

# Vishvakarma

"Vishvakarma" is the plant of choice for contractors all over the India who demand affordable large - scale production, long-term performance and the lowest operating costs per tonne of asphalt.

"Vishvakarma" Asphalt Drum Mix Plant is available in VDM - 10/20, VDM - 30/40, VDM - 40/60 up to VDM - 100 tonnes per hour models. having Fully Electronics as per MOST.

In designing the "Vishvakarma", VDM focused on delivering a simple. dependable easy - to operate and maintain. Truly Asphalt Drum Mix Plant with a durable design that lets contractors be competitive on both large and small projects.



**Dryer & Mixing Unit:** This unit of the drum mix asphalt plant is the heart of the plant As called the aggregate is heated with automatic burner to require temperature and bitumen is added in the drum at suitable stage and bitumen is coated evenly to the aggregate in this drum. There are various stages in the drum like heating, mixing zone. That helps the aggregate and bitumen to heat and mix uniformly. The fins in the dryer unit are specially designed to get maximum heat efficiency that is to say minimum heat loss.

**Dust Collector & Exhaust Unit:** The dust collector unit is fitted at the rear end of the plant that is at the out-put end of the plant. It is having an efficient dust collecting system and fitted with shutter, which can be varied as required.

An exhaust fan having sufficient capacity to ensure an effective airflow through the dryer and through the dust - collecting unit.

**\* Quality that you can rely upon \***

# Vishvakarma



**Four Bin Unit:** The Four-Bin Feeder unit is having four bins and each bin is driven by individual DC motor drive so as to accurately control flow of aggregate from each bin. Four Bin feeds aggregate to gathering conveyor, Which is driven by AC motor drive. It is fitted with electronic weighting system, Materials from gathering conveyer flow to double deck vibrating screen for removing over size material.



**Vibrating Screen Unit:** The unit is double deck type; vibrating screen removes oversize materials and feeds the remaining materials to charging conveyer. Separate size of screen can be provided for removing oversize materials from different kind of mix.

*Note : Specification are subject to change without notice due to development.*

SINCE  
1981



**Vishvakarma** Road Equipment Co (P) Limited.

Near S. D. Chambers, Borsad - 388540. Gujarat (INDIA)

Phone : 02696 - 221317, 221217, 223297 Fax : 222926

E- mail : [vreco@vishvakarma.com](mailto:vreco@vishvakarma.com) Website : [www.vishvakarma.com](http://www.vishvakarma.com)

# Vishvakarma



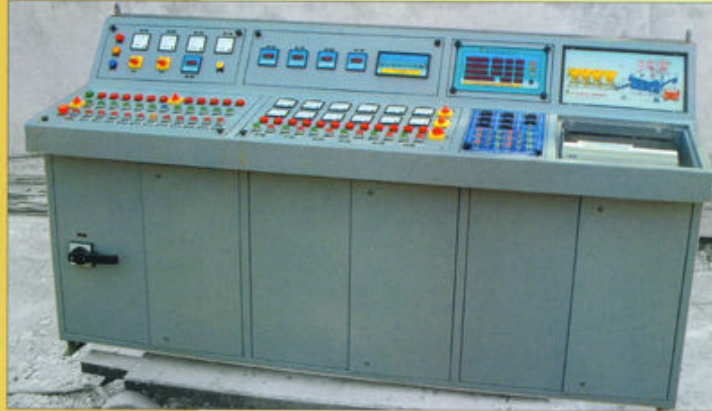
**Load Out Conveyer Unit** : It is elevates the mix aggregate to such height the mix material can be directly loaded in the dumper. It is fitted with hydraulically operated hopper, which helps the material to fall without segregation.



**Filler Unit** : It is also fitted at the output end of the plant Filler Unit into lime/cement/dust feeding pump with fitted DC motor drive and air blower quantity of filler material to be added in the mix.

**\* Quality that you can rely upon \***

# Vishvakarma



**Electric Control Panel :** It is fabricated from 16 SWG CRC sheet and processed with painting, The panel has in-feed master control, Aggregate flow measurement system, which controls asphalt flow, individual bin, asphalt flow indicator, automatic synchronization of aggregate with asphalt, aggregate and asphalt with totalizer, printer for print-out record of all parameters for an instant verify of formula, automatic temperature controls with indication, metering for aggregate, asphalt, input voltage, moisture and motor load.



**Control Cabin Unit :** It is insulated control cabin is provided with electric panel to operate the entire plant, the cabin may or may not have air conditioning system as per client requirements.

*Note : Specification are subject to change without notice due to development.*

SINCE  
1981



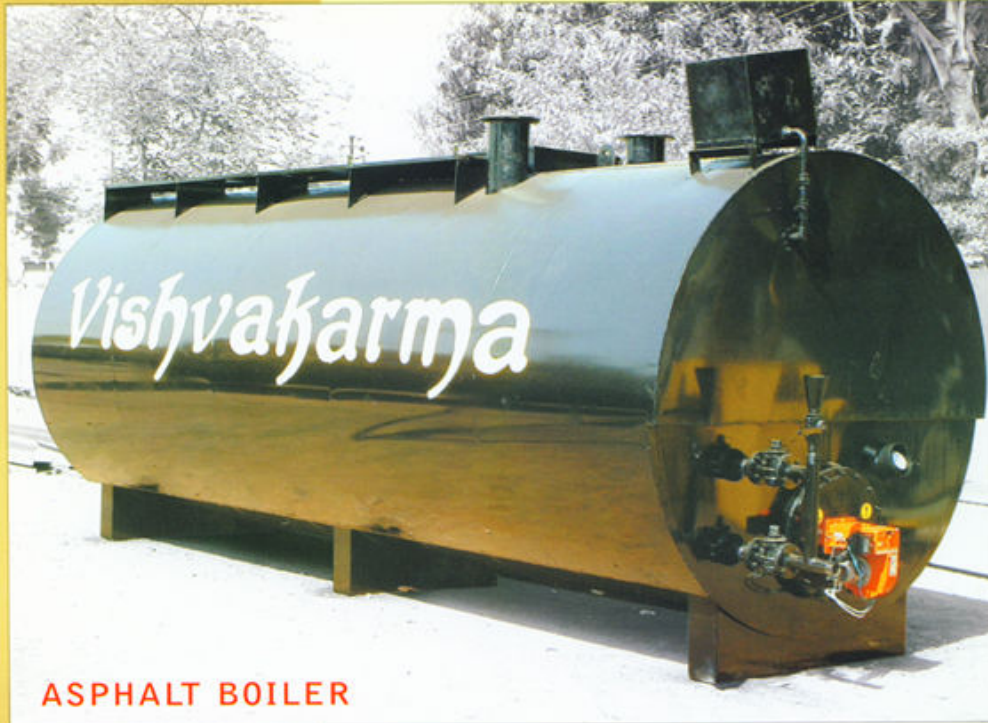
**Vishvakarma** Road Equipment Co (P) Limited.

Near S. D. Chambers, Borsad - 388540. Gujarat (INDIA)

Phone : 02696 - 221317, 221217, 223297 Fax : 222926

E- mail : [vreco@vishvakarma.com](mailto:vreco@vishvakarma.com) Website : [www.vishvakarma.com](http://www.vishvakarma.com)

# Vishvakarma



ASPHALT BOILER



**\* Quality that you can rely upon \***

# Vishvakarma



Note : Specification are subject to change without notice due to development.

An insulated storage tank is designed with heating system. It is insulated to prevent heat losses. Tank is equipped with separate automatic electric burner for heating the asphalt. Automatic burner makes a hot gas stream through pipe for heating. 25 mm thick external insulated with steel sheet covering. Temp-Gauge is provided for examining the status leading to uniform quality. It is fabricated by using M. S. Section and plates. It is having 10, 15 upto 30 Tones capacity in various safe like round and U safe.

SINCE  
1981



**Vishvakarma** Road Equipment Co (P) Limited.

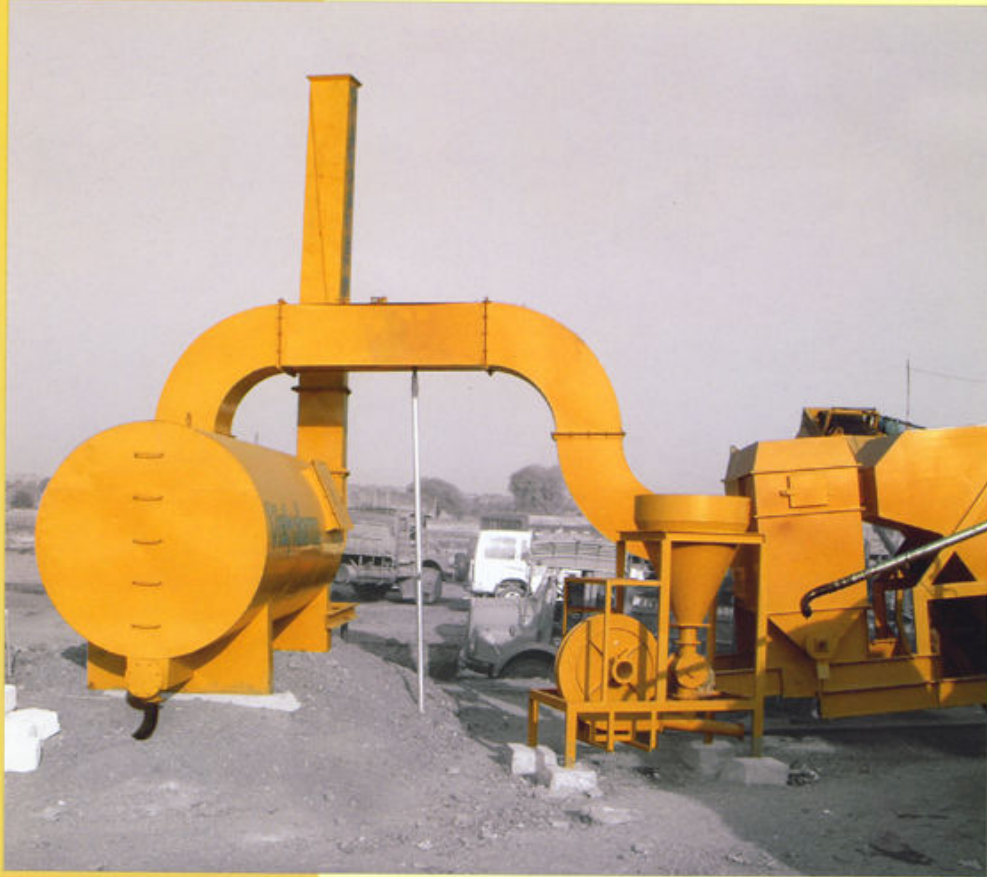
Near S. D. Chambers, Borsad - 388540. Gujarat (INDIA)

Phone : 02696 - 221317, 221217, 223297 Fax : 222926

E-mail : vreco@ Vishvakarma.com Website : www.vishvakarma.com

# Vishvakarma

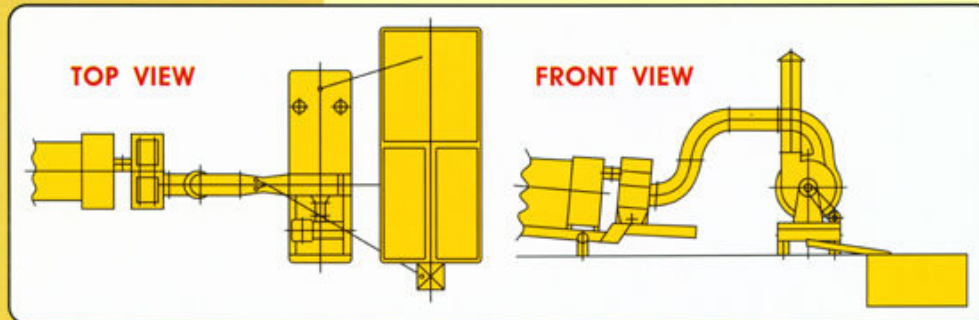
POLLUTION CONTROL SYSTEM



**\* Quality that you can rely upon \***

# Vishvakarma

## POLLUTION CONTROL SYSTEM FOR DRUM MIX PLANT



### Specifications

DIMENSION : 1.8 m x 3 m

CAPACITY (ACFM) : 10500 / 14500

WATER PUMP : 2 H.P.

### Sludge Pond Data

DIMENSION : 7.0 x 3.0 x 1.5 mtrs.

- \* Subject to location and aggregate dust content
- \* All the ratings are subject to change.



### OPERATION SEQUENCE

- Exhauster inducts hot gases from the Thermo Drum Unit.
- Higher Pressure Water Jet is sprayed on to the gases which forms water based slurry and is diverted to the sludge Pond.
- Air pressure is reduced and remaining gases are exhausted.
- The pond is made such that, the surface water is again reused.

### OTHER INFORMATION

Nozzles and Water Bearing Plates are made of Stainless Steel to resist corrosion. The Sludge Pond requires to be cleaned once a week based on normal site conditions. As a safety measure, always surround / cover the Sludge Pond with wire fence since, working temperature of water may be above 80 Degree. It is also necessary to have the Drain pipe submerged in pond.

SINCE  
1981



**Vishvakarma** Road Equipment Co (P) Limited.  
Near S. D. Chambers, Borsad - 388540. Gujarat (INDIA)  
Phone : 02696 - 221317, 221217, 223297 Fax : 222926  
E- mail : vreco@vishvakarma.com Website : www.vishvakarma.com

Note : Specification are subject to change without notice due to obsolescence.

## Specifications of "Vishvākarma" Drum Mix Plant

<b>Description</b>	<b>DM-45</b>	<b>DM-50</b>	<b>DM-60</b>
Capacity @ 3 % moisture content	<b>40/60 TPH</b>	<b>60/90 TPH</b>	<b>90/120 TPH</b>
<b><u>Four Bin Feeder Unit</u></b>			
Number of Bins	4 (Four)	4 (Four)	4 (Four)
Feeding Capacity	100 TPH	120 TPH	150 TPH
Bins Plate Thickness	5 MM	5 MM	5 MM
Bin Size	<b>290mx2mx183m</b>	<b>290mx2mx183m</b>	<b>290mx210mx183m</b>
Bin Belt Size	550 mm x 2.95 m	550 mm x 2.95 m	550 mm x 2.95 m
Motor	2 HP DC Drive	2 HP DC Drive	2 HP DC Drive
Gear Box	"C" SMSR	"C" SMSR	"C" SMSR
Bin's Drive	V – Belt	V – Belt	V – Belt
Bin Gathering Conveyer Motor	5 HP AC @ 1500	5 HP AC @ 1500	7.5 HP AC @ 1500
Bin Gathering Gear Box	"D" SMSR	"D" SMSR	"D" SMSR
Bin Gathering Drive	V – Belt	V – Belt	V – Belt
Bin Gathering Belt Size	<b>600 mm x 27.3 m</b>	<b>600 mm x 27.3 m</b>	<b>600 mm x 27.3 m</b>
Bin Vibrator Motor (Only 4 No Bin)	1 HP AC Drive	1 HP AC Drive	1 HP AC Drive
<b><u>Vibrating Screen Unit Size</u></b>			
Motor	3 HP AC	3 HP AC	5 HP AC
Drive	V – Belt	V – Belt	V – Belt
System	Rubber Pad	Rubber Pad	Rubber Pad
<b><u>Slinger Conveyer Size</u></b>			
	<b>6.1 m</b>	<b>6.1 m</b>	<b>7.3 m</b>
Motor	5 HP AC	5 HP AC	7.5 HP AC
Gear Box	"D" SMSR	"D" SMSR	"D" SMSR
Belt Size	550mm x 12.35 m	550mm x 12.35 m	600mm x 14.8 m
<b><u>Thermo Dryer &amp; Mixing Unit</u></b>			
Diameter	1219 MM	1500 MM	1800 MM
Length	6096 MM	6700 MM	7010 MM
Thickness	8 MM	8 MM	10 MM
Motor	15 HP AC	25 HP AC	30 HP AC
Gear Box , Only Elecon	5 NU Worm Gear	7 NU Worm Gear	8 NU Worm Gear
Drive	Rotary Drive	Rotary Drive	Rotary Drive
Dust Collector Motor	2 HP AC	2 HP AC	3 HP AC
Dust Collector Outlet Screw Gear	"C" SMSR	"C" SMSR	"C" SMSR
Dust Collector's No. of Cones	15	17	20
Exhaust Capacity	10500 CFM	14500 CFM	18500 CFM
Exhaust Motor	20 HP AC	25 HP AC	30 HP AC
Dryer Burner Firing Rate	225 LPH	350 LPH	550 LPH
Fuel Type	LDO/FO	LDO/FO	LDO/FO
Dryer Burner's Blower Motor	5 HP AC @ 2800	10 HP AC @ 2800	15 HP AC @ 2800
Dryer Burner's Pump / Motor	2 HP AC	2 HP AC	3 HP AC
* Dryer Burner's Heater (Optional )	12 KW	18 KW	18 KW

<b><u>Load-Out (Hot) Conveyer Size</u></b>	<b><u>10 m</u></b>	<b><u>10 m</u></b>	<b><u>10 m</u></b>
Motor	5 HP AC	5 HP AC	7.5 HP AC
Gear	"D" SMSR	"D" SMSR	"D" SMSR
Belt Size	600mm x 18.06 m	600mm x 18.06 m	600mm x 18.06 m
Storage Hopper Capacity	1000 Kegs	1000 Kegs	1500 Kegs
Power Pack System (Hopper Open/Close)	2 HP AC	3 HP AC	5 HP AC
<b><u>Mineral Filler Capacity</u></b>	<b><u>750 kgs</u></b>	<b><u>750 kgs</u></b>	<b><u>750 kgs</u></b>
Motor (Screw)	2 HP DC	2 HP AC DC	2 HP DC
Gear Box	"C" SMSR	"C" SMSR	"C" SMSR
Blower Motor	5 HP AC @ 2800	5 HP AC @ 2800	5 HP AC @ 2800
Blower Rotary Valve	3" Size	3" Size	3" Size
<b><u>Control Panel</u></b>			
Microprocessor Base – DC / AC Drive	SP.ElectroControl	SP.ElectroControl	SP.ElectroControl
<b><u>Control Cabine (Insulated) Size</u></b>	<b><u>12' x 6'</u></b>	<b><u>12' x 6'</u></b>	<b><u>14' x 6'</u></b>
<b><u>1) Fuel Storage Tank Capacity</u></b>	<b><u>10000 Ltrs</u></b>	<b><u>10000 Ltrs</u></b>	<b><u>12000 Ltrs</u></b>
<b><u>2) Fuel Service Tank Capacity</u></b>	<b><u>2000 Ltrs</u></b>	<b><u>2000 Ltrs</u></b>	<b><u>2000 Ltrs</u></b>
* Fuel Service Tank's Heater	9 KW (12 HP)	9 KW (12 HP)	9 KW (12 HP)
<b><u>*Pollution Control Unit – Extreme Turbulence Venturi Type Pollution Control Unit Dimension</u></b>	<b><u>Dust Emission Less than 150mg/m<sup>3</sup> 18x3m</u></b>	<b><u>Dust Emission Less than 150 mg/m<sup>3</sup> 1.8 x 3 m</u></b>	<b><u>Dust Emission Less than 150mg/m<sup>3</sup> 18x3m</u></b>
Water Pump	2 HP Mono-Block	2 HP Mono-Block	3 HP Mono-Block
<b><u>Bitumen Tank–{"O" Shape OR "U"}</u></b>	<b><u>15 Tones</u></b>	<b><u>15 Tones</u></b>	<b><u>20 Tones</u></b>
Bitumen Tank's Burner Firing Rate	25-40 LPH	25-40 LPH	25-40 LPH
Motor	250 W	250 W	250 W
Fuel Type	<u>Only Diesel</u>	<u>Only Diesel</u>	<u>Only Diesel</u>
Bitumen Pump Type	Hot Oil Jacked Gear Type	Hot Oil Jacked Gear Type	Hot Oil Jacked Gear Type
Bitumen Pump Make	Johnson	Johnson	Standard
Bitumen Pump Motor	3 HP DC	5 HP DC	5 HP DC
Pump Capacity	160 LPM	160 LPM	260 LPM
Pump's Gear	- NA -	- NA -	3 NU Worm Gear
Hot Line Motor	1 HP AC	1 HP AC	1 HP AC
Service Tank Motor / Pump	1 HP AC	1 HP AC	1 HP AC
Open Land Required	40 x 40 m	40 x 40 m	45 x 45 m
Total Connected Load of Plant	87 KW (115 HP)	108 KW (145 HP)	132 KW (176 HP)
Recommended Capacity of Genset	100 KVA	125 KVA	150 KVA
✓ <b><u>Bitumen Tank</u></b>	Tank main wall plate 5 mm and Glass-wood insulation – 40 mm thickness, Tank outer wall 18 gauge thickness plates and other fabrication works as per engineering standard.		
✓ <b><u>Dryer Unit -45</u></b>	✓ <b><u>Dryer Unit -50</u></b>	✓ <b><u>Dryer Unit -60</u></b>	
I Beam 250mm & 200mm Chase , Other Fabrication works as per engineering standard.	I Beam 300mm & 250mm Chase , Other Fabrication works as per engineering standard.	I Beam 400mm & 350 mm Chase , Other Fabrication works as per engineering standard.	

### List of motor's load- KW(HP) of "Vishvakarma" Drum Mix Plant

Description	Drive		DM-45 40/60 TPH	DM-50 60/90 TPH	DM-60 90/120 TPH
4 Bin – 1 Bin	DC		1.5KW (2 HP)	1.5KW (2 HP)	1.5KW (2 HP)
4 Bin – 2 Bin	DC		1.5KW (2 HP)	1.5KW (2 HP)	1.5KW (2 HP)
4 Bin – 3 Bin	DC		1.5KW (2 HP)	1.5KW (2 HP)	1.5KW (2 HP)
4 Bin – 4 Bin	DC		1.5KW (2 HP)	1.5KW (2 HP)	1.5KW (2 HP)
4 Bin – Vibrating	AC		0.8KW (1 HP)	0.8KW (1 HP)	0.8KW (1 HP)
4 Bin Gathering Belt	AC		3.8KW (5 HP)	3.8KW (5 HP)	5.6KW (7.5 HP)
Vibrating Screen Unit	AC		2.3KW (3 HP)	2.3KW (3 HP)	3.8KW (5 HP)
Slinger Conveyer	AC		3.8KW (5 HP)	3.8KW (5 HP)	5.6KW (7.5 HP)
Dryer Burner Blower	AC		3.8KW (5 HP)	7.5KW (10 HP)	11.3KW (15 HP)
Dryer Burner Pump/Motor	AC		1.5KW (2 HP)	1.5KW (2 HP)	2.3KW (3 HP)
<b>Dryer Burner Heater (Out)*</b>	<b>AC</b>		<b>12 KW (16 HP)</b>	<b>18 KW (24 HP)</b>	<b>18 KW (24 HP)</b>
Dryer Drum Unit	AC		11.3KW (15 HP)	18.8KW (25 HP)	22.6KW (30 HP)
Screw Conveyer (Dust)	AC		1.5KW (2 HP)	1.5KW (2 HP)	2.3KW (3 HP)
Exhaust System	AC		15KW (20 HP)	18.8KW (25 HP)	22.6KW (30 HP)
Load –Out Conveyer	AC		3.8KW (5 HP)	3.8KW (5 HP)	5.6KW (7.5 HP)
<b>Pollution Control System*</b>	<b>AC</b>		<b>1.5KW (2 HP)</b>	<b>1.5KW (2 HP)</b>	<b>2.3KW (3 HP)</b>
Hydraulic Power Pack	AC		1.5KW (2 HP)	2.3KW (3 HP)	3.8KW (5 HP)
Mineral Feeler, Blower	AC		3.8KW (5 HP)	3.8KW (5 HP)	3.8KW (5 HP)
Mineral Feeler Rotary Valve	DC		1.5KW (2 HP)	1.5KW (2 HP)	1.5KW (2 HP)
Hot Oil Line	AC		0.8KW (1 HP)	0.8KW (1 HP)	0.8KW (1 HP)
Service Tank Motor / Pump	AC		0.8KW (1 HP)	0.8KW (1 HP)	0.8KW (1 HP)
<b>Fuel Service Tank's Heater *</b>	<b>AC</b>		<b>9 KW (12 HP)</b>	<b>9 KW (12 HP)</b>	<b>9 KW (12 HP)</b>
<b>Bitumen Tank Blower – 1</b>	<b>AC</b>	<b>250 W</b>			
<b>Bitumen Tank Blower – 2*</b>	<b>AC</b>	<b>250 W</b>			
Asphalt Pump (Bitumen)	DC		2.3KW (3 HP)	2.3KW (3 HP)	3.8KW (5 HP)
<b>Total Power Required</b>			<b>86.5 KW (115 HP)</b>	<b>108 KW (144 HP)</b>	<b>132 KW (176 HP)</b>

Note :- \* is optional equipments, as per clients requirements.

Quality that you can rely upon ...