Sandblasting Room Introduction

喷砂房简介

The sandblasting room suitable for large workpiece surface cleaning ,rust removal ,increase the workpiece and the adhesion between the coating effects .According to the abrasive way of recycling peening room is divided into: automatic recovery type shot blasting room and artificial recovery type shot blasting room. Because of the artificial recycling sandblasting room the economic and practical, simple, convenient and greatly reduced the cost .It also accepted by many customers ,especially small and medium-sized enterprises.

喷砂房适应于一些大型工件表面清理、除锈，增加工件与涂层之间的附着力等效果。根据磨料的回收方式喷丸房分为:机械回收式喷丸房和人工回收式喷丸房. 由于人工回收喷砂房由于经济实用，制作简单、方便，大大的减少了造价成本，也被很多客户特别是中小企业所接受。

Benefits of the Sandblasting Room

喷砂房的优点

By removing rust, coatings and others ,blasting allows new coatings to better adhere to surfaces. Blast cleaning is environmentally, eliminates chemical disposal costs, reduces toxic emissions. This versatile process can also allow for significant cost savings.

通过去除铁锈、涂层和其他物质，喷砂可以使新的涂层更好地附着在物体表面。喷砂清理是环保的，消除了化学处理的成本，减少了有毒物质的排放。这个多用途的过程也可以节省大量的成本。

Sandblasting Room Preparation and Requirements

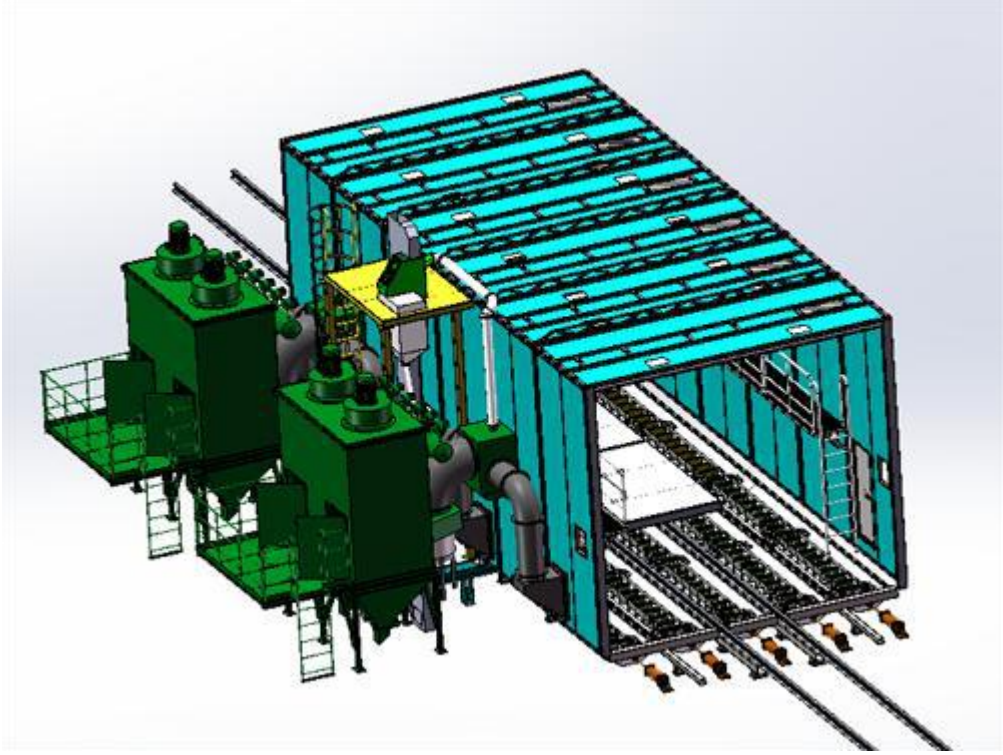
喷砂房的准备和要求

Abrasive blast systems depend on modern, well-designed blast rooms to ensure a confined, controlled, and clean environment for abrasive recycling. Whether removing an existing coating or prepping a surface for a new coating, optimal surface preparation with the use of air compressors is crucial.

磨料喷砂系统依靠现代化的、精心设计的喷砂室来确保一个封闭的、受控的、清洁的环境来进行磨料的回收。无论是去除现有涂层还是为新涂层准备表面，使用空气压缩机进行最佳表面处理都是至关重要的。

Abrasive blasting rooms also have many sizing and material-preparation requirements. Some factors to be taken into consideration include the size and weight of the largest workpiece, the material handling method, the hours spent blasting, and the base materials. And, depending on the size of the largest workpiece, four to five feet must be added to the width and length of the room. The height of the room is also determined by the largest workpiece.

喷砂室也有许多型号和材料制备要求。需要考虑的因素包括最大工件的尺寸和重量、材料处理方法、喷砂时间和基础材料。而且，根据最大工件的大小，房间的宽度和长度必须增加 4 到 5 英尺。房间的高度也由最大的工件决定。



Sandblasting Room Ventilation

喷砂室通风

Proper ventilation of blast rooms is also crucial. There are three different airflow options to achieve this:

1. Down-draft
2. End-to-center
3. Cross-draft

通风室的适当通风也很重要。有三个不同的气流选项来实现这一点：

1、 下向通风
2、 末端-中心通风
3、 交错通风

The best ventilation method will depend on the specific abrasive being used in the blast room.

最佳的通风方式取决于喷砂室使用的特殊磨料。

Cross-draft ventilation is very popular because it is the most economical method. It's also important to remember that the calculation for the dust collector size is measured by the width of room times the height of room times the cross-sectional airspeed in feet/minute (fpm) equals the total airflow in cubic feet/minute (cfm). The reclaim system also adds air volume to the dust collector; this will range between 500 to 1200 cfm, meaning the resultant dust collector needs to be sized for 12,800 cfm + 500 cfm, which makes a total of 13,300 cfm. The mechanical screw floor — with a belt and bucket elevator, rotary drum, and air-wash separator — is the most efficient reclaim floor system. Single screw, H-shaped, U-shaped, and full reclaim are the four different design options available.

交错通风是最经济的通风方式，因此很受欢迎。同样重要的是要记住，对除尘器大小的计算是用房间的宽度乘以房间的高度乘以空气的横截面速度(英尺/分钟)(fpm)等于总气流(立方英尺/分钟)(cfm)。回收系统还为除尘器增加了风量;这个范围在 500 到 1200 cfm 之间，这意味着除尘器需要 12800 cfm + 500 cfm 的尺寸，也就是 13300 cfm。采用带斗提升机、回转式滚筒、气洗分离器的机械螺旋地板是最有效的回收地板系统。单螺杆、h 形、u 形和完全回收是四种不同。

Blast Room Design and Components

喷砂室的设计和组成

Dust collection systems are critical components in abrasive blast rooms. These days, reverse pulse cartridge dust collectors are standard since they feature a reliable exhaust motor that brings air out of the space and traps it in filters. These collectors also have a reinforced pleated paper, which increases filter efficiency and reduces the size requirements of facility dust collection systems. Proper maintenance, such as occasionally removing the dust on the cartridge, is also important. However, some modern technology allows for self-cleaning via brief, reversed airflow. Pulse-sensing technology can differentiate pressure between clean and dirty sides of filters. Dust collectors must generate 50 feet per minute of airflow through the enclosure. Rates of up to 100 fpm may even be required for dusty material or the production of hazardous materials.

除尘系统是喷砂室的关键部件。如今，反向脉冲盒式除尘器是标准的，因为它们有一个可靠的排气发动机，可以将空气带出空间，并将其困在过滤器中。这些收集器也有一个加强的褶皱纸，这提高了过滤效率，减少了设施除尘系统的尺寸要求。适当的维护也很重要，比如偶尔清除墨盒上的灰尘。然而，一些现代技术允许通过简单的反向气流进行自我清洁。脉冲感应技术可以区分过滤器干净和脏的两边的压力。灰尘收集器必须产生每分钟 50 英尺的气流通过外壳。对于含尘物料或有害物料的生产，甚至可能要求高达 100 fpm 的速率。

Sweep-in systems mandate periodic shutdowns for cleanup and can be ideal for infrequent or aperiodic blasting needs. These floors utilize rocking technology to move abrasives and dust to a crossover pan or screw conveyor.

清扫系统要求定期停机进行清理，对于不经常或不定期的喷砂需求是理想的选择。这些地板利用摇摆技术将磨料和灰尘转移到交叉盘或螺旋输送机上。