

$u(x_i)$	Source of the uncertainty	Distribution	Relative variability range (%)			Factor	Relative standard uncertainty (%)		
			Method 1	Method 2	Method 3		Method 1	Method 2	Method 3
u_{ri}	Repeatability	Normal	0.050	0.20	0.20	1	0.050	0.20	0.20
u_{rp}	Reproducibility	Normal	0.20	0.80	0.80	1	0.20	0.80	0.80
u_{mt}	Transversal acceleration of the bench	Rectangular	0.15	0.10	0.10	$\frac{1}{\sqrt{3}}$	0.087	0.058	0.058
u_d	Distortion	Normal	0.060	0.060	0.060	1	0.060	0.060	0.060
u_{sc}	Conditioner stability	Rectangular	0.060	0.060	0.060	$\frac{1}{\sqrt{3}}$	0.035	0.035	0.035
u_v	Velocity error	Normal	0.15	0.030	0.030	1	0.15	0.030	0.030
u_{mv}	Voltage	Normal	0.040	0.30	0.30	1	0.040	0.30	0.30
u_{amp}	Gain amplifier noise	Normal	0.10	0.050	0.050	1	0.10	0.050	0.050
u_{te}	Temperature	Normal	0.080	0.060	0.060	1	0.080	0.060	0.060
u_α	Angle α	Rectangular	n/a	x 2.1	x 1.7	$\frac{1}{\sqrt{3}}$	n/a	x 1.2	x 1.0
				y 2.1	y 1.7			y 1.2	y 1.0
				z 0.0	z 0.0			z 0.0	z 0.0
u_θ	Angle θ	Rectangular	n/a	x 0.37	x 0.37	$\frac{1}{\sqrt{3}}$	n/a	x 0.21	x 0.21
				y 0.37	y 0.37			y 0.21	y 0.21
				z 0.73	z 0.73			z 0.42	z 0.42
u_{ts}	Transversal sensitivities	Normal	n/a	2.0	n/a	1	n/a	2.0	n/a
u_{off}	Offset effect	Rectangular	n/a	n/a	1	$\frac{1}{\sqrt{3}}$	n/a	n/a	0.58

Relative composed uncertainties (%) of the main sensitivities, $u_c(S)$

Method 1:

$$u_c(S) = \sqrt{\sum_i u(x_i)^2} = 0.31$$

for x , y and z

Method 2:

$$u_c(S) = \sqrt{\sum_i u(x_i)^2} =$$

2.5 for x
2.5 for y
2.2 for z

Method 3:

$$u_c(S) = \sqrt{\sum_i u(x_i)^2}$$

1.5 for x
1.5 for y
1.1 for z