

**PLYMVENT®**

clean air at work

Vredenburg

Atlantis

Malmesbury

Cape Town

CASE STUDY

## CLEAN AND FUME FREE ENVIRONMENT FOR STUDENTS



### THE CHALLENGE

A new facility was erected at the Vredenburg Campus (South Africa) in December 2008. Ventilation was not considered in the development stage of the facility and was, therefore, very poor with only natural air flow through open doors and windows and some 'whirlybirds' in the roof of the building.

It was clear that - with welding being the main training activity to take place in this new facility - the fumes would be a major problem.

[www.westcoastcollege.co.za](http://www.westcoastcollege.co.za)

West Coast College is a public Further Education and Training (FET) College where students gain a meaningful qualification to gain access to the world of work; become an entrepreneur; or enter university, depending on subject choices. The college offers integrated theoretical and practical experience. The West Coast College head office is located in Malmesbury with training facilities throughout South Africa.



**» I only accept the highest quality products and workmanship at the most economical price. «**

QUOTE BY Mister Willie Engelbrecht, head of Welding Training.

WCC counts approx. 2,500 students, of which the full-time equivalent is approx. 1,300. The West Coast College has engineering facilities which cover a wide spectrum of industries including that of welding. The college trains up to 48 students, at any given time, from a skilled level up to Artisan level.

### TESTIMONIAL

Mr. Engelbrecht required an engineered solution that would benefit his students, lecturers and the school in general, that was easy to use and maintain. The automation of the system has also proved to be beneficial from an energy saving perspective as well as a reduction in noise levels at the campus from fans and motors running at full capacity.

## THE SOLUTION

Plymovent supplied and fitted three fully automated welding fume extraction systems with filtration. Each T-Flex arm was fitted with a WL+ AST (working light and arc sensor), which starts up the connected extraction fan automatically every time a student strikes an arc to weld. The fan speed is reduced automatically when welding ceases.

The ductwork was specifically designed by Plymovent SA (Pty) Ltd., to enhance the performance of the telescopic welding fume extraction arms. Plymovent SA (Pty) Ltd. further manufactured, installed and commissioned the project, providing West Coast College with a complete solution.

Capturing welding fumes at source remains the most effective method, extracting the welding fumes, small particles, fine dust and spark and spatter directly at the source of a welding process. This way welding fumes do not get the chance to accumulate. Plymovent offers various extraction arms, available from 1.4 up to 8 metres. By fitting the right fan, filter, control box and arms to one system, optimum extraction is guaranteed. The extraction arms are connected to ductwork. Various settings are possible depending on the local conditions such as flexibility, energy, users' ease and noise level.



## MAIN BENEFITS

### The installation has resulted in the following benefits:

- Clean, healthy work environment for students.
- Productive environment.
- Clean area.
- Energy saving.
- Reduced noise levels.
- No impact to sensitive environments.

### Supplier

Plymovent SA (Pty) Ltd. (Cape Town, South Africa)

## SYSTEM FACTS

### Year of installation

- 2008

### Type of installation

- 3 fully controlled multiple arm systems with telescopic arms type T-Flex

### Filtration

- 3 x SCS central filter unit



ZA-01

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[www.plymovent.com](http://www.plymovent.com)

*Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world. We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.*