



Asphalt mixing plants 80-250 t/h

Cold Feed System

The **VIANOVA** cold batch plant can be supplied with silos holding 6 cbm, 10 cbm, 12 cbm aggregate.

The number of silos may be increased according to requirements. It allows for a smooth flow of sand to the feed belt.

The capacity of each silo is controlled from the regulator in the control cabin.



The advantages of the **VIANOVA** feed belt are:

- Steel lamina belt giving accurate batching, i.e. high stability
- Belt conveyor with variable motor speed control from the cabin
- Vibrating feeder with gate and variable vibration controlled from the cabin.

Type	No of bins	total volume
DR 0344	4	24
DF 122T	4	40
DF 144T	4	48
DF 248T	5	60
DF 268T	6	72



Drying and Heating

Drying Drum

The Vianova drying drum is fitted with spiral shovels to feed the aggregates to the fitters in the drying and heating zone. This ensures the correct flow of aggregate and optimum heat transfer.

The drum is supported by adjustable steel rollers which rotate on steel riding rings fitted at each end of the drum utilizing its 4 gear motors.



Burner AV

The self adjusting ASLI burner is designed specially for the drying drum. It requires no maintenance or lubrication. The burner chamber is made of heat resistant steel without the use of ceramics. A large fan ensures a correct amount of primary air.

- * Low wear friction drum drive operated by four geared motors.
- * Bolted drum flights enable a quick adoption of the heating efficiency to maximize heat transfer into the material and operation applications.
- * High thermal efficiency due to the perfect compatibility of the drum flights to the burner due to optimum insulation and sealing of the drum.

Burners

Type	FUEL RATE l/h	Capacity MW
AV 8	400	4,72
AV 10	650	7,68
AV 15	1000	11,80
AV 20	1600	18,90
AV 22	2000	23,60

Drying Drums

Type	Capacity t/h	Diameter mm	Length mm
DD 1206	40 -60	1200	6000
DD 1606	80 - 100	1600	6000
DD2009	120 - 150	2000	9000
DD 2610	150 - 200	2600	10000
DD 3010	200 - 250	3000	10000



Filtration

Characteristics

The Simatek Jet Filter, 4T series, has been developed to operate with dust explosion vents as stipulated in the German VDI 3673 guidelines.

The design of the filter housing and inlet zone secures a smooth flow of coarse particles as well as fine aerial dust particles in the filter.

The concept of combining the ideal filter unit with one of the five construction forms means that almost any task can be solved using standard modules.

Mode of Operation

The circular filter chamber contains a number of cylindrical filter bags mounted on support cages.

The dust laden air is led into the filter chamber while the fine dust deposits on the outside of the filter bag. The clean air is discharged through the outlet in the top section.

When an impulse of scavenging air is led into a filter bag, in a second the bag will be stretched out while air is penetrating from inside. The combined effect of the shake and reverse air flow efficiently cleans the filter bags. The separated dust settles at the bottom of the filter from which it can be discharged in different ways depending upon the amount of dust and type of plant.



The scavenging system

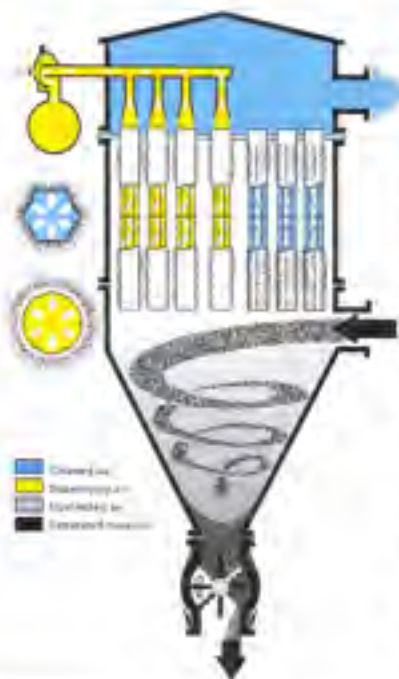
The filters scavenging system is operated by solenoid membrane valves mounted on the compressed air reservoir at the filter top.

The electronic control gives an impulse to one of the valves which will send a short but powerful compressed air blast into the filter bags. The control system will measure out a pause before the next valve is given a signal to clean. Both impulse and pause rates are adjustable to the actual working conditions and can be set by the operator.

Extended Control System

A mechanical differential gauge indicates the pressure drop across the filter bags.

The extended control DP is equipped with differential pressure transducer displaying the pressure drop by LEDs on the filter control board.



Screening , Weighing , Mixing

Screening

The totally enclosed screening section consists of a vibratory screens giving a total screening area 8 to 19sqm.

The screens divide the dried aggregate off-loaded from the hot elevator into the required fraction. A remote controlled gate enables the aggregate to bypass the screens directly into silo no.1.



Hot Bins

It holds up to six compartments with pneumatically operated discharge gates.

The standard capacity is 16 cbm. Larger capacities as well as additional compartments are optional.

The hot silo plant comes with 4 hoppers (standard) or 6 hoppers. Each with wear ribs to ensure long life and overflow pipes to prevent damage to the screen. The silos are individually emptied via pneumatically operated gates.



Aggregates Weighing Bin

The maximum accumulated weighing capacity is 3500 kg.



Mixer

A low speed mixer is meant for low wear and low power consumption. The **VIANOVA** mixer has a large volume and the design ensure complete and thorough mixing of all required recipes. The mixer has two shafts with replaceable paddles and arms manufactured of special wear resistant steel ensuring long life. The long mixing time ensures a uniform mix.



Screening , Weighing , Mixing

Weighing Systems

The weighing system consists of three individual scales with remote indication and control in the control cabin.

It has the highest possible accuracy due to electronic scales with modern load cells and with precise weighing with proportional gates.



Binder Scale

The binder scales capacity is 500 kgs. The scale feeds the bitumen into the mixer by means of gravity. The bottom of the scale container and the inlet and outlet valves are heated to ensure free flow of the bitumen.

Automation System and Control Cabin



Control Cabin

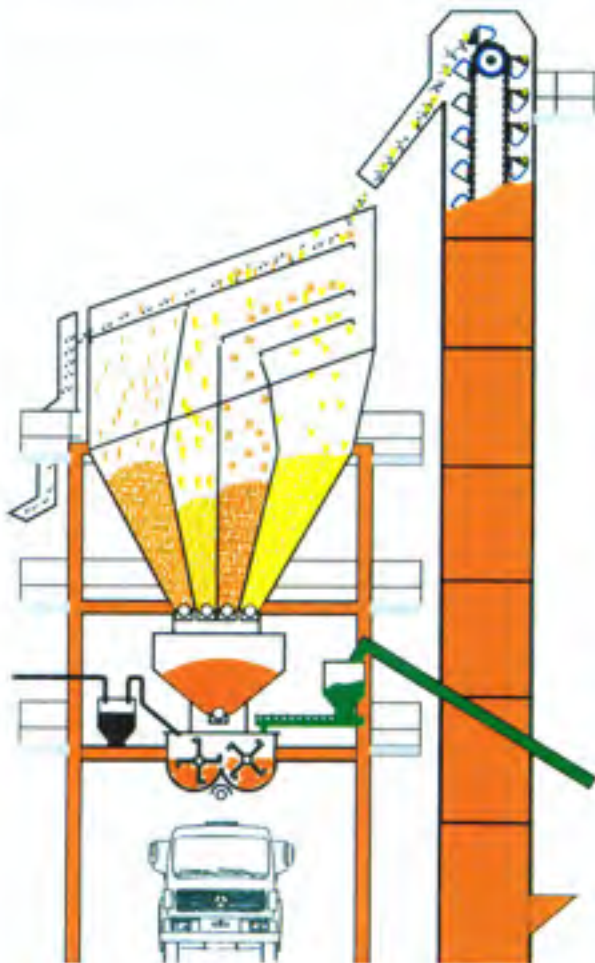
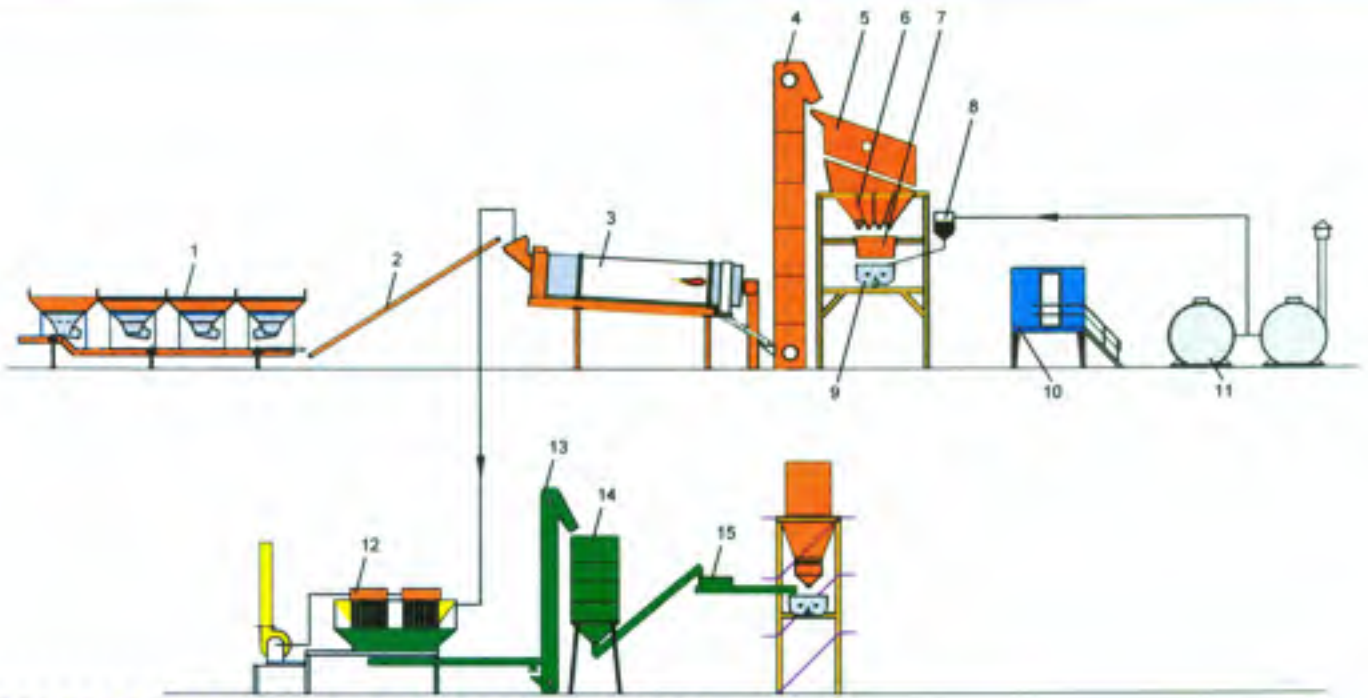
The Vianova control cabin is 15 sq. m. It is designed to hold the control and power panels. The cabin is manufactured of aluminum plates; the sandwich construction of the walls and roof provides a very effective insulation. The cabin has florescent lighting and may be fitted with air conditioning and/or heating panels.



All controls are built into a well arranged panel with signal lamps and start/stop indicators for each operation of the plant. Control systems are easily operated due to the simplistic layout of the panels with color indicators of the operation level and functions.



Material Flow



1- Cold feeders

2- Belt conveyor

3- Drying drum

4- Hot elevator

5- Screen

6- Hot bins storage

7- Aggregate weigh hopper

8- Bitumene weigher

9- Mixer

10- Control cabine

11- Bitumene tanks

12- Bag filter

13- Filler elevator

14- Filler silo

15- Filler weigher

		VD 1400	VD 1600	VD 2000	VD 2500	VD 3000
Denisty of rawmaterials	1.8					
Capacity	5% moisture 2% moisture	40 t/h 60 t/h	80 t/h 100t/h	120 t/h 150 t/h	150 t/h 200 t/h	200 t/h 250 t/h
Gold batching plant type	capacity	DR344 4x6 cbm	DF 122 T 4x10 cbm	DF 144 T 4x12 cbm	DF 248 T 5x12 cbm	DF 266 T 6x12 cbm
Belt Conveyor	width length	600 mm 12.5 m	650 mm 16 m	650 mm 20 m	800 mm 20 m	800 mm 20 m
Drying plant	type	DD 1206	DD 1606	DD 2009	DD 2610	DD 3010
Burner	type	AV 6	AV 10	AV 15	AV 20	AV 22
Cyclone plant	type	CY 15	CY 428	CY 640	CY 370	CY 370
Exhaust gas	volume	15,000 cbm	28,000 cbm	40,000 cbm	70,000 cbm	70,000 cbm
Hot elevator	type volume	- 60 t/h	HE 715 100 t/h	HE 720 150 t/h	HE 725 200 t/h	HE 725 250 t/h
Screening Section	type sq.m	SB 814 8 sq.m	SB 1234 12 sq. m	SB 1634 16 sq. m	SB 1944 19 sq. m	SB 1954 19 sq. m
Hot bins store	on cbm	4 total 3,5 cbm	4 total 12 cbm	4 total 16 cbm	5 total 16 cbm	5 total 16 cbm
Mixing section	type capacity	MW 14 800 kg.	MW 34 2200 kg.	MW 34 2700 kg.	MW 44 3400 kg	MW 54 3700 kg
Scales	stone bitumen filler	800 kg. 80 kg. 80 kg.	2500 kg. 300 kg. 300kg	2750 kg. 300 kg. 300kg.	3700 kg. 350 kg. 400kg	4500 kg. 300 kg. 500kg.
Control Cabin	type	CCT 10	CCT 12	CCT 12	CCT 14	CCT 14
Control board	type	600 TWS	600 TWS	600 TWS	6000 TERM	6000 TERM
Option						
Natural filler alt. 1		Via hot elevator into the mixer.				
Natural filler alt. 2		Via screw , buffer silo and separate filler elevator to filler scale.				
Natural filler alt. 3		Via screw and elevator to filler silo with screw filler scale.				
Foreign filler storage		1 x 30 cbm, 2 x 40 cbm, 2 x 50 cbm for pneumatic charging.				
Bag filter						
Exhaust gas	volume	15,000 cbm	28,000 cbm	40,000 cbm	70,000 cbm	70,000 cbm
Bitumen pump	capacity	15 t/h	15 t/h	18 t/h	30 t/h	30 t/h

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