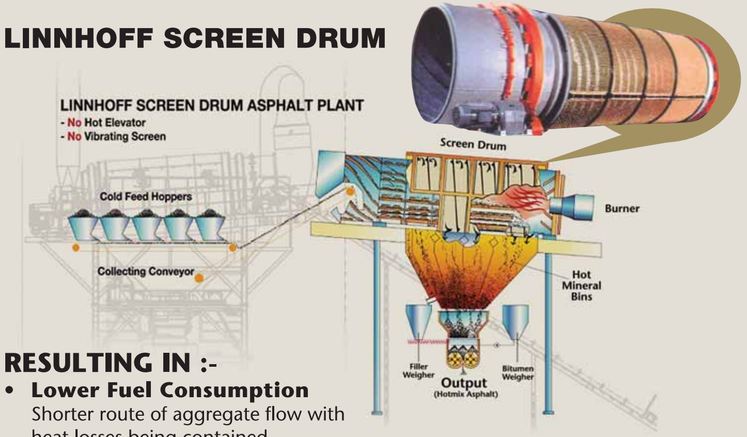
CONVENTIONAL ASPHALT PLANT VS LINNHOFF SCREEN DRUM

LINNHOFF SCREEN DRUM

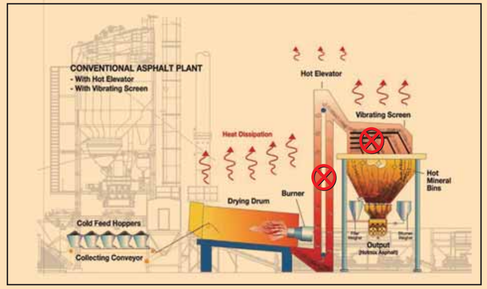


RESULTING IN :-

- **Lower Fuel Consumption**
  Shorter route of aggregate flow with heat losses being contained.
- **Lower Maintenance Cost**
  No need to change worn-off buckets, bearings, chain etc. as Hot Elevator is not required.

Hence, Lower Operating Cost with LINNHOFF SCREEN DRUM ASPHALT PLANT

CONVENTIONAL ASPHALT PLANT



RESULTING IN :-

- **Higher Fuel Consumption**
  Longer route of aggregate flow, with unnecessary heat dissipation from uninsulated dryer drum, Hot Elevator and Vibrating screens
- **Higher Maintenance Cost**
  Constant changing of worn-off buckets, bearings, chain, sprockets etc. of Hot Elevator.

Linnhoff system requires **NO HOT ELEVATOR** & **NO VIBRATING SCREEN**

Hence, Higher Operating Cost with Conventional Asphalt Plant

Other Plant Models


Containerized Asphalt Plant


Tower Asphalt Plant


Mobile Asphalt Plant


Base Stabilization Plant


Hot Recycling Plant

... Delivery made simple in just seven trucks!

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Authorized Distributor

Linnhoff/04/2010

DIN EN ISO 9001 : 2000

CompactMix Asphalt Plant

CompactMix Asphalt Plant

Designed with Portability for . . .

Easy Transportation

Quick Installation

Economical Operation

LINNHOFF TECHNOLOGIES

LINNHOFF CompactMix Asphalt Plant (Batch)

CompactMix Plant (CMX) with the latest design optimizes several innovative features. Having economical attributes to provide a facility of lowest cost production of Hotmix Asphalt without compromising its quality. CMX range of smaller plant capacities are premeditated for ultimate versatile operations.

TECHNICAL SPECIFICATIONS

MODEL	CMX 1000	CMX 1250	CMX 1500	CMX 2000		
CAPACITY*	***60-80 TPH***	***80-100 TPH***	***100-120 TPH***	***120-160 TPH***	***FEATURES***	***BENEFITS***
1. COLD FEED HOPPERS	VARIABLE SPEED BELT FEEDER					
No. of cold feed hoppers	3+1 (equipped with Vibrator)	3+1 (equipped with Vibrator)	3+1 (equipped with Vibrator)	3+1 (equipped with Vibrator)	Endless belt feeder	Maintenance free
Volume of each hopper	$6m^3$	$6m^3$	$6m^3$	$9m^3$	Shaft mounted gear motor	Less power consumption
Feeder belt capacity	40 TPH	50 TPH	60 TPH	80 TPH	Frequency invertor control	Better accuracy
Feeder belt drive motor	4 X 1.1 kw	4 X 1.1 kw	4 X 1.5 kw	4 X 1.5 kw		
2. COLLECTING BELT	ENDLESS BELT					
Capacity	80 TPH	100 TPH	120 TP	160 TPH	Endless belt	Maintenance free
Drive Motor	3 kw	4 kw	5.5 kw	5.5 kw	Shaft mounted gear motor	Less power consumption
3. THROW BELT	CLEATED BELT					
Capacity	80 TPH	100 TPH	120 TP	160 TPH	Endless belt (no elevator)	Maintenance free
Drive Motor	3 kw	4 kw	5.5 kw	9.2 kw	Shaft mounted gear motor	Less power consumption
4. DRYING & SCREENING DRUM	INCLINED SCREEN DRUM					
Drying Capacity	60 TPH	80 TPH	100 TPH	160 TPH	Rotary Screens	Less wear & tear
Drum (Dia. X Length)	1.4 X 6.3	1.7 X 6.3	1.7 X 6.3	1.8 X 8.5	(Non vibrating)	on screens
Drum drive motor	18.5 kw, chain drive	22 kw, chain drive	30 kw, chain drive	4 X 11 kw, friction drive		Better Heat Utilization
No. of Screen sections	5 sections (2 for sand)	5 sections (2 for sand)	5 sections (2 for sand)	5 sections (2 for sand)		
Total Screening area	$20m^2$	$25m^2$	$28m^2$	$46m^2$		
5. BURNER c/w Blower	FULLY ENCLOSED, HIGH PRESSURE					
Type of Fuel	Diesel/Heavy Fuel Oil/Gas **	Diesel/Heavy Fuel Oil/Gas **	Diesel/Heavy Fuel Oil/Gas **	Diesel/Heavy Fuel Oil/Gas **	High pressure burner	Less fuel consumption
Heat Output	3.9 MW	5.25 MW	7.25 MW	12 MW	Enclosed Type, Monobloc	Low noise level
6. HOT MINERAL BINS	4 COMPARTMENTS WITH OVERFLOW & OVERSIZE CHUTE					
Total Capacity	20 tons	20 tons	20 tons	20 tons	Generous Capacity	Sufficient material for
Discharge Flap	4 pneumatic actuator	4 pneumatic actuator	4 pneumatic actuator	4 pneumatic actuator		batching, Less plant
Compressor	750 LPM @ 7 bar & 5.5 kw	1000 LPM @ 7 bar & 7.5 kw	1000 LPM @ 7 bar & 7.5 kw	1250 LPM @ 7 bar & 11 kw		downtime & overflow
7. WEIGHER SYSTEM	LOADCELL, ELECTRONIC WEIGHING					
Aggregate weigher	1000 kg	1250 kg	1500 kg	2250 kg	2 stage mineral flap	Better closing accuracy
Capacity Discharge	2 x pneumatic actuated flap	2 x pneumatic actuated flap	2 x pneumatic actuated flap	2 x pneumatic actuated flap		Shorter cycle time
Filler weigher	100 kg	120 kg	150 kg	187.5 kg	Butterfly valve	No filler leakage
Capacity Discharge	2 x butterfly valve (Pneumatic)	2 x butterfly valve (Pneumatic)	2 x butterfly valve (Pneumatic)	2 x butterfly valve (Pneumatic)		
Bitumen weigher	100 kg	120 kg	150 kg	187.5 kg	Gravity Discharge	Less oxidation
Capacity Discharge	Gravity Flow	Gravity Flow	Gravity Flow	Gravity Flow		
8. MIXER	TWIN SHAFT SYNCHORNIZED SPUR GEAR					
Mixer Capacity	1000 kg	1250 kg	1500 kg	2500 kg	Larger paddles arms & tips	Shorter mixing time
Mixer Drive motor	2 x 15 kw	2 x 18.5 kw	2 x 22 kw	2 x 37 kw	(Ni-Hard Liners)	Homogeneous mix
9. POLLUTION CONTROL	A) BAGHOUSE FILTER **					
Filter area	$268\ m^2$	$321\ m^2$	$387\ m^2$	$528m^2$	Differential pressure, ambient air cleaning system	Lower fuel consumption
Exhaust fan drive motor	37 kw	45 kw	55 kw	75 kw	(no air compressor)	Longer bag service life
Damper	servo motor driven	servo motor driven	servo motor driven	servo motor driven	Aluminum cages	Maintenance free
Recuperated filler hopper	$9m^3$	$9m^3$	$9m^3$	$12m^3$		$<0.02\ g/m^3$ dust emission
Filler screw conveyor	1 x 4 kw	1 x 5.5 kw	1 x 5.5 kw	1 x 7.5 kw		
	B) MULTI-CYCLONE / WET SCRUBBER **					
Exhaust Fan Capacity	$25,500\ m^3/hr$	$29,000\ m^3/hr$	$32,500\ m^3/hr$	$51,500\ m^3/hr$	Composed of	Multi-cyclones has more
Exhaust Fan Drive Motor	37 kw	45 kw	55 kw	75 kw	several cyclones	seperation efficiency than single cyclone. $<0.2\ g/m^3$ dust emission
10. CONTROL ROOM	CENTRALIZED CONTROL & POWER PANEL					
Cabin Type	Container with glass windows at front & both sides insulated, dust proof & air conditoned				European made components & cable	Durable & no electromagnetic interference
Control	Pentium computer 19" monitor, printer, pre-loaded Widows Operating System, pre-loaded Linnhoff control software, keyboard micro series PLC, switch gear & control gear housed within power and control panels				Soft starter	Lower power consumption
11. HOT STORAGE SILO **	1 / 2 / 4 COMPARTMENTS, RECTANGULAR SECTION					
Silo Capacity	20 / 80 / 150 tons	20 / 80 / 150 tons	20 / 80 / 150 tons	20 / 80 / 150 tons	Mineral wool insulation	Longer storage time
Winch drive system	1 x 18.5 kw motor	1 x 22 kw motor	1 x 30 kw motor	2 x 22 kw motor	Special bucket discharge	Minimise segregation
Heat preservation	Fully insulated silo and electrically heated dicharge cones					
Mix discharge	Pneumatic actuated discharge gate					
12. STEEL FOUNDATION **						
Rapid Set-Up Steel Foundation	One set of steel foundation				Reusable Steel Foundation	No concrete & heavy foundation required, ensures quick & easy setup.

* As per standard performance conditions.
** Optional item
Note: Rights for improvement and alteration to specifications above reserved.

** *Optional*

CMX PLANT'S MAIN COMPONENTS

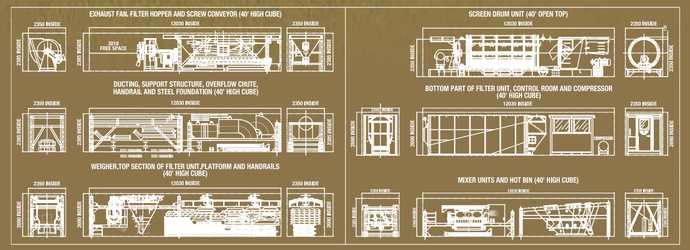
COMPACT DESIGN

Compact design coupled with high performance. Linnhoff's modular plant does not require Hot Elevator and Vibrating Screens. Thus area for plant lay-out is also reduced. Linnhoff Screen Drum concept utilizes dual functions of drying and screening of aggregates ensuring very short route of aggregate flow to the hot bins. Screen Drum concept minimizes utilization of moveable parts by lowering maintenance cost. So, Lower Fuel Consumption and Lower Maintenance Cost result in Lower Operating Cost. Plant users appreciate Linnhoff's plant competitive investment with Lower Operating Cost.

CUSTOM-FIT TO CONTAINERS

Each plant module are shippable via sea containers. This shipment method achieves lowest sea freight cost and fast land transportation. Shipment with container vessels are more frequent as compared to bulk cargo. Each module fits well into containers and carted out easily at site.

CMX SHIPMENT



RAPID SET-UP STEEL FOUNDATION ** AND PLUG & PLAY

Foundation of the plant ensures solid stability over the compacted ground. No concrete or heavy foundation required. This facilitates quick set-up, optimizing time and performance hence reducing costs. This optional, reusable Rapid Set-Up Steel Foundation ensures fast installation at site as well as minimizing civil works construction. This method speeds up the assembly and re-assembly of plant set-up. All motors and electrical components come pre-wired from the factory, all connections are plug-in type.

QUICK INSTALLATION

Linnhoff's modular design allows the plant to be easily transportable, elementary in set-up with its pre-assemble stackable units ; making the plant's assembly fast and easy. Its specific configuration having mechanism to compliment the installation at site with crane, module by module until the plant finally erected. Modularity made simple!

Modular Structure

Module by module installation