

TECHNICAL PROPOSAL

of

Floor Shot Blasting Machine

Model: M270



M & M INTER COMPANY LIMITED



1. Functions outlined

M-270 mobile floor shot blasting machine mainly through the mechanical method blasting the cast steel shot to work on the surface at a high speed and certain Angle, make the shot impact road surface, then inside of the machine through the vacuum cleaner cleaning effect, respectively collect shot and clean up the impurities, and make shot can be recycling. The machine is equipped with the dust collector, the machine has clean, no pollution construction, not only improve efficiency, but also protect the environment. Blast processing surface not only cleaned up the various surface dirt of road surface, but also increase the surface rough degree; Our equipment construction is simple and convenient operation, do not need to closed road for construction, the construction cost is low, the equipment has high mobility. And protect environment, in the process of the construction, it can be done no dust and soilless, no pollution, and the shots can be recycled.

Shot blasting refers to shot blast the road surface or steel plate surface at a high speed and certain Angle by the high speed rotating impeller drive., so as to be blasted surface roughening or remove residue effect, at the same time filter creates negative pressure will make the shots and clean up down the impurities and dust recycle after cleaning, good shot will be recycled, and impurity and dust will fall into dust collector

2. The Floor Shot Blasting Machine Application

Along with the shot blasting processing equipment continuous improvement and mature technology, blasting process and equipment have entered the developed country for their highway maintenance, bridge construction and airport maintenance, etc.



2.1 Concrete bridge surface treatment

Concrete bridge deck pavement is widely used in waterproof layer, greatly reducing the concrete bridge caused damage for water penetration, prolong the service life of the bridge. But with the increase of the traffic flow, and at the same time appeared waterproof layer and bridge deck bonding strength shortage and produce the damage. In China, the concrete bridge also often happen damage, as well as water penetration and even cause concrete loose, fall off, the corrosion of reinforcement. Because the concrete surface layer blasting treatment failed to completely remove surface residue, which caused the reasons of the above diseases, no reserve some rough surface to ensure that the waterproof layer and compressive strength of the bottom floor.

Through the blast cleaning to clean up concrete surface laitance and impurity. At the same time roughening process for the concrete surface, make its surface form uniformity rough surface, greatly improving the waterproof layer and compressive strength of concrete base, can fully exposed concrete crack damage, in order to take remedial measures in advance.

2.2 Steel bridge surface cleaning, anticorrosive coating pretreatment

In China's bridge anticorrosion fields, blasting equipment have a wide range of applications, especially in the steel corrosion, has become an indispensable construction equipment.

In most of the Bridges which have been built, before the anti-corrosion primer or other spraying, all choose to use blasting technology for surface cleaning and roughness processing, such as: the Yangtze river two bridge, Jiangyin bridge, Junshan bridge, BaiShaZhou bridge, Shanghai lu pu bridge and Donghai bridge, etc.

Use blast processing steel bridge deck can achieve SA2.5 / SA3 steel cleanliness requirements, and can control the rough degree, meet the coating requirements, and the whole process is no dust operation, convenient to move, construction efficiency is high.



2.3 Blasting equipment clean-up the tunnel concrete pavement

In China, considerations the tunnel pavement of waterproof and flame resistance and oil resistance materials ect, generally USES the cement concrete. But at the same time the tunner road surface skid resistance requirement put forward higher requirements. Periodic blast cleaning tunnel pavement, due to pollution and tire trace make the pavement reduce the coefficient of friction, which can be greatly improved, make the tunnel pavement skid resistance has been greatly improved, and significantly reduce the accident rate. Such as Chongqing tunnel, Guiyang tunnel, Kunshi tunnel and so on, all use blasting technology on concrete pavement maintenance.

2.4 Asphalt road surface sliding treatment

Blast processing equipment is widely used in improving asphalt pavement roughness and friction coefficient, and improve the surface adhesion, ensure the traffic safety. At the same time also can remove the asphalt attachments (such as fuel, oil, etc.) is mainly used in the following aspects:

- (1) When asphalt concrete cover surface construction, the use of the blasting process carries on road surface pretreatment can ensure that the road clean, at the same time increase the roughness of the surface, increase the skin coat and the original pavement bonding strengthen, the structure durability has the greatly increase; Slurry seal and using resin material finish, first make blasting treatment can greatly improve the resin finish and the original grass-roots bonding strength, improve the slurry seal quality and extended the service life of pavement,.
- (2) The blasting process can be directly used in the asphalt road surface, such as turning section surface, it can improve the skid resistance performance.
- (3) It can directly remove the asphalt surface functional oil, due to flood caused oil of skid resistance performance reduction, which can be improved.
 - (4) Blasting process can also be used in logo line removal.



Blasting equipment and milling equipment can be carried out marker removal; Blasting equipment especially are suitable for cold paint line cleaning and municipal pedestrian street and other surface clean and clear.

3. Main Technical Parameters

| Model | M-270 |
|-------------------------------------|------------------------|
| Maximum cleaning size | 270 mm |
| Concrete surface effect rate | 150 m2/h |
| Blasting device | 1 set |
| Device power | 11 kw |
| Separator capacity | 20T/h |
| Separator air volume | 6~8m³/s |
| Running style | Electric control |
| Driving Motor power | 0.55 kw |
| Running speed (frequency control) | 5-25 m/min |
| Shot first loading capacity | 80 kg |
| Suggest shot diameter | 1.0-1.5 mm |
| Dust collect way | Blow back |
| Power of dust collector | 6.2 kw |
| Air volume of dust collector | 1250 m³/h |
| Connection pipe diameter | 150 mm |
| Total power of machine | 18 kw |
| Overall dimension of blaster | L2050 x W380 x H1130mm |
| Weight of blaster | 450 kg |
| Overall dimension of dust collector | L1420 x W860 x H1650 |
| Weight of dust collector | 380 kg |
| Weight of spare parts | 120 kg |



4. Composition of Equipment

This equipment is mainly composed of blasters, recovery unit, running mechanism, separator, dust removal system, shot control system, electric control system, etc. Clean up the road, through the control and choice shot particle size, shape, as well as adjustment and set the machine speed of running, control shot blasting flow, get different shot blasting strength, get different surface treatment effect. Shot blasting machine according to the running way, it can be divided into three kinds: hand push type, vehicular and its self-propelled.

5. Dust Removal System

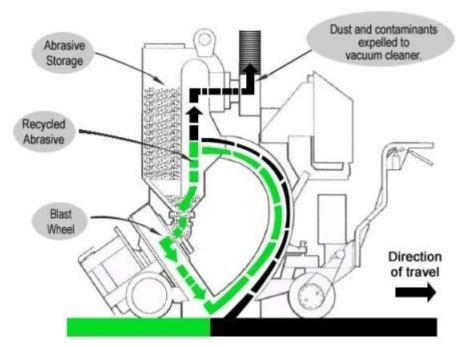
With a better understanding of environmental awareness, protection, management, improving the environment has been the consensus of the whole society. With our long-term research, analysis, practice get shot blast machine industry experience, our factory make the new design with every shot blasting machine, we aims to improve our working conditions for employees, improve the comprehensive economic benefits.

Dust removal system including dust collector, fan, fan piping, the connection pipeline between filter and the main machine, etc.

PH854 filter is designed for PHLM pavement shot blasting machine matching design blowback type dust removal equipment, also can be used in pavement strong strength cleaning equipment matching dust. The machine volume is small, convenient to move, convenient operation, it is the preferred products to clean road surface.



The vacuum cleaner through the three way blowback soot, using pulse valve, the use of sequence control principle, to ensure that vacuum cleaner circulation loop clear; Use the original fat gather dust hose, ensure connection wear-resisting, reliable; Use of imported filter paper, ensure dust removal effect; Make vacuum cleaner can safe, stable long-term work. Fan drive bearing imported high-speed bearing, ensure the stable and reliable transmission.



6. Picture (reference)



All date and details are subject to change without prior notice.