

Innovation in Vacuum and Conveying Technology

CASE STUDY



Central Vacuum Cleaning System for Welding Slag Removal

The primary function of the system was to reduce the amount of waste material being transferred further up the production line. This was required because previously, the automatic transfer of the finished welded product meant a manual campaign cleaning up two extensive production lines which could only be achieved when the plant was not in production. Now with our system solution production is not interrupted and ongoing cleaning costs of hiring-in expensive vacuum plant and associated operative costs have been eliminated.

The system comprised two stations into which the weld slag is delivered. This is a glassy abrasive material. It is directed into a chute channeling it into the crusher machines. The lengths of slag being 150/200 mm long x 25/50 mm wide and 5-6 mm thick are reduced down to small granulate and dust to



ensure it will not block the selected conveying line.

The two crusher stations are connected to the filter separator by individual conveying lines. These are isolated from each other by pneumatic line isolating valves. Products are separated within the filter separator from the conveying air and are continuously dispensed from the filter separator via a pneumatically operated double dump valve into the client's skips, which are located on a track system positioned below the outlet of the filter separator.

As the client's production process requires flexibility in the form of how many, which, or both of the production lines are being utilised, it means the product removal system has to be flexible. The motive air is generated by a 30 kW exhauster unit which is provided with an inverter drive. One extraction line can be served by running the exhauster at one speed and two extraction points can be served by running the machine at a higher speed.

To find out more about how our Central Vacuum Cleaning Systems can be developed to benefit your manufacturing facility, contact us today and talk to our specialists.

