Schedule of Accreditation

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National Gear Metrology Laboratory

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Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement		Measurement Capability Expressed as an Expanded Uncertainty (k=2)
RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED			
GEARS, GEAR ARTEFACTS, SPLINE GAUGES (see notes) **External**			
Profile total error (F_α)	Helix angle 0 to 55°	0.15 to 25 Module	1.7
Profile slope error ($f_{H\alpha}$)			1.5
Profile form error ($f_{f\alpha}$)			1.7
Helix (alignment) total error (F_β)			1.7
Helix (alignment) slope error ($f_{H\beta}$)			1.5
Helix (alignment) form error ($f_{f\beta}$)			1.7
Single pitch (f_p)			1.5
Single pitch difference (f_u)			1.5
Cumulative pitch (F_p)			1.8
Radial runout of tooth space (F_r)			3.3
Normal circular tooth thickness (S_n)			2.2
Dimension over/pins or balls (Mdr or Mdk)	5 to 250 diameter		2.2

Materials/Products tested	Type of test/Properties measured/Range of measurement		Measurement Capability Expressed as an Expanded Uncertainty (k=2)
RANGE IN MILLIMETRES AND UNCERTAINTY IN MICROMETRES UNLESS OTHERWISE STATED			
GEARS, GEAR ARTEFACTS, SPLINE GAUGES (see notes) (cont'd) **Internal**			
Profile total error (F_α)	Helix angle 0 to 55°	0.15 to 25 Module	1.7
Profile slope error ($f_{H\alpha}$)			1.5
Profile form error ($f_{f\alpha}$)			1.7
Helix (alignment) total error (F_β)			1.7
Helix (alignment) slope error ($f_{H\beta}$)			1.5
Helix (alignment) form error ($f_{f\beta}$)			1.7
Single pitch (f_p)			1.5
Single pitch difference (f_u)			1.5
Cumulative pitch (F_p)			1.8
Radial runout of tooth space (F_r)			3.3
Normal circular tooth thickness(S_n)			2.5
Dimension between pins or balls (Mdr or Mdk)	15 to 250 diameter		2.2

NOTES

1. Measured by comparison with reference artefacts.

2. Gears of the following capacities may be calibrated: Maximum diameter 650 mm, Maximum length 1000 mm, Max Weight 800 kg.

3. The uncertainties stated assume that journal diameters or reference surfaces have been used to define the measurement axis.

END