

A mortar spraying machine is a type of construction equipment used to spray mortar or cement on walls, ceilings, and floors. It is also called grout spraying pump, cement spraying machine, plaster spraying machine or mortar sprayer. The machine consists of a hopper that holds the mixture of mortar or cement along with water and an air compressor that helps in spraying the mixture onto surfaces using a hose and nozzle. The machine is commonly used for plastering buildings' interior and exterior walls quickly, efficiently, and with less labor-intensive work compared to traditional methods.

SeFluid's mortar spraying machine series is the best choice for mixing, conveying and spraying all kinds of mortar, concrete, cement, plaster and grout in construction and engineering projects.

## **Principle of Mortar Spraying Machine**

A mortar spraying machine essentially consists of a mortar mixer, a pump, and a spraying nozzle. The process begins with the preparation of the mortar mix in the mixer, which combines sand, cement, water, and other additives to form the desired consistency. Once the mixture is ready, it is transferred to the pump, which then conveys it through a hose to the spraying nozzle. The nozzle is designed to atomize the mortar mix, ensuring even distribution and a smooth finish on the surface being sprayed.

Operators control the machine using a remote or an attached control panel, adjusting the flow rate and pressure as needed to achieve the desired results. The mortar spraying machine is typically mounted on a mobile frame or cart, allowing for easy transportation and maneuverability around the construction site.

When the fluid enters the gap between the stator and the rotor's teeth, it is strongly sheared, homogenized and emulsified together with the surrounding

medium, finally achieving a good mixing effect and being discharged from the discharge outlet.

# **Benefits of Mortar Spraying Machines**

Mortar spraying machines have revolutionized the construction industry by offering numerous benefits over traditional mortar application methods. Some of the key advantages include:

#### **Increased Efficiency**

The machine's automation drastically reduces the time and effort required to apply mortar, resulting in significant time savings and faster project completion. Additionally, the uniform application of mortar ensures better bonding between bricks and stones, improving the overall structural integrity.

#### **Improved Quality**

The even and consistent application of mortar by the machine ensures better bonding and a smoother finish, which translates to higher-quality structures with improved durability and longevity.

## **Enhanced Safety**

By eliminating the need for workers to manually handle heavy mortar loads and climb scaffolding, the use of a mortar spraying machine reduces the risk of accidents and injuries on construction sites.

#### **Reduced Labor Costs**

The use of a mortar spraying machine reduces the need for manual labor, which can be both costly and hard to find in today's competitive construction market. This results in lower labor costs and a more cost-effective construction process.

#### **Reduced Material Waste**

With precise control over the mortar application, the mortar spraying machine minimizes wastage of materials, leading to cost savings and a more environmentally friendly construction process.

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## **Applications of Mortar Spraying Machines**

Mortar spraying machines have a wide range of applications in the construction industry, including:

#### **Masonry Construction**

The primary application of mortar spraying machines is in the construction of brick and stone walls, where they are used to apply the mortar that bonds the individual units together.

#### Grouting

In projects that require the filling of gaps or voids, such as in tunnel construction or soil stabilization, mortar spraying machines can be used to inject grout into the required areas.

## **Plastering & Rendering**

Mortar spraying machines can also be used to apply plaster or render to internal and external walls, providing a smooth, uniform finish that is both aesthetically pleasing and functional.

## **Repair & Restoration**

Mortar spraying machines can be used to apply repair mortar for the restoration of damaged or deteriorated structures, such as bridges, tunnels, and historic buildings.

# **Technical Specifications**

MODLE	SEMSM50	SEMSM100	SEMSM130
Hose Inner Dia.	DN32	DN32	DN38
	4KW	7.5KW	9KW
	3-6 MP	5-8 MP	7-8 MP
Capacity	130 M <sup>2</sup> /H	200 M <sup>2</sup> /H	260 M <sup>2</sup> /H
Feeding Hopper Volume	50L	100L	130L
Max. Particle Size	6 MM	7 MM	7 MM
	150 KGS	300 KGS	360 KGS

