines. Trioliet has various patents in its name, which not only make the machines unique, but also extremely efficient and user friendly. Feeding with perfect precision is the rationale we base everything on and this fits in with the wishes and needs of modern livestock breeders and contractors.

www.trioliet.com



# Over 65 years of innovation







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#### Solomix 1



# Compact, but spectacular in performance

The Solomix 1 is a compactly constructed mixer feeder wagon and can be delivered with a capacity from 5 up to 14 m³/180-500 cu.ft. For both large and small livestock breeders and for every specific situation Trioliet has the appropriate mixer feeder wagon. The Solomix 1 can be made to measure, if desired. Its specific characteristics and high quality make the mixer feeder wagon unique, efficient and very easy to work with.



The Trioform auger knives are mounted at horizontal position on the auger flighting. This ensures an optimum cutting performance with less resistance in the feed (fuel saving). The patented Trioform auger knives are self-sharpening and the special shape lead up to a higher strength and long life.

#### Solomix 1



#### It's all about the mix

The mixing auger and the mixing tub have been well developed through technically. The mixing tub is provided with robust walls which are highly wear-resistant. The special **wear ring** ensures greater stability and resistance to wear at the bottom of the mixing tub, where the pressure on the tub wall is the greatest. The unique 'Twin stream' auger has two symmetrical dispenser arms, which ensure that the feed is discharged quickly and evenly. Even small mixtures are mixed quickly and accurately because of this.



## Precision requires advanced instruments

Healthy livestock demands the best feed available. Apart from this, accurate and proper feeding saves costs and is less stressful on the environment. An indispensable option on every Solomix 1 mixer feeder wagon is the 'Triotronic' electronic weighing system. This is a standard fitting with three robust weighing bars, which ensure maximum stability. At every weighing bar two measurements are taken. The average value calculated ensures optimum precision. The stable produced weighing bars are insensitive to peak loads while moving. The digital weight indicator is well protected by its shockproof, watertight housing.

# Optimum discharge



# Trioliet Feed Management system for efficient feeding

The Solomix's weighing equipment can be extended with the advanced Trioliet feed management program 'TFM Tracker'. With this system, rations can be programmed, optimised and controlled - an optimum system enabling very exact feeding.





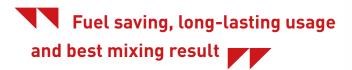


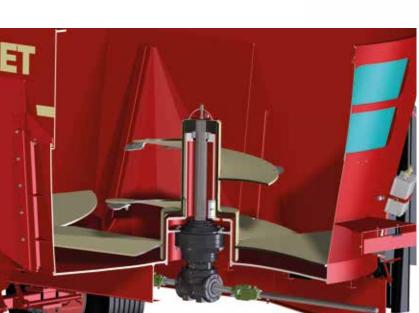
## The perfect solution for any farm situation

The Solomix 1 is available in different options. The front unloader is available from 7 to  $14 \, \text{m}^3 / 250 - 500$ cu.ft. in three different discharge options. For the discharge, there is a choice of various possibilities: a synthetic conveyor belt, a conveyor chain, a curved conveyor chain or side discharge doors. Side discharge is an excellent choice for any standard situation. The machine with side discharge is also available as Solomix P1, fitted with a straw blower to distribute straw in deep litter stables and in cubicles. For any situation, such as low temperatures, small or wide feed alleys, or feeding troughs, an appropriate choice can be made.

#### Unique features Solomix 1

and a long life.







- Unique mixing tub for a perfect mix | The shape and the dimensions of the mixing tub and mixing auger match optimally. This ensures a perfect, homogenous mix and a maximum filling rate.
- 2 Wide observation window for perfect view at the mixing process | Not for all models.
- Unique 3-point weighing system | Three heavy duty weigh bars provide maximum stability. Every weigh bar has double sided strain gauges for maximum accuracy. The weight indicator is placed in an rugged indicator case of high-impact durable matertial.
- Unique bearing construction | The auger bearings include a large maintenance-free conical roller bearing at the top and a sinter sleeve bearing at the bottom. This bearing construction will absorb all axial and radial auger forces. The large bearing distance ensures maximum stability
- Integrated chassis for long life time | All Trioliet mixer feeders have a very stable auger construction, supported on the chassis. As a result all forces on the mixing auger are directly absorbed by the chassis.





- Trioform auger knives: less resistance, less fuel | The patented shape of the auger knives reduces the resistance. Because of this, fuel is saved. The Trioform auger knives are also self-sharpening and the special shape lead up to a higher strength and long life.
- Stronger and hard-wearing auger through overlapping welding.
- Twin Stream auger | The optimum auger shape of the Twin Stream auger guarantees a quick and homogeneous mixing action at a low power requirement (low diesel consumption). No wasted space and higher capacity of cubic metre age because of slim auger body. Even and quick discharge caused by the two symmetrical dispenser arms. This even applies to small mixtures.
- **☑** Trioliet wear ring for stability and long life time | The special Trioliet wear ring ensures a long life of the mixing tub.
- **Special Troiliet tires** | Sturdy Trioliet tires underneath the mixer feeder wagon ensure a low machine height. These mixer feeders are very suitable for skid loader and fit in low barns.
- Rubber hay ring | The flexible solution for high dry matter and long material.

#### Solomix P1



# Optimum straw bedding with the compact Solomix P1 The Solomix P1 is a side discharge mixer feeder equipped with a straw blower for distributing straw in deep litter houses and cubicles. The powerful straw blower can spread straw up to a depth of 25 metres / 82'. For an optimum view of the spreading process, the mechanically powered straw blower is situated on the front of the machine. The machine is equipped with an electric remote control as standard, meaning that all of the machine's functions can be easily operated from the

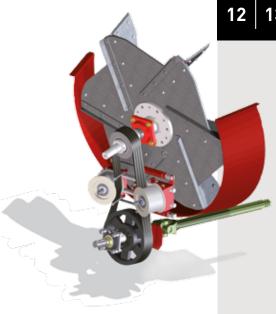
tractor cab. To reduce dust emissions, a spray system

is available as an option.



## Simple and reliable drive

The straw blower is equipped with a mechanically powered turbine. The turbine is located at an angle directly on the mixer cart without the intervention of additional components or a gear box. This therefore allows for a compact method of construction. The turbine is extremely efficiently powered via several drive belts (after work is finished, the turbine can slow down and come to a standstill on its own without having to place any extra strain on the drive train). The blow/ejection wheel is fitted with detachable blades in order to make maintenance simple. The discharge opening of the blowing pipe is hydraulically operated in terms of both its height and width, so that straw can be spread in every desired area of the stable.



#### Solomix 1



# The standard model is complete

All Solomix 1 mixer feeder wagons are fitted with 1 mixing auger, long-lasting auger bearings and a stable auger base, which is supported by a solid chassis. The shape and the dimensions of the mixing tub and mixing auger match optimally. This ensures a perfect, homogenous mix and a maximum filling rate. The Solomix 1 series can be delivered in various discharge options at the front, side or rear of the machine.





Discharge units

**VLH** = Front discharge

**B** = Conveyor belt

**K** = Conveyor chain

**C** = Curved conveyor chain

**ZK** = Side discharge doors

**P** = Straw blower/bedder

If desired, any VLH type can be fitted as an option with a side shift, whereby the entire discharge unit can be pushed into a sideways direction.

# Accessories



< Dust control Solomix P1



< Magnet kit with hanging magnets



< Reduction gearbox



< Adjustable chain conveyor



< Cross conveyor belt at the rear (ALH-B)



< Rubber hay ring



Electric operation

< Chain conveyor with side-shift

# Solomix 1 | 800 - 1400 | VLH - B



#### Standard features

- 1 Twin Stream auger
- Wide-angle PTO shaft
- Control by bowden cable
- With hydraulic brakes
- Adjustable and reversible drawbar
- Cross conveyor belt at the front (VLH-B)
- 2 restrictor blades
- Two wide single wheels
- Wear ring
- Trioform auger knives

MODEL	800 VLH-B	1000 VLH-B	1000L VLH-B	1200 VLH-B	1400 VLH-B	
Discharge	Cross conveyor belt at front					
Capacity	m³/cu.ft.	8/280	10/350	10/350	12/430	14/500
Overall length	m/Inch	4,74/187"	4,82/190"	4,99/196"	4,87/192"	5,16/203"
Overall width	m/Inch	2,30/91"	2,30/91"	2,45/96"	2,46/97"	2,45/96"
Overall height	m/Inch	2,50/98"	2,78/109"	2,49/98"	2,94/116"	3,02/119"
Track width	m/Inch	1,91/75"	1,91/75"	2,11/83"	1,91/75"	2,11/83"
Length cross conveyor belt	m/Inch	2,29/90"	2,29/90"	2,44/96"	2,29/90"	2,44/96"
Discharge height*	m/Inch	0,75/30"	0,74/30"	0,74/30"	0,74/30"	0,74/30"
Height bottom of belt	m/Inch	0,53/21"	0,53/21"	0,53/21"	0,53/21"	0,53/21"
Width of cross conv. belt	m/Inch	0,60/30"	0,60/30"	0,60/30"	0,60/30"	0,60/30"
Net weight	kg/Lbs	3.540/7,800	3.740/8,250	3.450/7,610	4.050/8,930	4.540/10,010
Maximum load	kg/Lbs	3.500/7,720	4.000/8,820	4.500/9,920	4.500/9,920	5.000/11,020
Number of auger knife posi	tions	8	9	9	10	12
Number of knives mounted p	5	6	6	7	9	
PTO Drive	•	540	540	540	540	540
Power requirement PTO	HP (kW)	66 (48)	68 (50)	75 (55)	75 (55)	82 (60)
Tires (2x)		400/45 L17.5	)	-	400/45	5 L17.5
Required hydraulic capaci	ity	20 l/min. 170 bar/ 5 gallons/min., 2,500 psi				

<sup>\*</sup> Top side of belt

Required tractor hydraulics

Solomix 1 | 800 - 1400 | VLH - K



MODEL

#### Standard features

- 1 Twin Stream auger
- Wide-angle PTO shaft
- Two wide single wheels
- With hydraulic brakes
- Trioform auger knives

800 VI H-K

- Adjustable and reversible drawbar
- 2 restrictor blades
- Flat chain conveyor at the front

1/00 VI H\_K

• Control by bowden cable

1200 VI H\_K

• Wear ring

1 single acting valve

10001 VI H\_K

MUDEL		800 VLH-K	1000 VLH-K	TUUUL VLH-K	1200 VLH-K	1400 VLH-K
Discharge		Chain conveyor at front				
	n³/cu.ft.	8/280	10/350	10/350	12/430	14/500
Overall length	m/Inch	4,74/187"	4,82/190"	4,99/196"	4,87/192"	5,16/203"
Overall width	m/Inch	2,30/91"	2,29/91"	2,44/96"	2,46/97"	2,44/96"
Overall height	m/Inch	2,50/98"	2,78/109"	2,49/98"	2,94/116"	3,01/119"
Track width	m/Inch	1,91/75"	1,91/75"	2,11/83"	1,91/75"	2,10/83"
Length chain conv.	m/Inch	2,30/91"	2,30/91"	2,44/96"	2,30/91"	2,44/96"
Discharge height*	m/Inch	0,74/30"	0,74/30"	0,74/30"	0,74/30"	0,75/30"
Height bottom of chain	m/Inch	0,53/21"	0,53/21"	0,53/21"	0,53/21"	0,53/21"
Width of cross chain conv.	m/Inch	0,60/30"	0,60/30"	0,60/30"	0,60/30"	0,60/30"
Net weight	kg/Lbs	3.540/7,800	3.740/8,250	3.450/7,610	4.050/8,930	4.540/10,010
Maximum load	kg/Lbs	3.500/7,720	4.000/8,820	4.500/9,920	4.500/9,920	5.000/11,020
Numb. of auger knife positions		8	9	9	10	12
Numb. of knives mounted per au	uger	5	6	6	7	9
PTO Drive		540	540	540	540	540
Power requirement PTO	HP (kW)	66 (48)	68 (50)	75 (55)	75 (55)	82 (60)
Tires (2x)		-		00/45 L17.5 —		
Required hydraulic capacity		20l/min. 170	bar/5 gallons/	min.,2,500 psi		

1000 VI H\_K

20l/min. 170 bar/5 gallons/min.,2,500 psi 1 single acting valve

Required tractor hydraulics
\* Top side of chain

## Solomix 1 | 800 - 1400 | VLH - C



#### Standard features

- 1 Twin Stream auger
- Wide-angle PTO shaft
- Control by bowden cable
- With hydraulic brakes
- Adjustable and reversible drawbar
- 2 restrictor blades
- Two wide single wheels
- Wear ring
- Trioform auger knives
- Curved cross chain conveyor at front L=2.30m/90" with side shift 35cm/14" RHS and 25 cm/10" LHS, discharge RHS and LHS (800 / 1000 / 1200)
- Curved cross chain conveyor at front L=2.54m/100" with side shift 35cm/14" RHS and 35 cm/14" LHS, discharge RHS and LHS (1000L / 1400)

MODEL		800 VLH-C	1000 VLH-C	1000L VLH-C	1200 VLH-C	1400 VLH-C
Discharge			Curved cr	oss chain conv	eyor at front	
Capacity m <sup>3</sup> / <sub>c</sub>	/cu.ft.	8/280	10/350	10/350	12/430	14/500
Overall length m,	/Inch	4,74/187"	4,82/190"	4,99/196"	4,87/192"	5,16/203"
Overall width m,	/Inch	2,30/91"	2,30/91"	2,54/100"	2,46/97"	2,54/100"
Overall height m,	/Inch	2,50/98"	2,87/109"	2,49/98"	2,94/116"	3,02/119"
Track width m,	/Inch	1,91/75"	1,91/75"	2,11/83"	1,91/75"	2,11/83"
Length cross conveyor m,	/Inch	2,30/91"	2,30/91"	2,54/100"	2,30/91"	2,54/100"
Discharge height (central position)* m	/Inch	0,99/39"	0,99/39"	1,06/42"	0,99/39"	1,06/42"
Discharge height (side shifted)* m	/Inch	1,21/48"	1,21/48"	1,30/52	1,21/48"	1,30/52
Height bottom of conveyor (central position) m	/Inch	0,82/32"	0,82/32"	0,89/35"	0,82/32"	0,89/35"
Height bottom of conveyor (side shifted) m	/Inch	1,04/32"	1,04/32"	1,13/35"	1,04/32"	1,13/35"
Width of cross conveyor belt m,	/Inch	0,60/30"	0,60/30"	0,60/30"	0,60/30"	0,60/30"
Net weight kg	g/Lbs	3.540/7,800	3.740/8,250	3.450/7,610	4.050/8,930	4.540/10,010
Maximum load kg	g/Lbs	3.500/7,720	4.000/8,820	4.500/9,920	4.500/9,920	5.000/11,020
Number of auger knife positions		8	9	9	10	12
Number of knives mounted per auger		5	6	6	7	9
PTO Drive		540	540	540	540	540
Power requirement PTO HP	(kW)	66 (48)	68 (50)	75 (55)	75 (55)	82 (60)
Tires (2x)		-		400/45 L17.5 -		
Required hydraulic capacity			20 l/min. 170	bar/ 5 gallons	/min., 2,500 ps	si

20 l/min. 170 bar/ 5 gallons/min., 2,500 psi 2 double acting valves

Required tractor hydraulics

#### Solomix 1 | 500 - 900 | ZK NEWEDITION



#### Standard features

- 1 Twin Stream vertical auger
- Two side discharge doors
- 2 large single wheels
- Directly operated by tractor hydraulics
- With hydraulic brakes (not for 500 ZK)
- Side doors with rounded edges for better discharge
- Manual adjustable discharge chutes (700 / 900)
- Flexible and spacious side door covers (700 / 900)
- One restrictor blade
- Wide-angle PTO shaft
- Drawbar for top connection
- Wear ring
- Trioform auger knives
- Rubber side door covers (500)

MODEL		500 ZK	700 ZK	900 ZK
Discharge		Two si	de discharge doors	
Capacity	m³/cu.ft.	5/180"	7/250"	9/320"
Overall length	m/Inch	4,23/167"	4,32/170"	4,43/174"
Overall width	m/Inch	2,18/86"	2,30/91"	2,30/91"
Overall height	m/Inch	2,15/85"	2,40/94"**	2,77/109"
Track width	m/Inch	1,78/70"	1,86/79"	1,86/79"
Discharge height*	m/Inch	0,81/32"	0,83/33"	0,82/32"
Width of discharge door	m/Inch	0,92/36"	0,92/36"	0,92/36"
Net weight	kg/Lbs	1.900/4,19.0	2.430/5,360	2.670/5,890
Maximum load	kg/Lbs	2.200/4,850	2.500/5,510	3.000/6,610
Number of auger knife positions		5	7	8
Number of knives mounted per auger		4	4	5
PTO Drive		540	540	540
Power requirement PTO	HP (kW)	55 (40)	55 (40)	60 (44)
Tires (2x)		∟10,0/75-15,3 18 PF	R340/55-16 -	
Required hydraulic capacity		20 l/min. ′	170 bar/ 5 gallons/min., 2,5	500 psi
Required tractor hydraulics			2 double acting valves	

 $<sup>^{*}</sup>$  Height of base of tub  $^{**}$  Warning: Side door will rise 35cm above the tub when completely opened

<sup>\*</sup> Top side of chain

## Solomix 1 | 800 - 1400 | ZK | NEW EDITION



#### Standard features

- 1 Twin Stream vertical auger
- Wide-angle PTO shaft
- 2 Side discharge doors
- With hydraulic brakes
- Manual adjustable discharge chutes
- Side doors with rounded edges for better discharge
- Flexible and spacious side door covers
- Directly operated by tractor hydraulics
- Models 1000L ZKL and 1200L ZKL with low machine height and axle behind the tub

• 2 Restrictor blades

Wear ring

• Two wide single wheels

• Trioform auger knives

• Adjustable and reversible drawbar

MODEL		800 ZK	1000 ZK	1000L ZK	1200 ZK	1200L ZK	1400 ZK	1000L ZKL	1200L ZKL
Discharge				Two sid	de discharge	doors			
Capacity	m³/cu.ft.	8/280	10/350	10/350	12/410	12/410	14/500	10/350	12/410
Overall length	m/Inch	4,52/178	4,61/181"	4,77/188"	4,68/184"	4,85/191"	4,93/194"	5,11/201"	5,16/204"
Overall width	m/Inch	2,47"/98"	2,46"/98"	2,70/106"	2,49"/98"	2,70/106"	2,70/106"	2,71/106"	2,71/106"
Overall height	m/Inch	2,50/98"**	2,78/109"	2,49/98"**	2,97/117"	2,77/109"	3,02/119"	2,18/86"	2,46/97"
Track width	m/Inch	1,91/75"	1,91/75"	2,11/83"	1,91/75"	2,11/83"	2,11/83"	2,11/83	2,11\83"
Discharge height*	m/Inch	0,82/32"	0,82/32"	0,82/32"	0,82/32"	0,82/32"	0,82/32"	0,53/21"	0,53/21"
Discharge height w. 90 cm chain ext	m/Inch	1,10 - 1,30	/ 43" - 51"						
Width of discharge door	m/Inch	0,92/36"	0,92/36"	0,92/36"	0,92/36"	0,92/36"	0,92/36"	0,92/36"	0,92/36"
Net weight	kg/Lbs	3.290/7,250	3.490/7,690	3.590/7,910	3.685/8,120	3.800/8,380	4.100/9,040	3.690/8,135	3.950/8,710
Maximum load	kg/Lbs	3.500/7,720	4.000/8,820	4.500/9,920	4.500/9,920	4.500/9,920	5.000/11.020	4.500/9,920	4.500/9,920
Number of auger knife positio	ns	8	9	9	9	10	12	9	10
Number of knives mounted per	auger	5	6	6	6	7	9	6	7
PTO Drive	-	540	540	540	540	540	540	540	540
Power requirement PTO	HP (kW)	66 (48)	68 (50)	75 (55)	75 (55)	82 (60)	82 (60)	75(55)	82(60)
Tires (2x)		-			400/45 L	17.5			

<sup>\*</sup> Height of base of tub \*\* Warning: side door will rise 27cm above the tub when completely opened (800 and 1000L)

#### Solomix P1 | 1000 - 1400 | ZK NEWEDITION



MODEL

Required hydraulic capacity Required tractor hydraulics

#### Standard features

- Mechanically driven (by V-belts) straw bedder at front
  - 15 25 m / 50'- 80' spreading width
  - Constant velocity PTO shaft
  - Two manual restrictor blades
  - Two wide single wheels
  - With hydraulic brakes

1000 ZK

- Manual adjustable discharge chutes
- 1 Twin Stream auger
- Adjustable and reversible drawbar
- Right, left or dual discharge
- Wear ring

20 l/min. 170 bar/ 5 gallons/min., 2,500 psi

2 double acting valves

- Trioform auger knives
- Electric operation

1400 ZK

• 2 side discharge doors with rounded edges for better discharge • Flexible and spacious side door covers

Discharge		Two side
Capacity	m³/cu.ft.	10/350
Overall length	m/Inch	5,00/197"
Overall width	m/Inch	2,47/98"
Overall height	m/Inch	2,78/109"
Track width	m/Inch	1,91/75"
Discharge height*	m/Inch	0,84/33"
Discharge height w. 90cm chain	ext. m/Inch	1,10 - 1,30 / 4
Width of discharge door	m/Inch	0,92/36"
Net weight	kg/Lbs	3.910/8,620
Maximum load	kg/Lbs	4.000/8,820
Number of auger knife positions		9
Number of knives mounted per a	auger	6
PTO Drive		540
Power requirement PTO	HP (kW)	71 (52)
Tires (2x)		-
Required hydraulic capacity		20 l/mi

Two side discharge doors + straw blower							
10/350	12/410	14/500					
5,00/197"	5,05/199"	5,32/209"					
2,47/98"	2,47/98"	2,70/106"					
2,78/109"	2,97/117"	3,02/119"					
1,91/75"	1,91/75"	2,11/83"					
0,84/33"	0,85/33"	0,85/33"					
1,10 - 1,30 / 43	" - 51"						
0,92/36"	0,92/36"	0,92/36"					
3.910/8,620	4.110/9,060	4.500/9,920					
4.000/8,820	4.500/9,920	4.500/9,920					
9	9	12					
6	6	9					
540	540	540					
71 (52)	75 (55)	82 (60)					
1	400/45 L17.5	5					

20 l/min. 170 bar/ 5 gallons/min., 2,500 psi 1 single acting valve

Required tractor hydraulics

<sup>\*</sup> Height of bottom of tub

# Trioliet feeding technology | since 1950

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