



Quality Construction Equipment



## **DRUM MIX PLANT**

*DMX Series 30 - 150 tph*



**TUV NORD**  
★ Star Export House



*With years of experience in asphalt mixing, strategic technology tie-ups and an installed base of over 1500 plants, Apollo has mastered the continuous Asphalt Mixing Technology. The world over, Drum Mix Plants from Apollo have produced millions of tons of quality asphalt, in the bargain generating a high level of customer satisfaction. Apollo plants are renowned for quality of mix, lower operating costs, productivity, efficiency and high uptime.*

#### **THERMODRUM UNIT**

The Drying and Mixing unit of the asphalt plant demands complex flight design and heat transfer technology. With its continuous R & D and incorporation of the latest design up-gradations, Apollo thermodrum is miles ahead of competition. The Apollo thermodrum unit follows a triple heat transfer system that ensures a total transfer of heat to the aggregates, translating into higher productivity and lower fuel consumption. The heat is transferred to the aggregates using the conductive, convective and radiation techniques. The unique flight design ensures total heat transfer, a thorough mixing & coating, lower emissions and prevention of bitumen oxidation.



## **DRUM MIX PLANT**

DMX Series 30 - 150 tph

#### **DRUM MECHANICS**

The 30 -90 Tph plants are supplied with a low maintenance cradle type drum drive. The auto lubrication system ensures proper and adequate lubrication on the chain drive thereby ensuring long years of trouble free service. Optionally a four wheel friction drive, which is a standard on the 90 tph and higher models, can be supplied.

Specially treated sprockets, thrust wheels, trunion rings and trunion rollers, engineered precisely for flawless and trouble free dryer drum rotation, ensures unlimited productivity.

#### **BURNER**

The high pressure atomized, fully automatic remotely controlled burner unit has already gained an enviable reputation for its fuel efficiency, ease of operation and high uptime. Completely automatic process controls with system interlocks ensure conformance to high safety standards.

#### **COLD AGGREGATES BIN FEEDERS**

Over 40 + years of experience and an installed base of over 2000 units mean design expertise for top performance even under the toughest of operating conditions.

The bins are all-welded and modular in construction, permitting easy addition of bins to meet growing needs. Steep bin walls and valley angles allow free flow of aggregates from the feeders minimizing hold up of materials in the corners and bridging with sticky aggregates.

The bins supplied with adjustable calibrated gate openings and variable speed feeder drives, together offer total proportional control, greater flexibility and accuracy of operations.





## CONTROLS

Fully computerized control cabin (AC optional) with on board electrical power control console, distribution switch board, fully automatic process and sequence controls are a standard on all Apollo DM series plants.

A user friendly software gives you total reliability and ensures top notch performance.

- Fail proof power interlocks and auto process controls
- Online fault detection
- Online printing facility
- Provisions to print, store and edit production details, mix proportions, etc.
- Display of all process control parameters
- Auto / manual operation

The control is equipped with function keys and numeric keys and does not require special skills for operation.



## POLLUTION CONTROL DEVICES (OPTIONAL)

### "Freedom" Bag house Filter unit

Freedom is a state-of-the-art free air flow type bag house filter unit with specially treated meta aramid filter elements designed specifically for asphalt application. This zero maintenance design keeps emissions at less than 50 mg/Nm<sup>3</sup>, which meets International pollution control norms.

### CV Series - Wet dust collectors

CV Series is a venturi type high efficiency wet dust collector that maintains the required environmental standards in specified areas. The extreme turbulence type venturi design ensures a very good entrapping of the dust laden exhaust gas.

Large stainless steel spray nozzles provide a clog free operation and assure minimum water make-up requirements. The adjustable venturi throat permits "fine tuning" to get optimum cleaning efficiency to meet specific plant operating requirements.

## CONTINUOUS ELECTRONIC BELT WEIGHING SYSTEM

The State-of-the-Art SCADA system processes and meters the mix proportioning. The feedback from the Load cell is processed by the PLC, which further automatically controls and processes the bitumen and filler proportioning.

## BITUMEN INJECTION

A high capacity hot oil jacketed gear type pump, controlled by an AC variable speed drive feeds the metered amount of bitumen into the mixing section of the Thermodrum unit. The fully automatic SCADA / PLC control ensures a precise metering of bitumen.

## FILLER STORAGE UNIT

Apollo offers a wide range (1.5-50 tons) of filler storage and feeding solutions for the customers to choose from, depending on the site requirements. A variable speed computerized synchronized metering system ensures the right proportioning in the mix.

## HOT MIX SILO

Apollo offers a complete range of customized solutions for asphalt storage. The standard range includes MONOPAK and TWINPAK systems. MONOPAK silos are available with storage capacities from 10 to 80 Tons. The TWINPAK silos are available with storage capacities ranging from 50 to 80 Tons with an additional feature of storing different mix designs. Various storage combinations can be availed by opting for customized MULTIPAK designs. The silos are supplied with automated standard safety controls and process interlocks. The storage silos can be supplied with skip hoist arrangement, hot bucket elevators or swivelling loadout conveyors.

## BITUMEN HEATING & STORAGE SOLUTIONS

With Apollo, customers can opt for a direct heating type or hot oil heated bitumen storage tanks. Storage capacities range from 15 - 50 tons.

The indirect heating tanks are supplied with a Japanese design thermic oil heater.

The Direct heating tanks are supplied with automatic imported pressure jet burner.

As a standard, all Apollo tanks are supplied with auto thermostatic controls and level indicators.



## TECHNICAL SPECIFICATIONS

	Plant Model		DMX 45	DMX 50	DMX 60	DMX 65
	Rated Output@3% Moisture Content	tph	60	90	120	150
Units						
Feeder	No. of Bins*/ Total Capacity	nos / m³	4 / 25	4 / 25	4 / 25	4 / 32
	Charging Width	m	3.05	3.05	3.05	3.66
	Aux Conveyor Motor	kW	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.2
	Gath Conveyor Belt ( W x L )	mm	600 x 25600	600 x 25600	600 x 25600	600 x 29600
	Gath Conveyor Motor	kW	3.7	3.7	3.7	5.5
	Bin Vibrator	kW	0.18	0.18	0.18	0.18
Over Size Removal Screen	Feeding Capacity	tph	110	140	180	200
	Screening Method		Inclined Circular Vibration	Inclined Circular Vibration	Inclined Circular Vibration	Inclined Circular Vibration
	Mesh Size	mm x mm	45 x 45	45 x 45	45 x 45	45 x 45
Slinger Conveyor	Drive Motor	kW	2.2	2.2	2.2	2.2
	Belt ( W x L )	mm	500 x 15025	500 x 15025	500 x 20400	500 x 20400
Thermo Drum	Motor	kW	3.7	3.7	5.5	5.5
	Dryer ( L x D )	mtrs	6.7 x 1.5	7.3 x 1.8	7.9 x 1.8	7.9 x 1.8
	Drive Type*		Cradle Type Chain Drive	Cradle Type Chain Drive	4W Friction Drive	4W Friction Drive
	Drive Motor	kW	18.5	30	4 x 7.5	4 x 11
	Burner Capacity	lph / MW	450 / 5.5	770 / 9.5	1140 / 14	1140 / 14
	High Pressure Burner		Fully Automatic Dual Stage		Fully Automatic Modulating	
	Blower Connected Load	kW	15	15	18.5	18.5
	Exhauster	cfm / kW	14500 / 18.5	16500 / 30	with CV unit	with CV unit
Load Out Conveyor with Gob Hopper	Belt ( W x L )	mm	600 x 17900	600 x 20300	600 x 20300	600 x 20300
	Drive Motor	kW	5.5	5.5	5.5	5.5
	Gob Hopper Capacity	MT	1.5	2.0	2.0	2.0
Bitumen Injection Pump	Power Pack	kW	3.7	3.7	3.7	3.7
	Bitumen Pump Capacity	lpm	90	115	200	250
	Type		Hot Oil Jacketed Gear Type			
	Drive		Variable Speed AC Drive			
Pollution Control Unit						
Primary Multicone	Nos. of Cone		15	21	21	21
Dry Dust Collector	Dust Screw Drive	kW	1.1	1.1	1.1	1.1
Secondary Units (Optional)						
Wet Dust Collector CV Series	Type		Ventury Type	Ventury Type	Ventury Type	Ventury Type
	Dust Emission	mg / Nm³	<150	<150	<150	<150
	Water Pump	kW	3.7	3.7	5.5	7.5
	Exhauster	cfm / kW	15500 / 22	17500 / 37	21000 / 45	21000 / 45
Bag House Filter	Type		–	–	Reverse Air flow*	Reverse Air flow*
	Dust Emission	mg / Nm³	–	–	<50	<50
	Filter Area	m²	–	–	330	330
	Exhauster	cfm / kW	–	–	28250 / 90	28250 / 90

\* Options available

### Accessories

Filler Silo	Capacity Range	m <sup>3</sup>	1.5 / 3/7 / 11 / 18 / 28
Bitumen Tanks	Capacity Range	m <sup>3</sup>	15 / 25 / 30 / 50
Thermic Oil Heater	Heating System		Direct heating / Thermic oil heating
	Type		Normal pressure horizontal tubular boiler
Hot Mix Storage Silo	Hot Oil Heater Capacity	kcal / hr	500000
	Monopak Series	m <sup>3</sup>	15 / 31 / 50
	Twinpak Series	m <sup>3</sup>	15 x 2 / 18.5 x 2
	Multipak Series	m <sup>3</sup>	15 x 3 / 18.5 x 3

Offer for Capacities below 60 tph and above 150 tph on request.

With Apollo's policy of constant upgradation of products, specifications are subject to change without prior notice. Accessories shown are optional and not a part of standard supply.



India | Algeria | Australia | Afghanistan | Bangladesh | Botswana | New Caledonia  
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Nigeria | Oman | Pakistan | Russia | Srilanka | Sudan | Saudi Arabia | Senegal | Tahiti  
Tanzania | Trinidad & Tobago | Tunisia | Uganda | Yemen | West Indies...

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