

Case Story

Problem:

In car body shops preparing cars for painting generates a lot of dust and smoke created. These contaminations should be captured direct at the source and then transported to a dust collector where the air will be cleaned through filtration. The demands from the customer was a centralized high vacuum system that had to be fully automatic and able to supply sufficient extraction at 6 simultaneously used orbital sanders. The system should also be efficient enough to be used for general cleaning of the workshop.



Solution:

Both the electrical and pneumatic tools used by the customer (both types with integrated extraction) are connected to 6 meter long arms. The arms are connected to a steel pipe system via automatic valves that opens as as soon as any of the tools are used. At the same time the valve opens, the vacuum unit gets a signal (from the valve) to start up. This ensures that no hoses or cables are lying on the floor. The vacuum unit uses the under pressure in the system to clean the filter which in turn results in a very low consumption of compressed air, 3 liters per day. The automatic filter cleaning ensures a long filter lifetime, more than 8000 hours for this application. The system takes care of sanding dust, welding smoke, glass particles and trash on the floor.

Result:

Today the customer has a much cleaner workshop, which also improves the lead time due to the efficient extraction of dust. The arms ensures that vacuum hoses, electrical cables etc., are kept in the air which makes the workshop safer.