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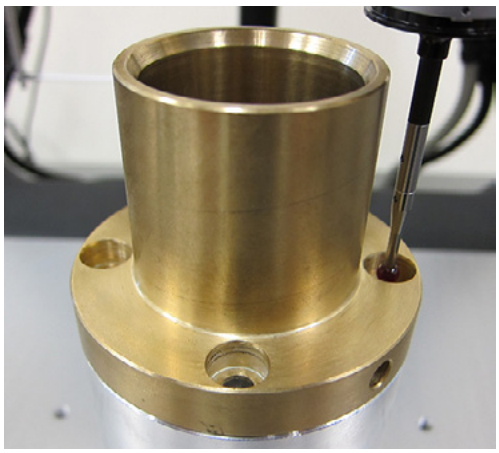
Gauge R&R study – brass sleeve

Industry: Drives



Type 1 Gauge R&R

Type 1 tests are simple repeatability trials with one operator, one part and multiple repetitions. Results show gauge repeatability.

Test conditions, type 1

Gauging cycle time:	47 sec
Number of repetitions:	32

Test results, type 1

	Feature measured	Cg	Cgk	% of tolerance
∅	C'bore	27.11	27.02	0.74
⊥	C'bore perp	4.52	4.51	4.43
∅	40mm bore	27.11	27.02	0.74
⟷	Flange-top dist.	27.11	27.02	0.74

Type 2 Gauge R&R

Type 2 tests involve multiple operators, multiple parts and multiple repetitions. Results give an indication of real world conditions, including factors such as gauge repeatability, fixture distortion and operator inconsistencies.

Test conditions, type 2

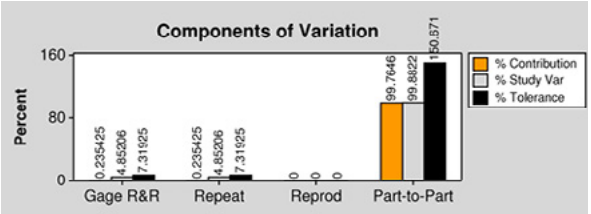
Gauging cycle time:	47 sec
Number of components:	3
Mastering frequency:	3
Number of operators:	4
Number of repetitions:	7
Total gauging operations:	84

Test results, type 2

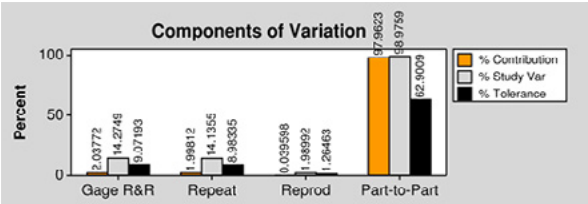
	Feature measured	Tolerance	% of tolerance*
∅	C'bore	0.04	7.32
⊥	C'bore perp.	0.04	9.07
∅	40mm bore	0.05	8.73
⟷	Flange-top dist.	0.04	9.00

*R&R of measuring process (using Equator) as % of tolerance

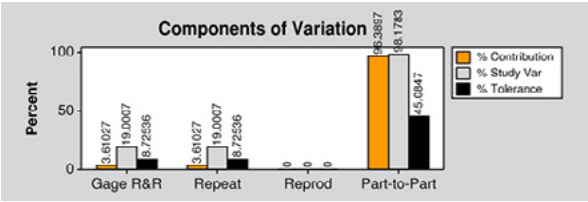
∅ C'bore



⊥ C'bore 9 o' clock perpendicularity



∅ 40 bore



⟷ Distance between flange face and top plane