Talvar asphalt mixing plant 160 t/h – bag filter

Technical specification

1. **Cold feed system**
	1. **cold silos**

 5silos(2+3 silos)

 Matrial flow control with warning signal

 2 remote control vibrator each 0.45 kw

 Dimension (LWH) 3.6×2.4×3.55 m

 Capacity 12 – 15 m3

* 1. **feeder belts controlled from control cabin**

number of belts 5

dimension 1.5×0.6 m

drive unit 1.5 kw

inverter 2.2 kw

* 1. **Dryer cold feed conveyor belts**

Conveyor drum 320 mm diameter and 730 mm length

Main rollicks 90 mm diameter and 250 mm length

Guiding rollicks 65 mm diameter and 95,120 and 740 mm length

Emergency line belt no.1 belt no.2

Width (3 layers) 70cm 70cm

Drive unit 5.5 kw 4 kw

1. **Drying and heating system**

**2-1 Dryer**

 Isolated with 5 cm rock wool & Aluminium cladding to reduce the fuel Consumption

 Temperature is conslantly checked by sensor

 Optimized heat transfer stages

 Drum fixer to prevent linear movement of the drum

 Negative pressure inside the drum tube prevents extracting of filler of the environment

* Length 10.5 m
* Diameter 2.2 m
* Declination of dryer tube 3 degrees
* Drive unit 4×18.5 kw

 **2-2 Burner**

 Equipped with silencer

 Fuel type ( dual burner) diesel and heavy oil

 Oil multi-fuel as option

 Fuel viscosity( max) 10 c.st (200 c)

 Fuel consumption 1560 kg/h

 Capacity (max) 13 mil kcal/h

 Air fan 37 kw,3000 rpm

 Pump pressure (max) 40 bar

 Pump output (max) 47 liter/min

 Heavy oil temperature (max) 100 – 1200 c

 Pump motor output 7.5 kw – 150 rpm

 Voltage 400/230 v , 50 Hz

**2-3 Hot mineral elevator**

 Closed and dust-tight structure

 Chain type elevator with wear-resistant steel buckets

 Weighted chain tensioner

 16 mm heavy-duty chains according to amrican standards

 Transfer unit from elevator to screens has wear-resistant ribs

 Shaft length 27 m

 Drive output 18.5 kw

1. **Dust collecting system**

**3-1 Cyclone filter**

 Adjustable to collect fillers(from 0 up 60%) equipped with a 4kw

 screw conveyor

**3-2 Exhaust fan**

 Backward type with 90 kw drive

 SPB belt with guard

 Shaft and fan inspection door

 Motorized damper,controlled from control cabin

**3-3 Bag filter**

 Hi-tech Euro2007standard filler/dust collecting system from dryer tube

 Isolated with 5 cm rock wool and galvanized cage

 Temperature sensor PT-100 to prevent filter bags from burning

 Filtration area 500 m2

 Max dust burden onto plant 250 g/m3

 Max emission of dry particulate 20 mg/m3

 Filter type Nomex

 2 screws drive output 4 kw

 Temperature 1200C – Max 1600C

**3-4 Filler alavator**

 Twin elevator (separate shafts)for conveying filler from cyclone to silo

 No. 1 and filler from bag filter to silo no. 2 ( option)

 Drive output 11 kw

**3-5 Filler silo**

 Bottom loading pipe and ladder to access the top of the silo

 Capacity 50 tons

1. **Mixing tower**

**4-1 Vibrating screening**

 Separates aggregates to 5 grades (0-3) (3-6) (6-12) (12-18) (18-25)

 Dust-removal fan from screen and mixer

 2 vibrating electromotor each 5 kw made by ital vibras

 Ralling system for easy access and replacing the screens

 Articulated chutes from screens

 Screens inspection doors

 Maximum temperature 2000 C

 Total screen area 33 m2

**4-2 Hot mineral and filler silos**

 Isolated with 5 cm rock wool and equipped with current level control system

 No. of hot mineral silos 5

 Capacity of hot mineral silos 50 tons

 Capacity of filler silo 2 tons

 Filler screws drive output 2 × 3 kw

**4-3 Weighing system**

 High precision (0.0003) strain gauge load cells

 Option to assign the discharge priority of the materials

 Option to assign the mixing time

 Hot mineral weighing load cells 4

 Bitumen weighing load cells 3

 Filler weighing load cells 3

 Capacity of bitumen scale 250 liter

**4-4 Mixer unit**

 2 layer mixer ,inner layer made from wear resistant cast iron plates

 Cast iron paddles based on ASTM A532

 Drive gearbox 2 × 30kw

 Mixer capacity (1 batch) 2 tons

**4-5 Asphalt storage silo**

 2 layer silo, isolated with 5 cm rock wool

 Total capacity of silo100tons separated to 2×45 tons and 1×10tons compartment

 Discharging doors electrically heated

 Overflow alarming system

**4-6 Oversize silo**

 Capacity 30 tons, with pneumatic valve and overflow sensor

1. **Compressed air supply**

 screw type air compressor

 capacity 3 m3/min

 2 containers 2000 and 500 liter

1. **Control cabin**

**6-1 Monitoring**

 Computerized control of the operation , control and display of the complete

 Scope of delivery.

 Storage of recipes, plant parameters and production and operational data.

 Daily production report separately for every batch will be saved on a

 file with Excel format and can be copied to flash memory. Running

 the invertors will be done through the computer.

**6-2 Switch panels**

 All the electric parts such as contactors and thermal contacts German brand.

1. **Bitumen pump package**

 Bitumen pump 2.5 inch/ made in turkey

 Drive output 11 kw

 Valves 1.2 and 3 inches

 3-ways valve 1

 Collector 1

 Separator 1

1. **Additional equipment**

**8-1 Oil heater**

 Length 3.5 m

 Diameter 1.7 m

 Height 2 m

 Burner thermal capacit 550000 kcal

 Oil pump 2 inch

 Drive unit 15 kw

**8-2 2 × Bitumen flask**

 Insolated with rock wool and galvanized steel

 Length 12 m

 Diameter 2.5 m

 Height 2.7 m

 Capacity 67000 liter

Required power 620 KwA which will be supplied by Buyer.