

# Weld Fume Extraction



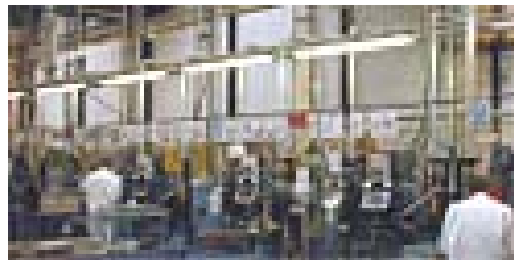
We were asked to design manufacture and install an LEV system for UYT Ltd following OEL readings taken within their manufacturing facility at Coventry



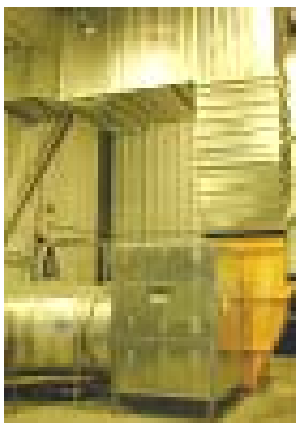
UYT use robotic spot welding machines as well as man operated nut spot weld machines producing harmful weld fume at oot the operator level. Point of extract was therefore agreed upon with central plant filtration, The filtered air is recycled and redistributed back into the manufacturing warehouse



The system was designed to be extended in the future, with the initial fan running at 60 % of total capacity. The initial build catered for 14m<sup>3</sup>/s of extraction with capacity up to 24 m<sup>3</sup>/s. Filtration equipment was installed for the initial load with free area within the plant room for expanded filter location. A fan was selected with future capacity to handle the future load capacity.



The point of extract utilized pivoted, articulate, and flexible extraction arms of varying sizes and types each tailored for the specific need. High face velocity at point of capture is used to ensure weld fume is extracted adequately



The whole project was coordinated with the existing M&E services within the existing manufacturing facility.

The completed installation was completed within the agreed construction programme, within budget and to the satisfaction of the customer, UYT Ltd



**TOTALDUCT**  
UNIT 41 WILFORD INDUSTRIAL EST  
WILFORD, NOTTINGHAM. NG11 7EP  
TEL 0115 914 4885 FAX 0115 914 4886  
EMAIL - SALES@TOTALDUCT.COM  
Design and Build Air Movement and Fabrication Specialists.

**Client:-**  
Unipart  
**Location:-**  
Coventry

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# Particle Extraction



Morganite Industries in Southampton manufacture high specification parts from Graphite for the Aerospace industry. Their core material is Graphite which when machined to create the finished article produces fine dust waste. Whilst this dust is not a danger to Health, it causes a large waste problem. We worked closely with Morganite to come up with a solution.

The answer was to provide “point of Extract Ventilation” right at the source of the problem, and then to transport the captured dust back to a filtration plant, The duct particles are then removed from the air to create recyclable air. This recycled warm air was then re-introduced back into the premises via an Air Sock.



Particle extraction system with central point of collection and filtration.



High velocity LEV was necessary at the point of extract.



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EMAIL - SALES@TOTALDUCT.COM  
Design and Build Air Movement and Fabrication Specialists.

**Client:-**  
Morganite  
**Location:-**  
Southampton

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Ventilation

Project profile