

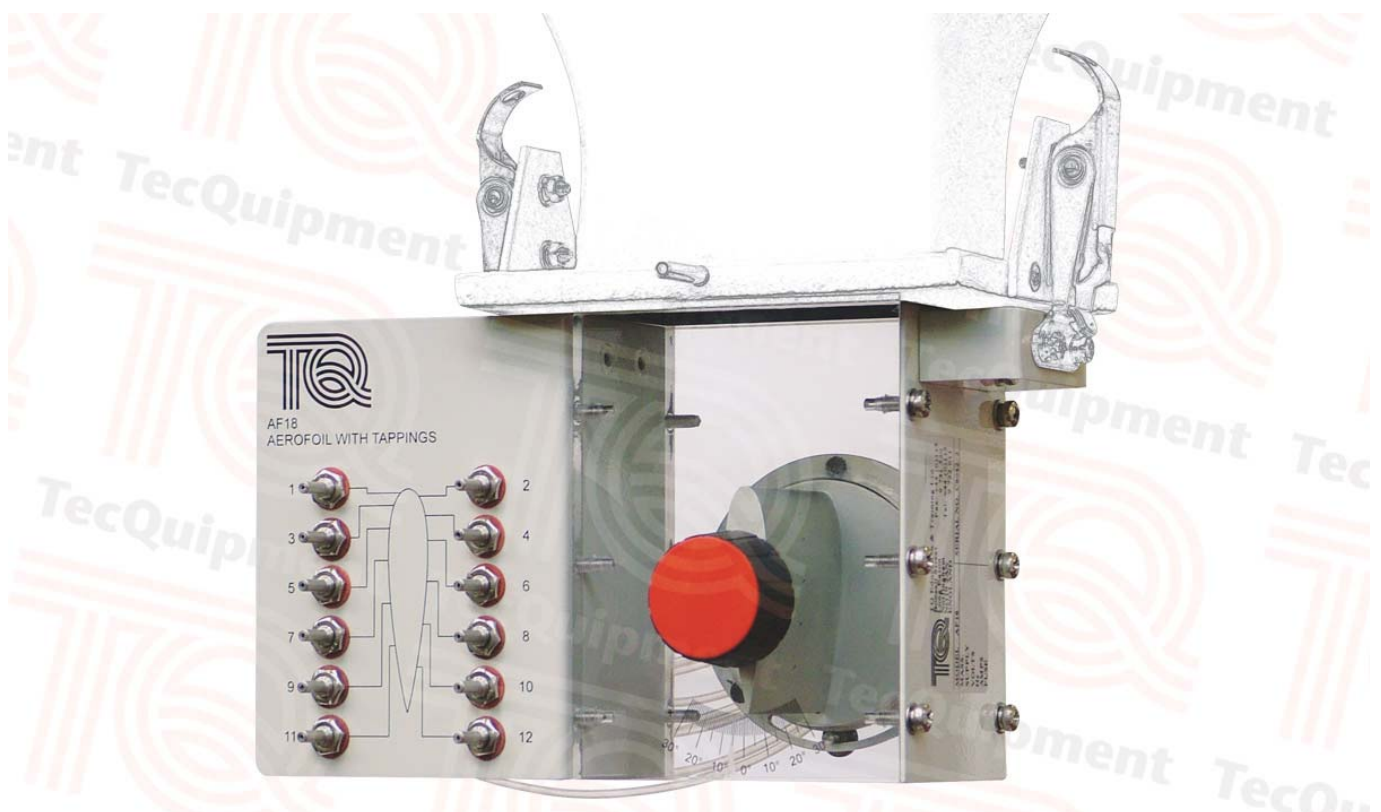


# Aerodynamics

# AF18

## Tapped Aerofoil

***Allows students to investigate the pressure distribution around a two-dimensional aerofoil***



- One of a series of eight experiment modules that fits to the Modular Air Flow Bench (AF10)
- Provides both a visual and analytical experience for students as the manometer readings clearly show both the pattern and magnitude of the pressure distribution
- Serves as a useful companion experiment to the Drag Force Apparatus (AF12)
- Toggle clamp connections to the Modular Air Flow Bench contraction for quick and easy fitment
- Quick-release couplings and clear printed schematic for rapid and reliable pressure measurement connections to the AF10a Manometer
- Transparent front and rear to the test duct with a printed scale allows the experiment to be clearly seen and allows the aerofoil angle to be accurately set

- TecEquipment Ltd, Bonsall Street, Long Eaton, Nottingham NG10 2AN, UK
- **T** +44 115 972 2611 • **F** +44 115 973 1520 • **E** info@tecquipment.com • **W** www.tecquipment.com
- An ISO 9001 certified company

# AF18

# Tapped Aerofoil

## Description

This module consists of a duct with transparent front and rear, between which is mounted a symmetrical aerofoil with a NACA profile. The aerofoil has 12 tapping points at various chordwise positions on its surface allowing the pressure to be measured at that point. The tapping points are permanently connected to a manifold mounted on the duct showing the tapping position and number for easy reference.

The experiment mounts on the Air Flow Bench contraction using toggle clamps. Each one of the tappings connects to the AF10a manometer (ancillary) via flexible tubes fitted with quick-release couplings. The aerofoil may be accurately rotated to various angles of incidence (attack) to the air using the control and printed scale on the front of the duct.

## Standard Features

- Supplied with a comprehensive User Guide
- Five-year warranty
- Manufactured in accordance with the latest European Union directives

## Essential Base Unit

- Modular Air Flow Bench (AF10)

## Essential Ancillaries

- Multitube Manometer (AF10a)

## Experiments

- The visualisation and measurement of the pressure distribution around an aerofoil section.
- Lift characteristics and stall angle of an aerofoil.

## Specifications

*Packed dimensions and weight:*  
0.2 m<sup>3</sup>; 10 kg

## Operating Conditions

*Operating environment:*  
Laboratory

*Storage temperature range:*  
−25°C to +55°C (when packed for transport)

*Operating temperature range:*  
+5°C to +40°C

*Operating relative humidity range:*  
80% at temperatures < 31°C decreasing linearly to 50% at 40°C

*tradition.*

*innovation.*

*integration.*

**infoWERK** is a leading expert in the development of eLearning courseware, learning system solutions, teaching and AV equipment.

**Furthermore infoWERK is the representative and system integrator of "TecQuipment".**

**TecQuipment** is one of the global leaders in technical teaching equipment for engineering. If you are interested in one of TecQuipment's products feel free to contact us at:



**infoWERK Medien & Technik GmbH**

**Martinsbühel 6 / A-6170 Zirl / Austria**

Phone: +43 (0) 5238 52099-0 / Fax: +43 (0) 5238 52099-40

E-Mail: [info@infowerk.at](mailto:info@infowerk.at) / Website: [infowerk.at](http://infowerk.at)

**Otto-Dürr-Straße 25**

**D-70435 Stuttgart, Zuffenhausen/ Germany**

Phone: +49 (0) 711 342471-0 / Fax: +49 (0) 711 342471-11

E-Mail: [info@de.infowerk.at](mailto:info@de.infowerk.at) / Website: [infowerk.at](http://infowerk.at)