

# CERTIFICATE OF ACCREDITATION

*In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act I hereby certify that:-*

**DENEL AVIATION (PTY) LTD**  
**Co. reg no: 1992/001337/07**

Facility Accreditation Number: **210**

is a South African National Accreditation System accredited Calibration laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation, Annexure "A", bearing the above accreditation number for

**PRESSURE METROLOGY**

*The facility is accredited in accordance with the recognised International Standard*

**ISO/IEC 17025:2005**

*The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system*

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

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**Mr R Josias**  
**Acting Chief Executive Officer**

**Effective Date: 15 May 2009**  
**Certificate Expires: 30 April 2012**

# ANNEXURE A

## SCHEDULE OF ACCREDITATION

### PRESSURE METROLOGY

Laboratory Accreditation Number: 210

<p><b>Permanent Address of Laboratory:</b> Denel Aviation Calibration Services Building D2 Ground Floor Astro Park, Atlas Road Bonaero Park</p> <p><b>Postal Address:</b> P O Box 7246 Bonaero Park 1622</p> <p>Tel : (011) 927-3133 Fax : (011) 927-2128 E-mail : <a href="mailto:apiedv@denelaviation.co.za">apiedv@denelaviation.co.za</a></p>	<p><b>Technical Signatory</b> : Mr HJT Labuschagne : Mr JA Pieters : Mr CA van den Bergh (Item 3.1.1 and 3.2.1)</p> <p><b>Nominated Representative</b> : Mr AH de Vries</p> <p>Issue No. : 06 Date of issue : 14 April 2010 Expiry date : 30 April 2012</p>		
ITEM	MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT	NOMINAL RANGE OF MEASUREMENT QUANTITY	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)
<b>3.1 Absolute Pressure</b>			
3.1.1	Gas Medium <ul style="list-style-type: none"> <li>• Barometer</li> <li>• Pressure Gauges</li> <li>• Digital manometer</li> <li>• Pressure Transmitters</li> </ul>	2 kPa to 700 kPa 700 kPa to 7 MPa	± (0,0035 % + 3,0 Pa) ± (0,0035 % + 10 Pa)
<b>3.2 Gauge Pressure</b>			
3.2.1	Gas Medium <ul style="list-style-type: none"> <li>• Pressure Gauge</li> <li>• Digital manometer</li> <li>• Pressure Transmitters</li> </ul>	2 kPa to 700 kPa 700 kPa to 7 MPa	± (0,0035 % + 1,8 Pa) ± (0,0035 % + 10 Pa)
3.2.2	Liquid Medium <ul style="list-style-type: none"> <li>• Pressure Gauge</li> <li>• Pressure Balance</li> <li>• Pressure Transmitters</li> </ul>	100 kPa to 4 MPa 4 MPa to 40 MPa 40 MPa to 82 MPa	± (0,012 % + 40 Pa) ± (0,015 % + 250 Pa) ± (0,017 % + 250 Pa)

Original date of accreditation: 01 February 2002

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The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor  $k = 2$ , corresponding to a confidence level of approximately 95%

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

**Field Manager**