Gage R&R Study Upper Jaw

Mesiodistal widths 17 to 27

COPY FROM 17-27

Gage R&R Study - XBar/R Method

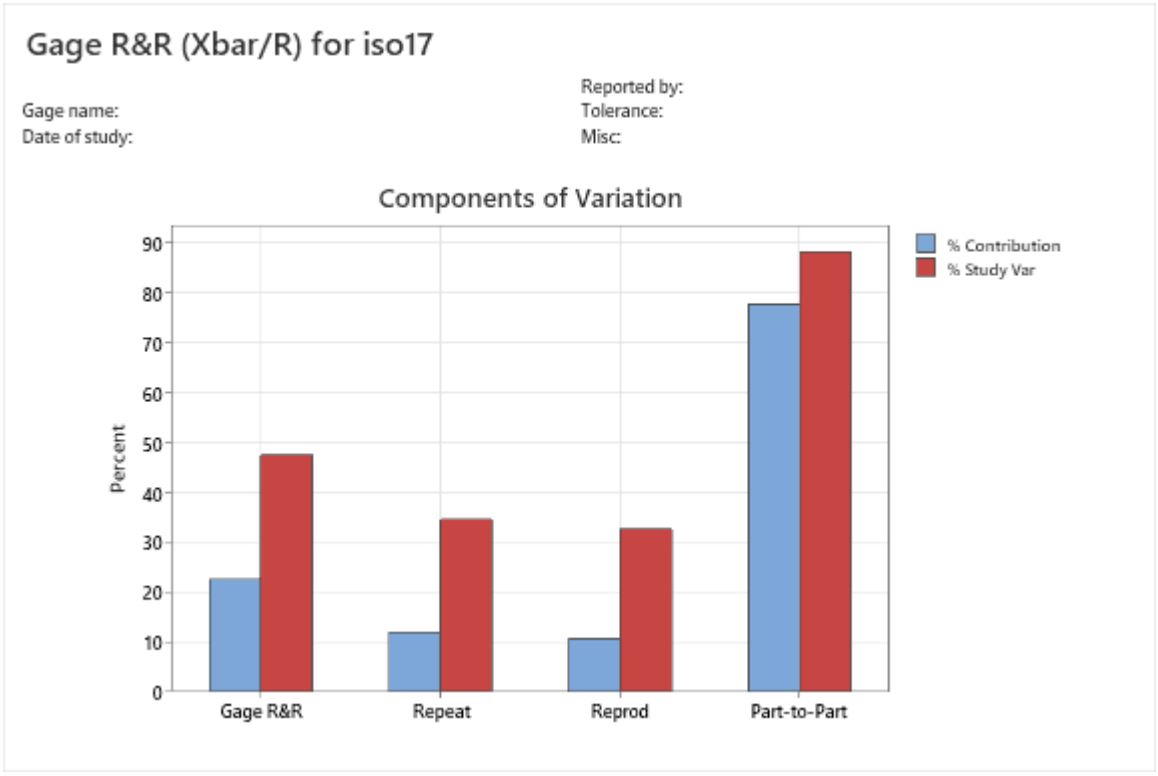
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.064375	22.45
Repeatability	0.034064	11.88
Reproducibility	0.030311	10.57
Part-To-Part	0.222368	77.55
Total Variation	0.286742	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.253722	1.52233	47.38
Repeatability	0.184564	1.10739	34.47
Reproducibility	0.174099	1.04460	32.51
Part-To-Part	0.471559	2.82935	88.06
Total Variation	0.535483	3.21290	100.00

Number of Distinct Categories = 2

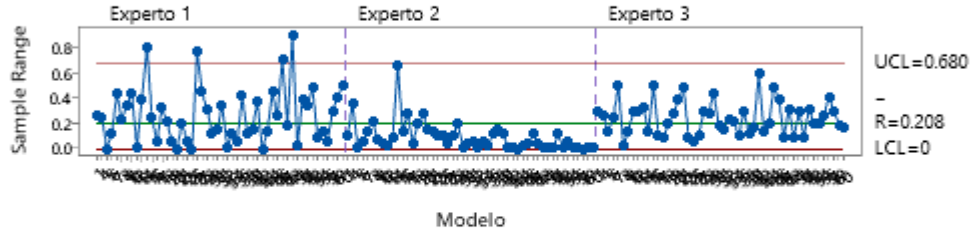


Gage R&R (Xbar/R) for iso17

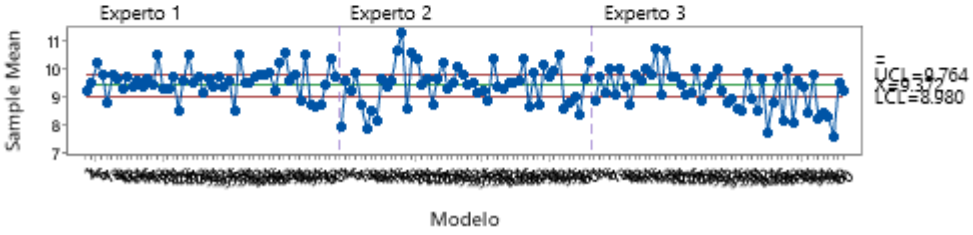
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

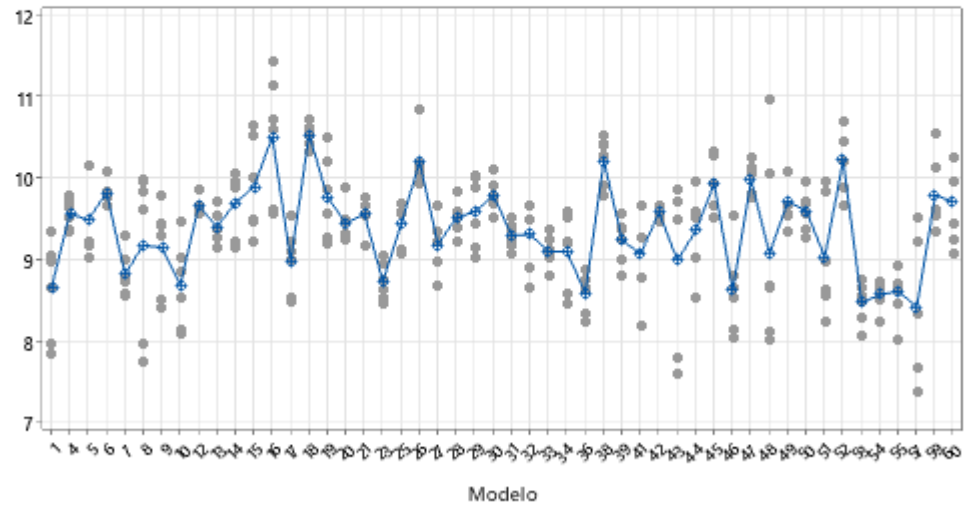


Gage R&R (Xbar/R) for iso17

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

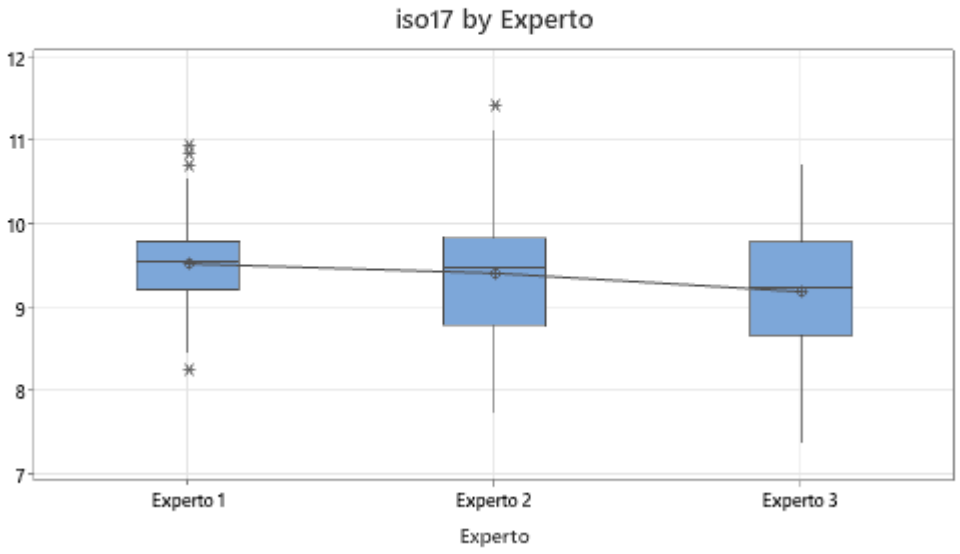
iso17 by Modelo



Gage R&R (Xbar/R) for iso17

Gage name:
Date of study:

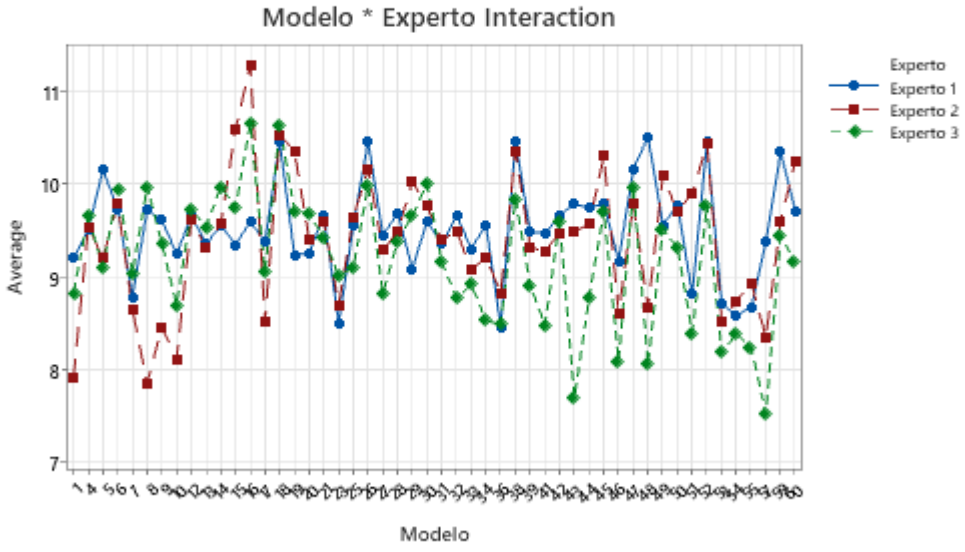
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso17

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

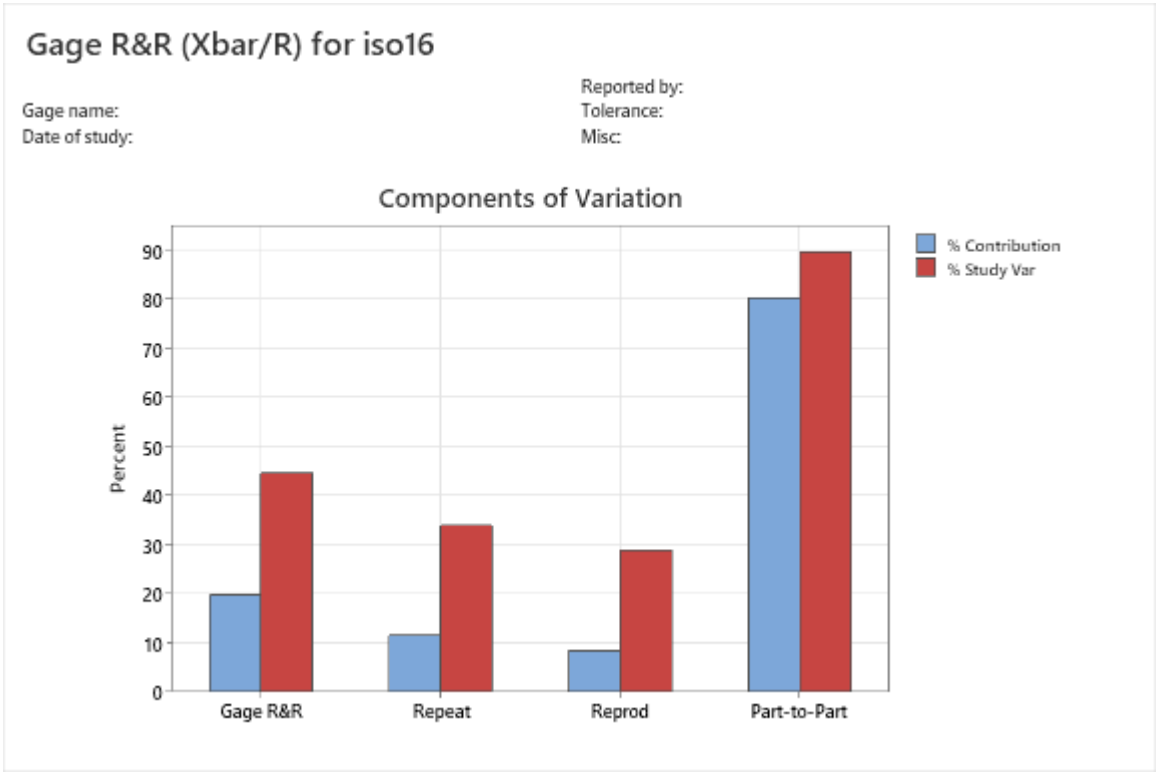
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.058618	19.79
Repeatability	0.033973	11.47
Reproducibility	0.024645	8.32
Part-To-Part	0.237642	80.21
Total Variation	0.296260	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.242112	1.45267	44.48
Repeatability	0.184318	1.10591	33.86
Reproducibility	0.156987	0.94192	28.84
Part-To-Part	0.487485	2.92491	89.56
Total Variation	0.544298	3.26579	100.00

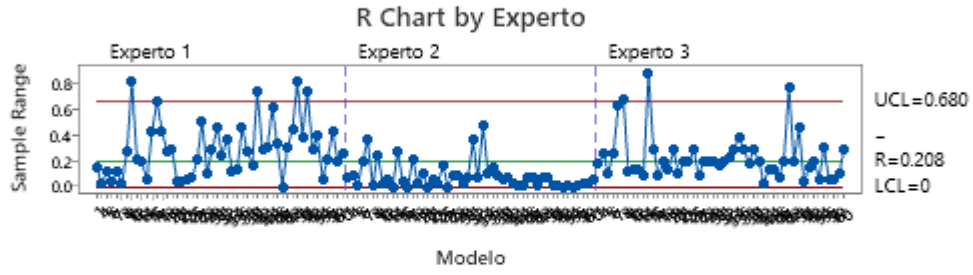
Number of Distinct Categories = 2

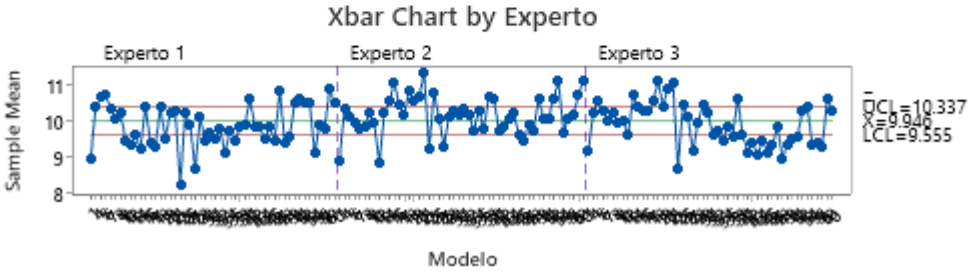


Gage R&R (Xbar/R) for iso16

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

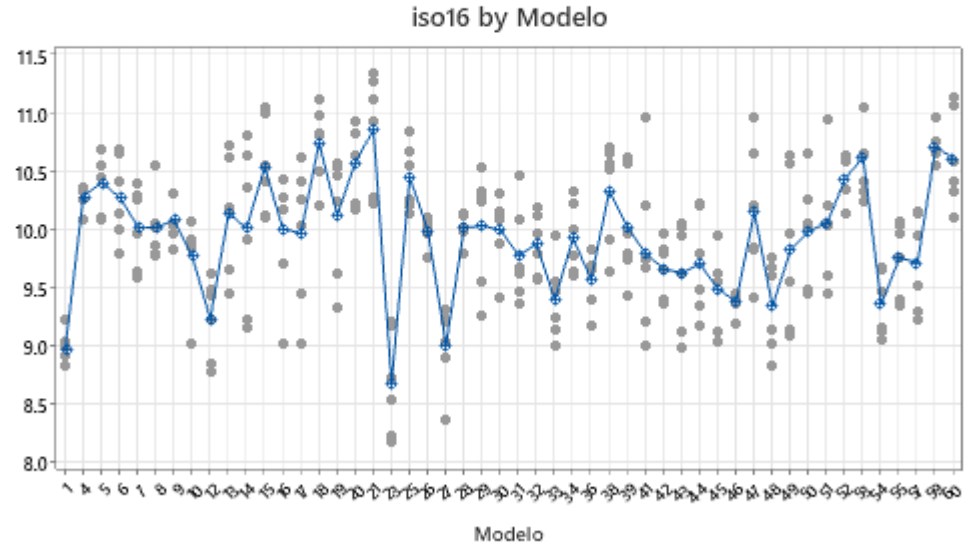




Gage R&R (Xbar/R) for iso16

Gage name:
Date of study:

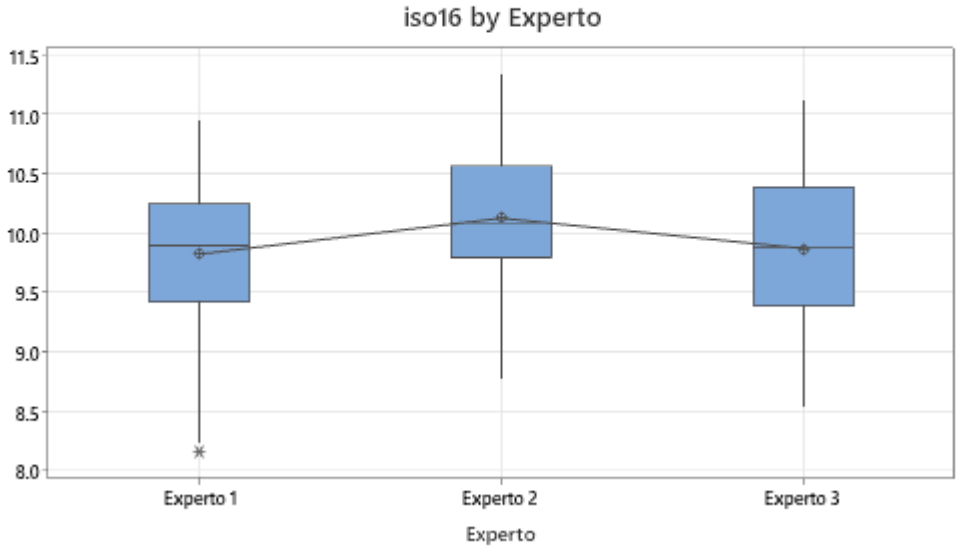
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso16

Gage name:
Date of study:

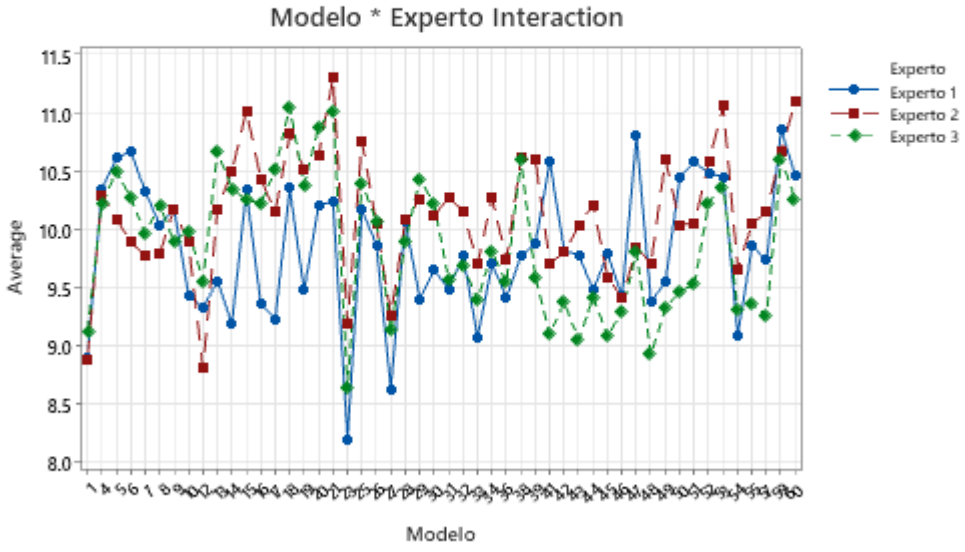
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso16

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

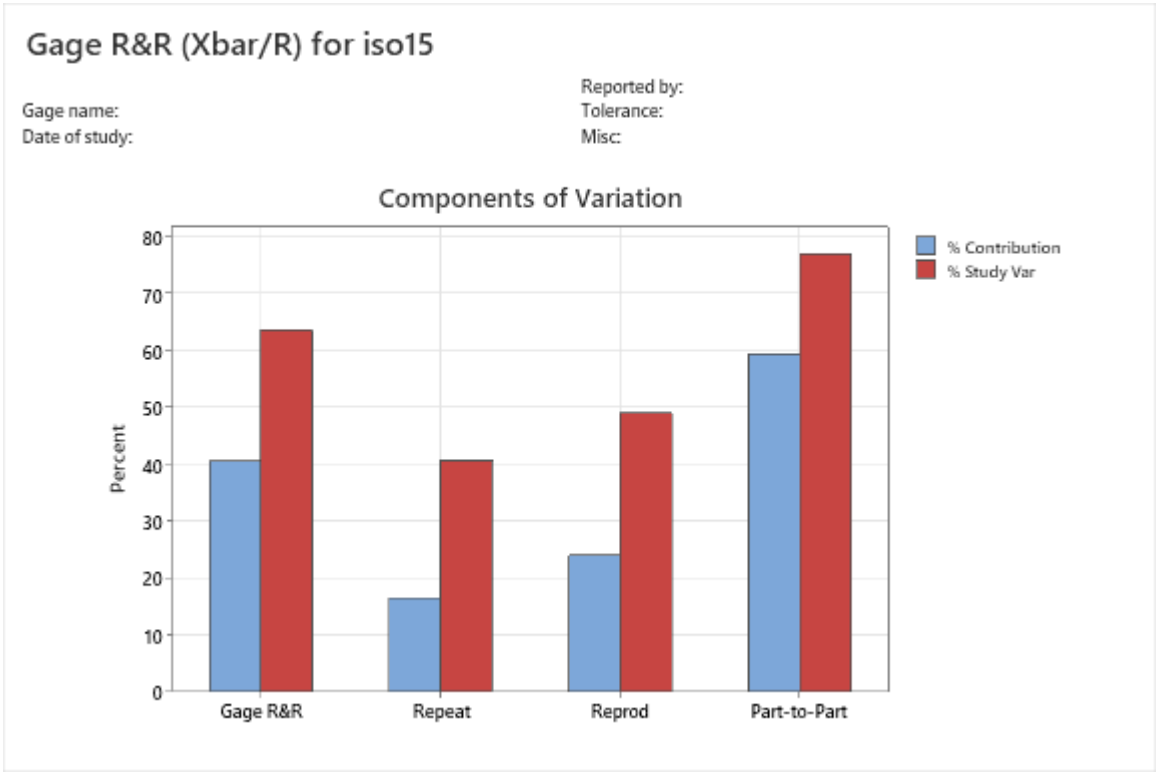
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.090840	40.57
Repeatability	0.037031	16.54
Reproducibility	0.053809	24.03
Part-To-Part	0.133077	59.43
Total Variation	0.223917	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.301396	1.80838	63.69
Repeatability	0.192434	1.15460	40.67
Reproducibility	0.231968	1.39181	49.02
Part-To-Part	0.364797	2.18878	77.09
Total Variation	0.473198	2.83919	100.00

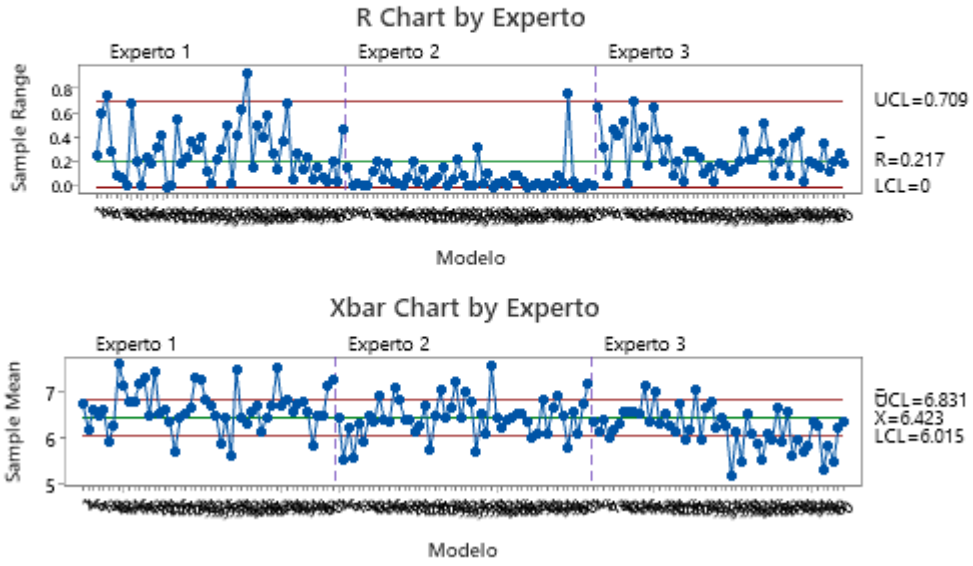
Number of Distinct Categories = 1



Gage R&R (Xbar/R) for iso15

Gage name:
Date of study:

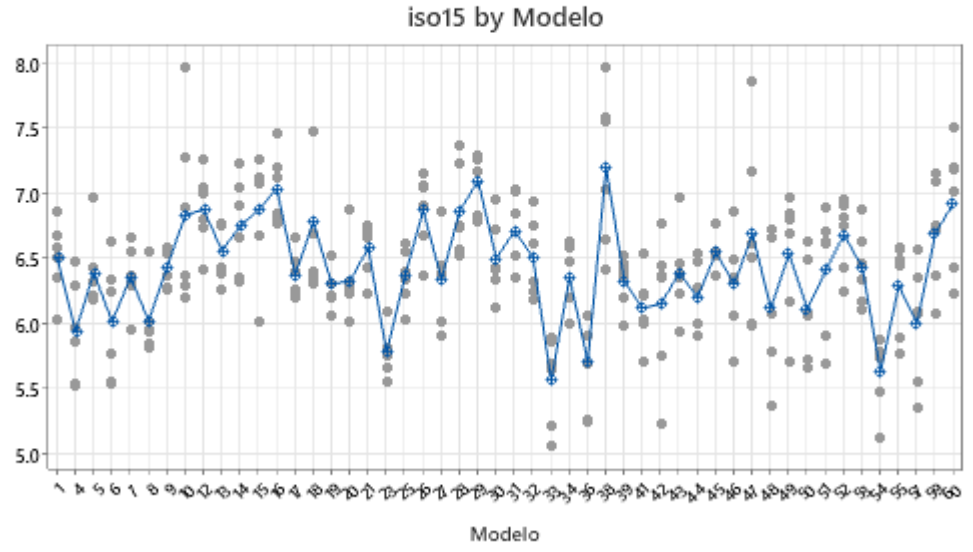
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso15

Gage name:
Date of study:

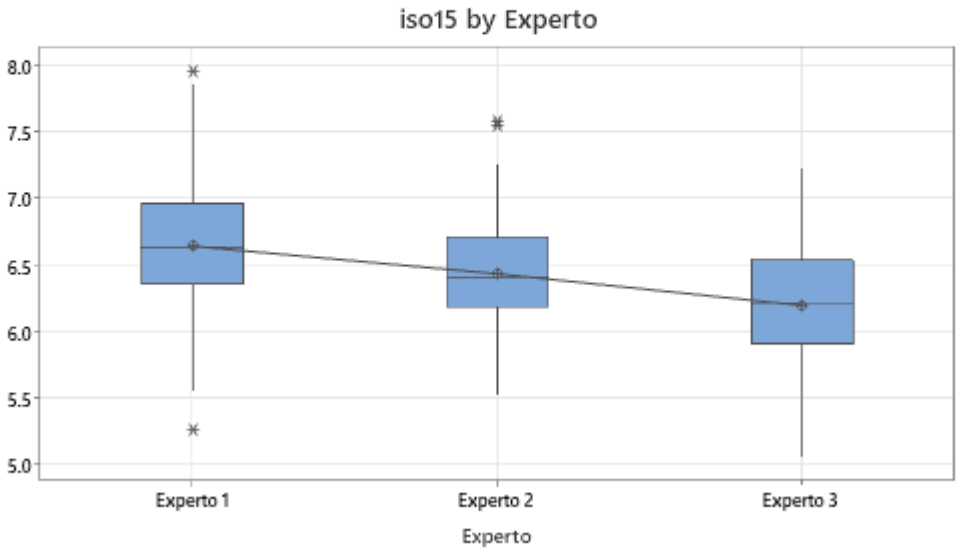
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso15

Gage name:
Date of study:

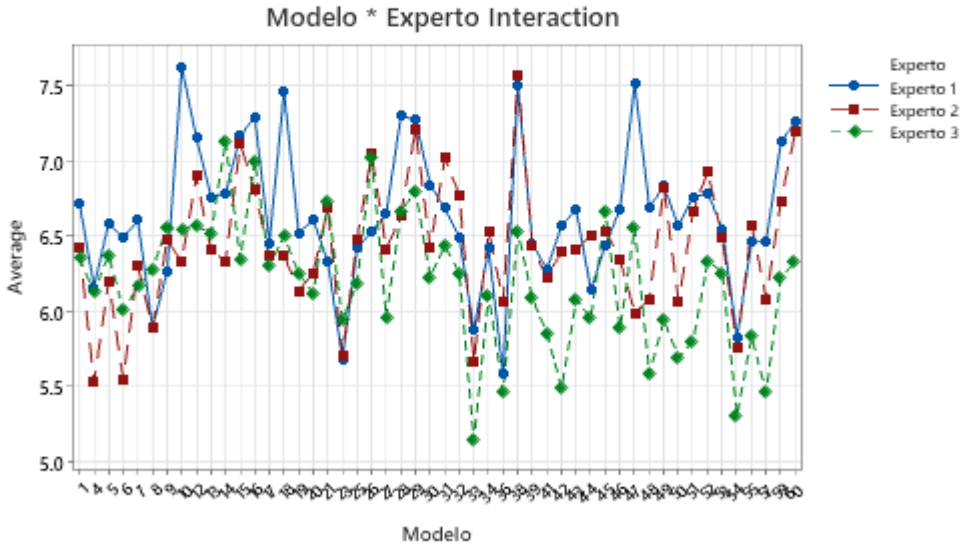
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso15

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

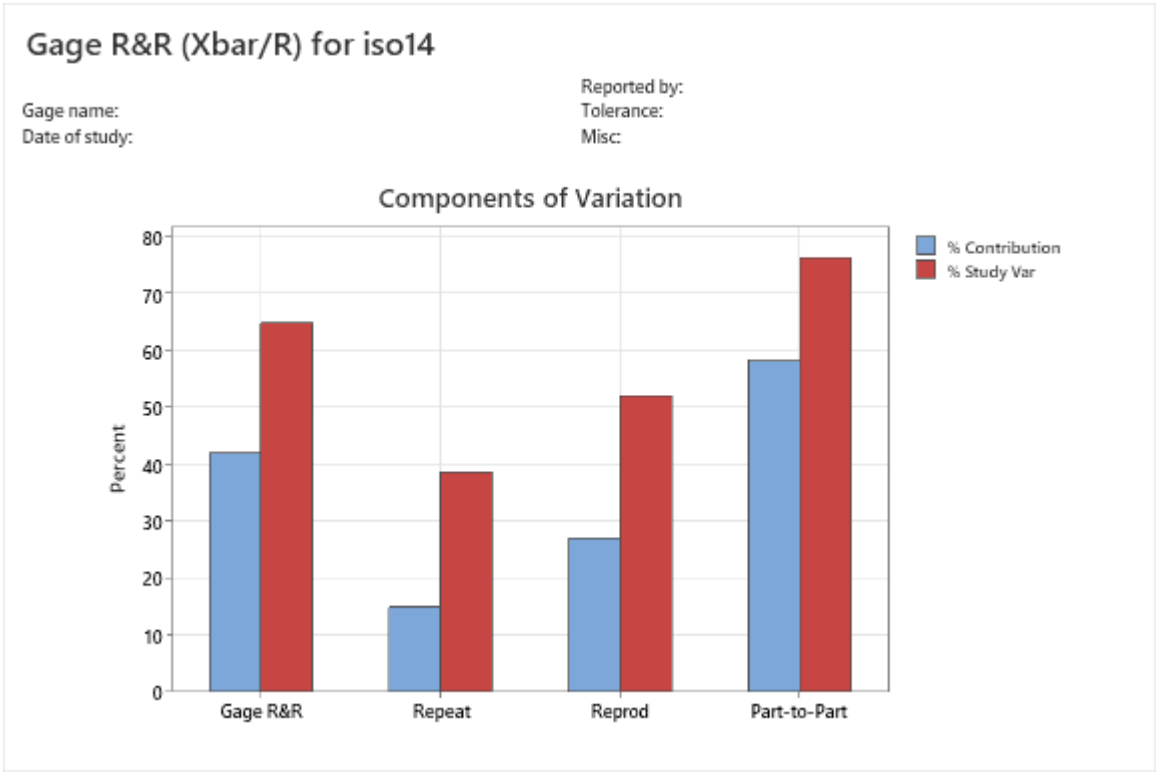
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.137926	41.90
Repeatability	0.049054	14.90
Reproducibility	0.088872	27.00
Part-To-Part	0.191218	58.10
Total Variation	0.329144	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.371384	2.22830	64.73
Repeatability	0.221482	1.32889	38.61
Reproducibility	0.298114	1.78868	51.96
Part-To-Part	0.437285	2.62371	76.22
Total Variation	0.573711	3.44226	100.00

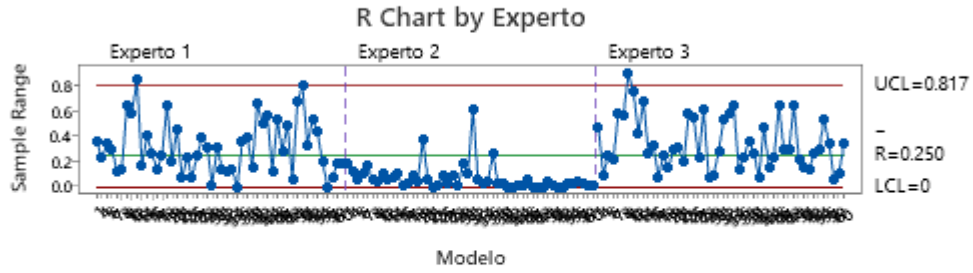
Number of Distinct Categories = 1

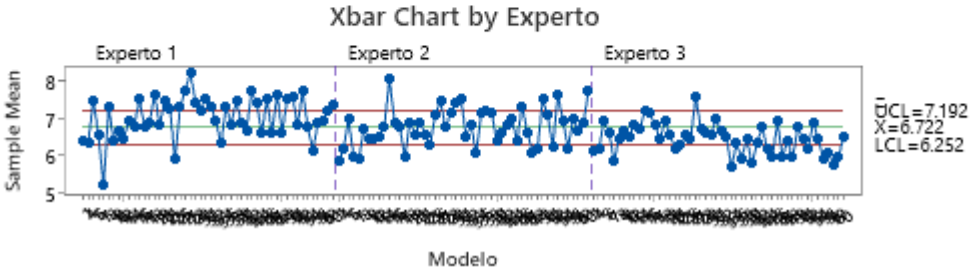


Gage R&R (Xbar/R) for iso14

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

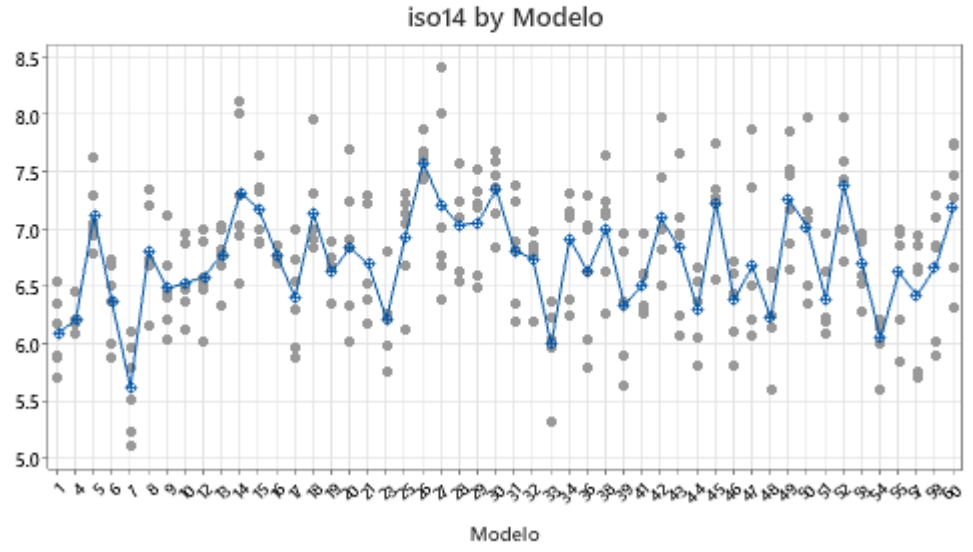




Gage R&R (Xbar/R) for iso14

Gage name:
Date of study:

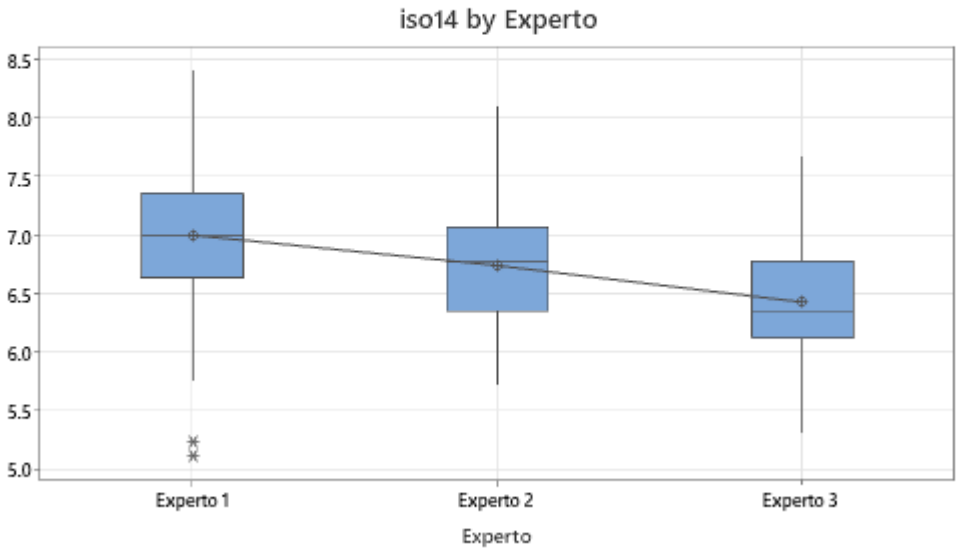
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso14

Gage name:
Date of study:

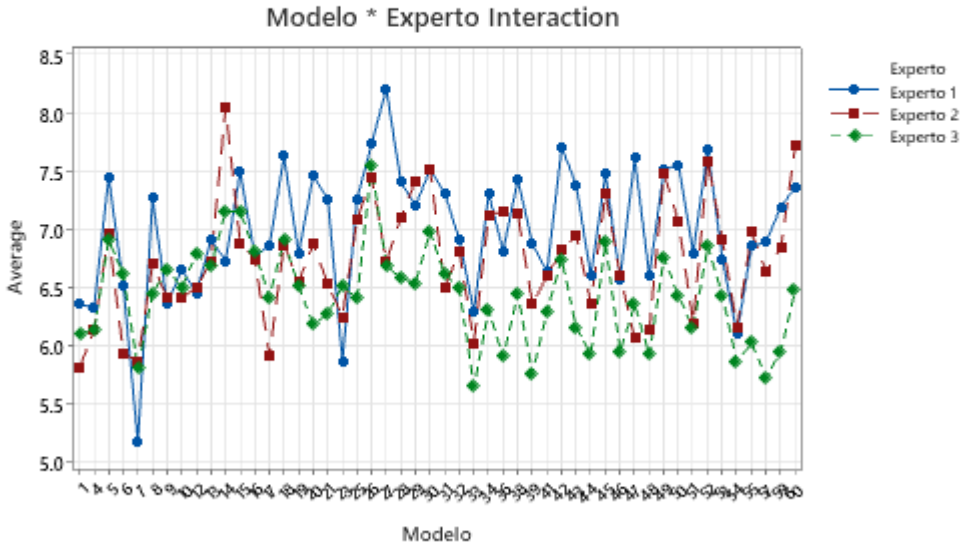
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso14

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

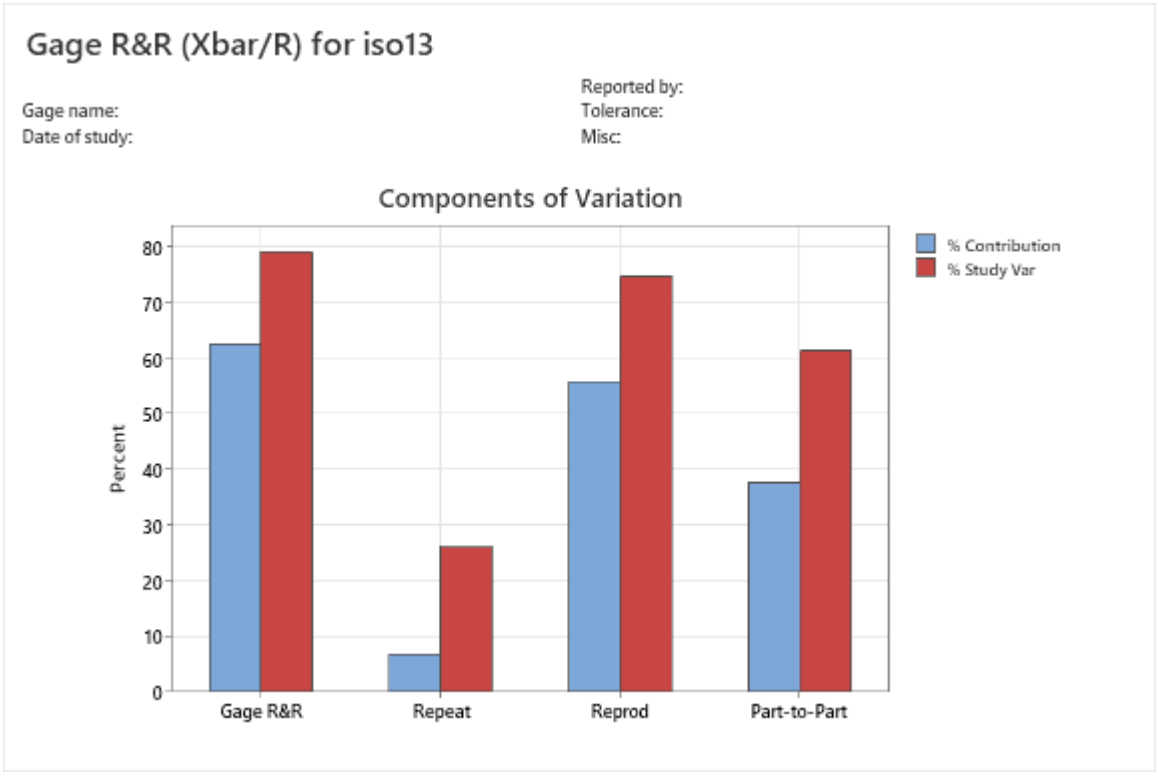
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.307737	62.45
Repeatability	0.033268	6.75
Reproducibility	0.274469	55.70
Part-To-Part	0.185035	37.55
Total Variation	0.492772	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.554741	3.32844	79.03
Repeatability	0.182395	1.09437	25.98
Reproducibility	0.523898	3.14339	74.63
Part-To-Part	0.430156	2.58094	61.28
Total Variation	0.701977	4.21186	100.00

Number of Distinct Categories = 1

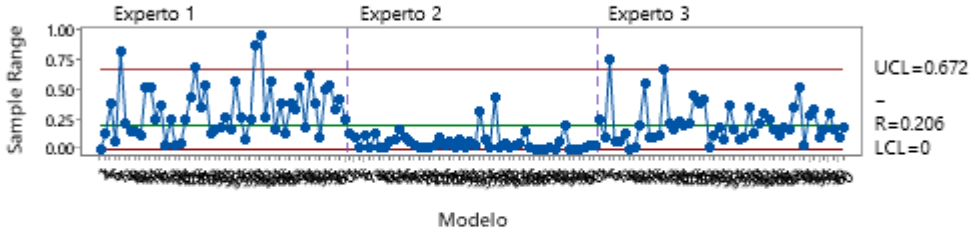


Gage R&R (Xbar/R) for iso13

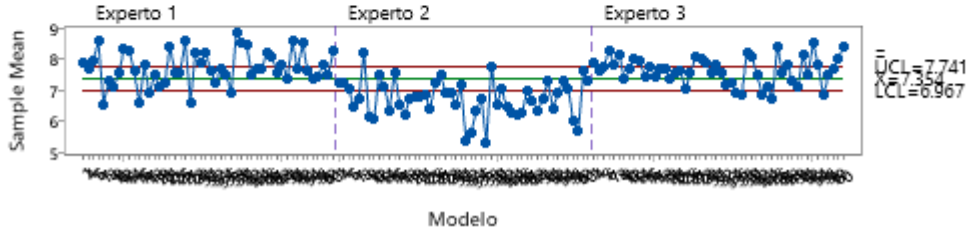
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

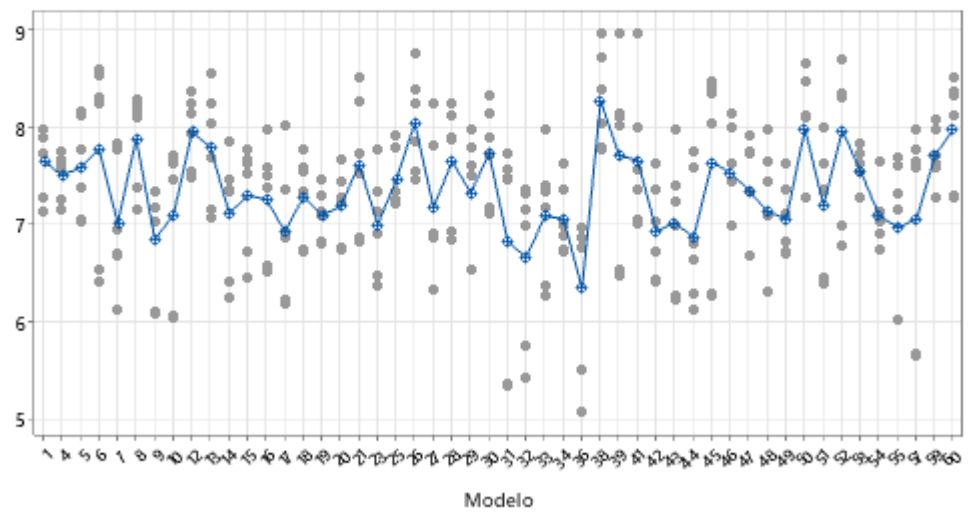


Gage R&R (Xbar/R) for iso13

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

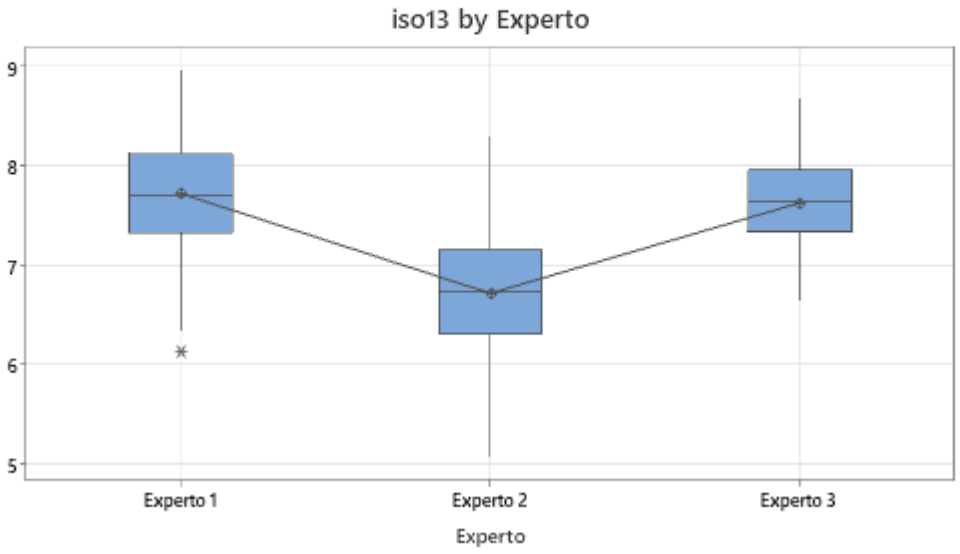
iso13 by Modelo



Gage R&R (Xbar/R) for iso13

Gage name:
Date of study:

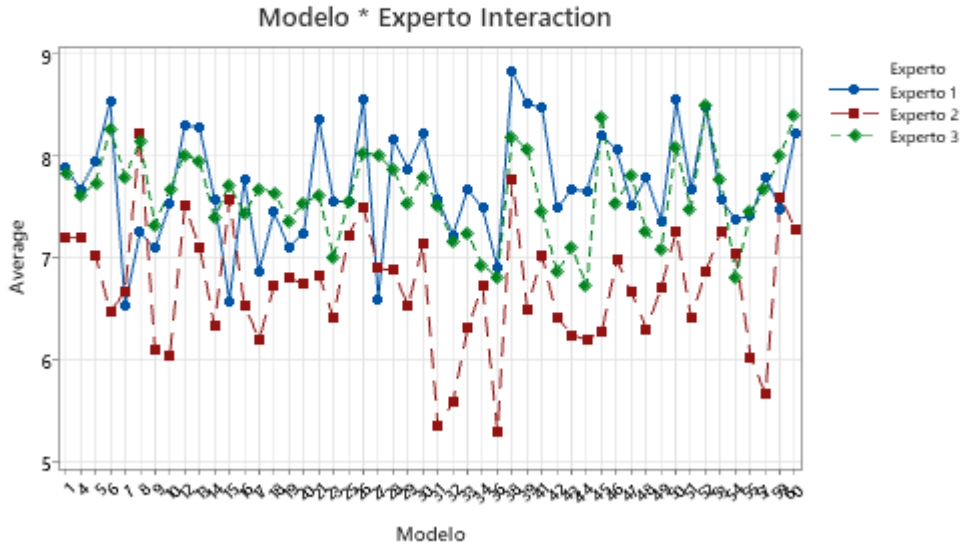
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso13

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

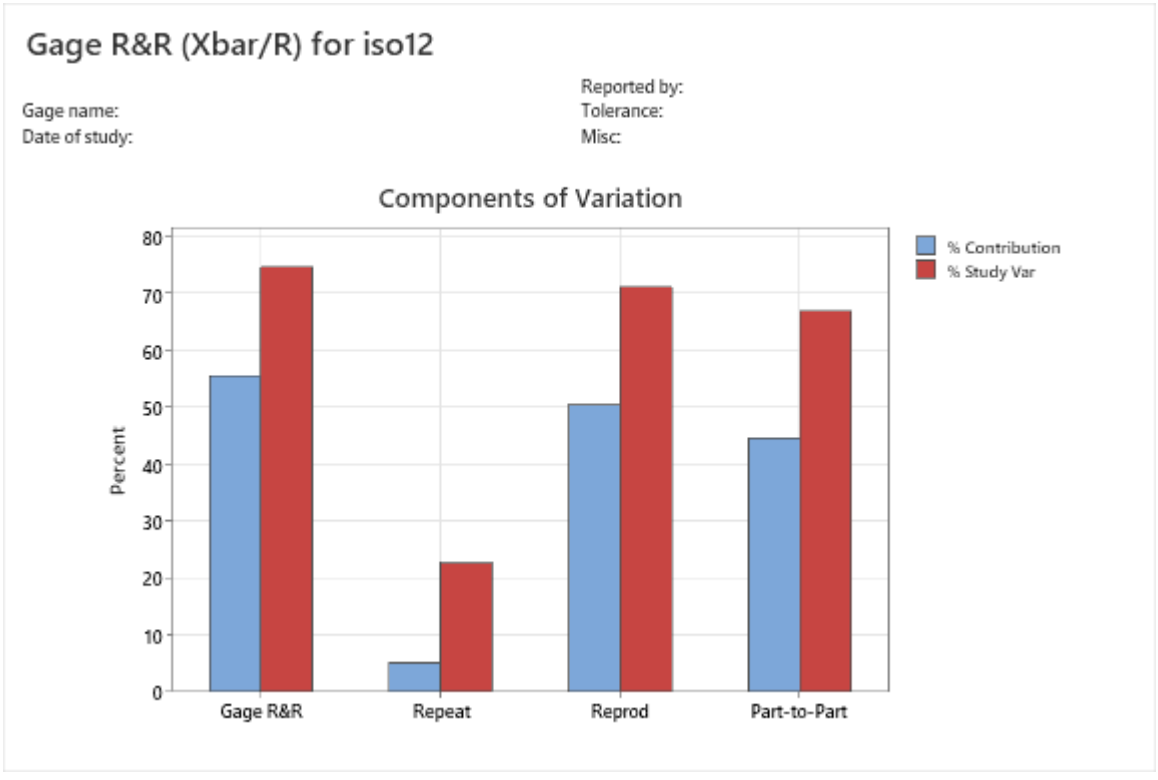
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.258970	55.46
Repeatability	0.023843	5.11
Reproducibility	0.235127	50.35
Part-To-Part	0.208021	44.54
Total Variation	0.466990	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.508891	3.05334	74.47
Repeatability	0.154411	0.92646	22.60
Reproducibility	0.484899	2.90939	70.96
Part-To-Part	0.456093	2.73656	66.74
Total Variation	0.683367	4.10020	100.00

Number of Distinct Categories = 1

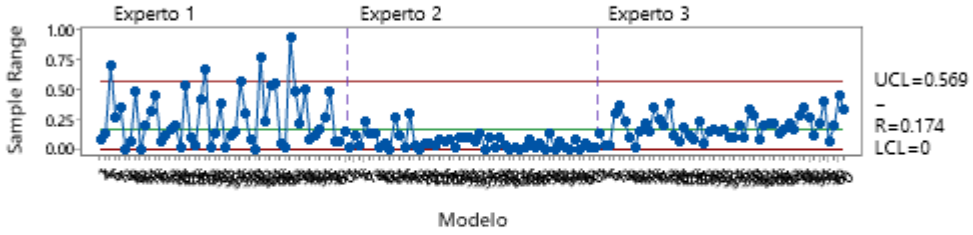


Gage R&R (Xbar/R) for iso12

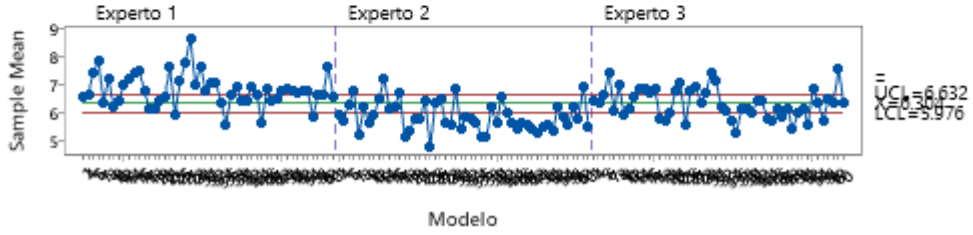
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

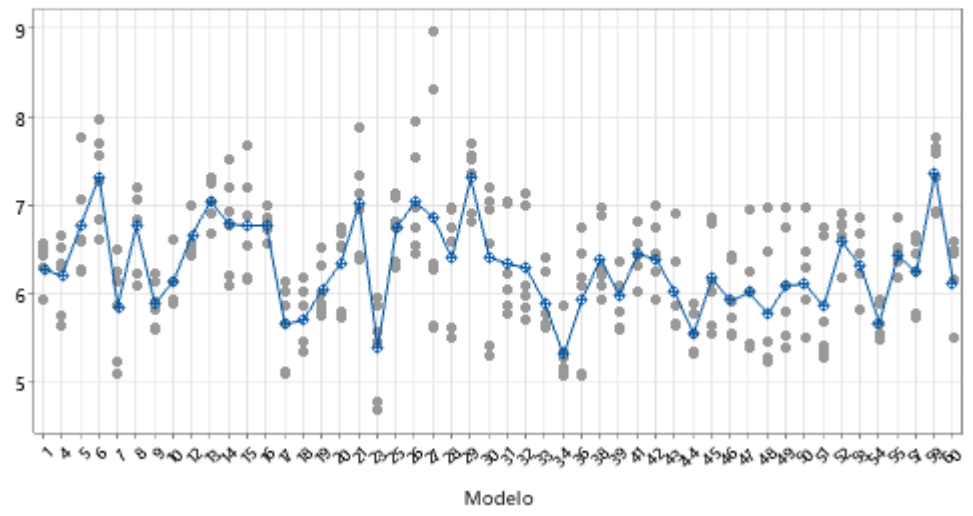


Gage R&R (Xbar/R) for iso12

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

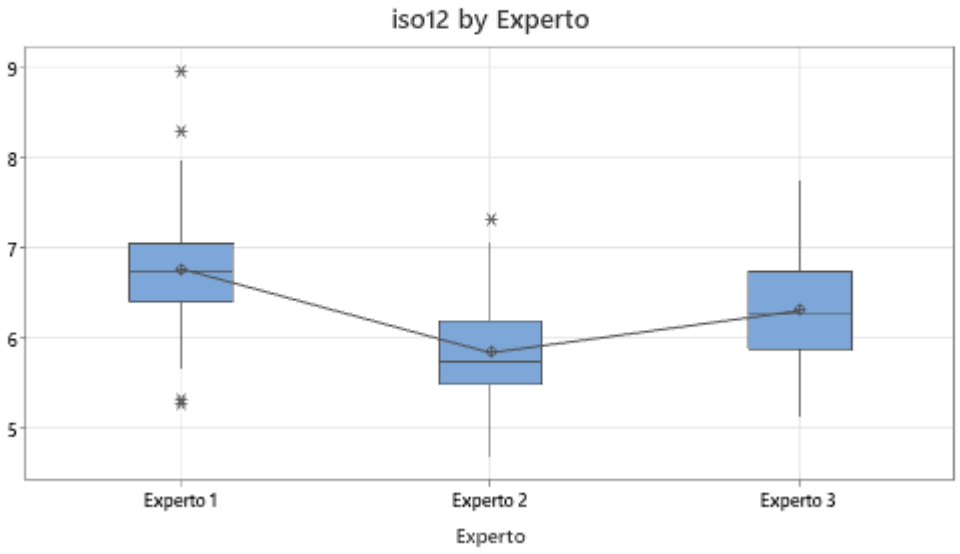
iso12 by Modelo



Gage R&R (Xbar/R) for iso12

Gage name:
Date of study:

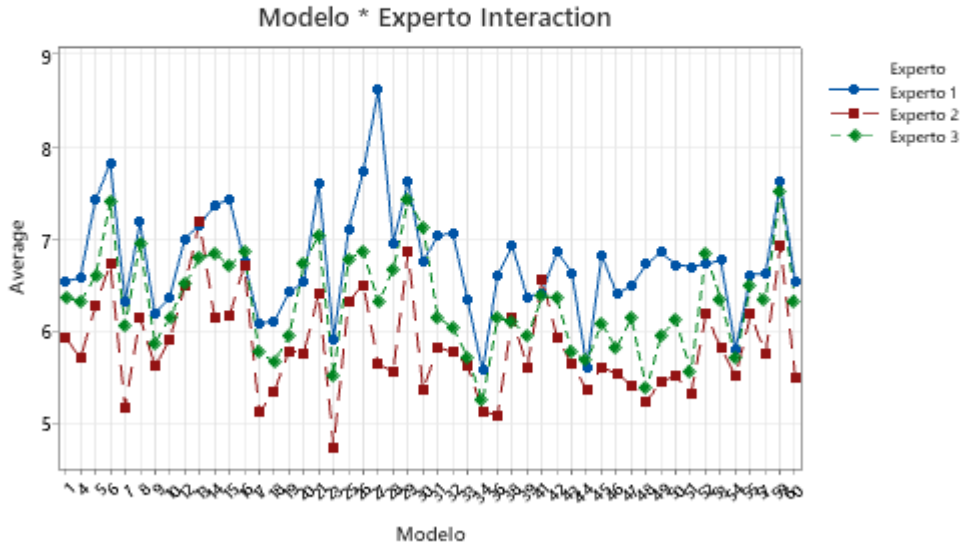
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso12

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



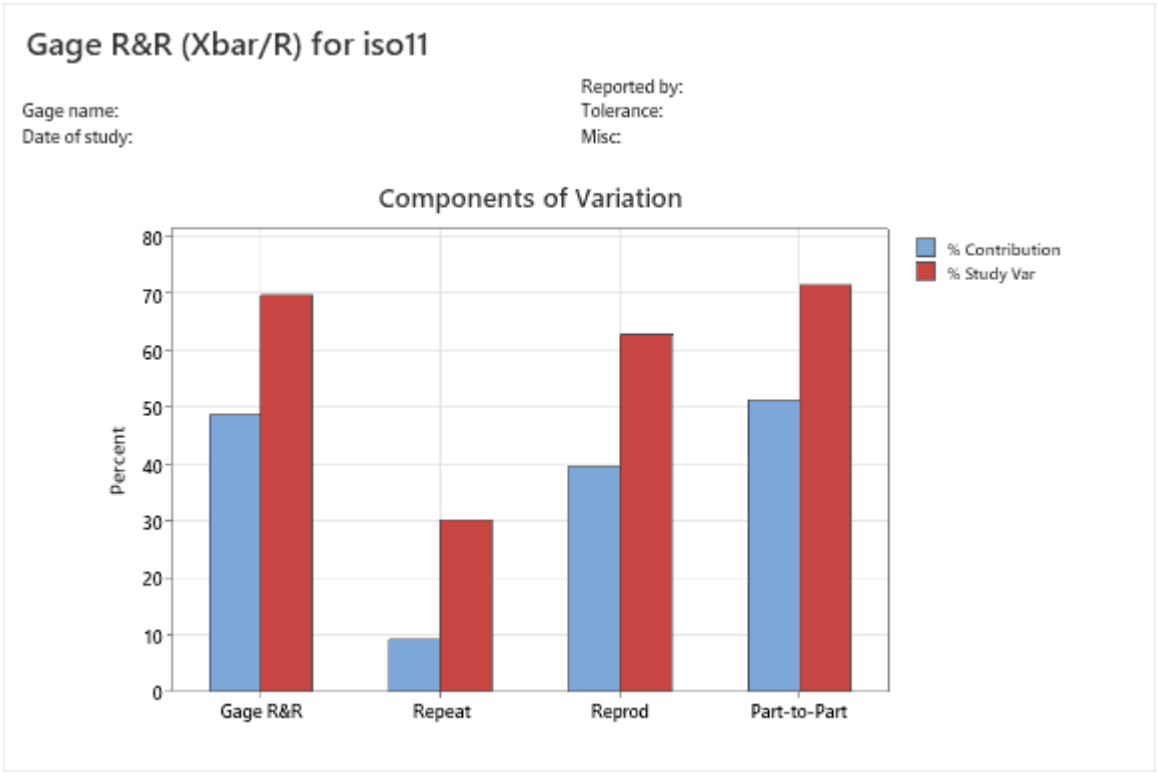
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.159969	48.76
Repeatability	0.030099	9.18
Reproducibility	0.129870	39.59
Part-To-Part	0.168082	51.24
Total Variation	0.328051	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.399961	2.39976	69.83
Repeatability	0.173491	1.04094	30.29
Reproducibility	0.360374	2.16225	62.92
Part-To-Part	0.409978	2.45987	71.58
Total Variation	0.572757	3.43654	100.00

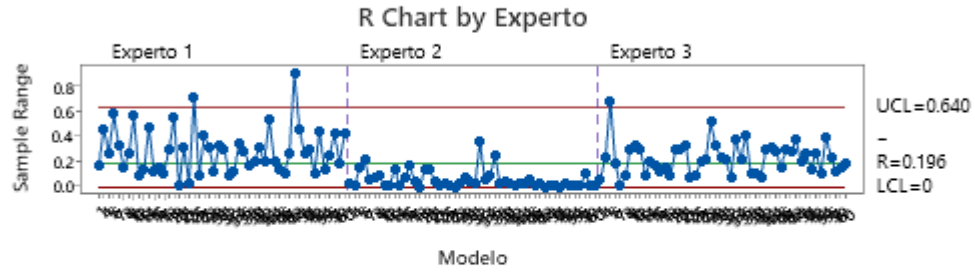
Number of Distinct Categories = 1

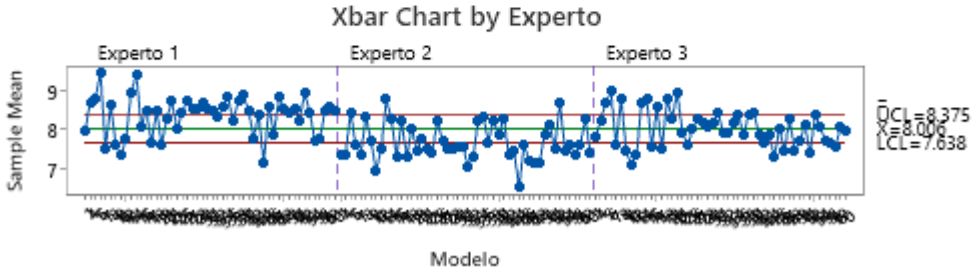


Gage R&R (Xbar/R) for iso11

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

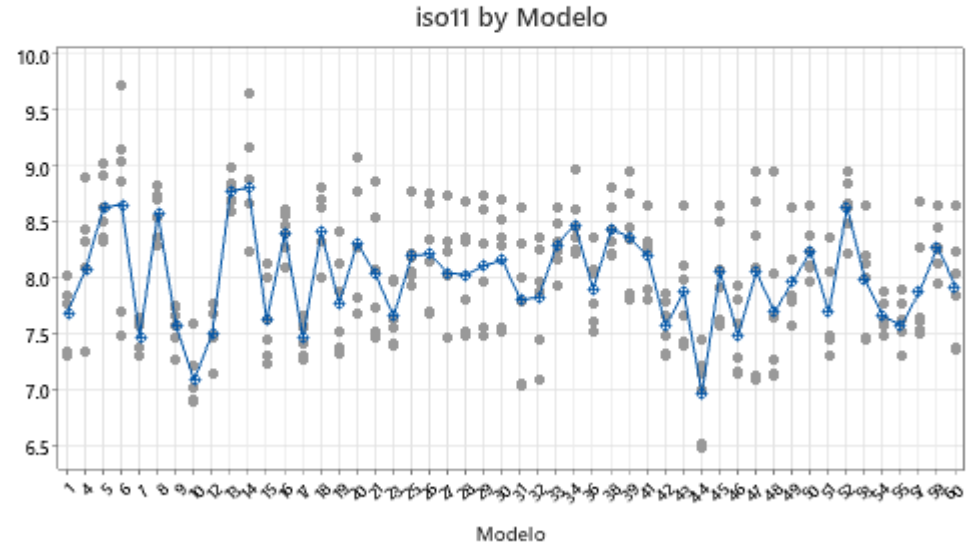




Gage R&R (Xbar/R) for iso11

Gage name:
Date of study:

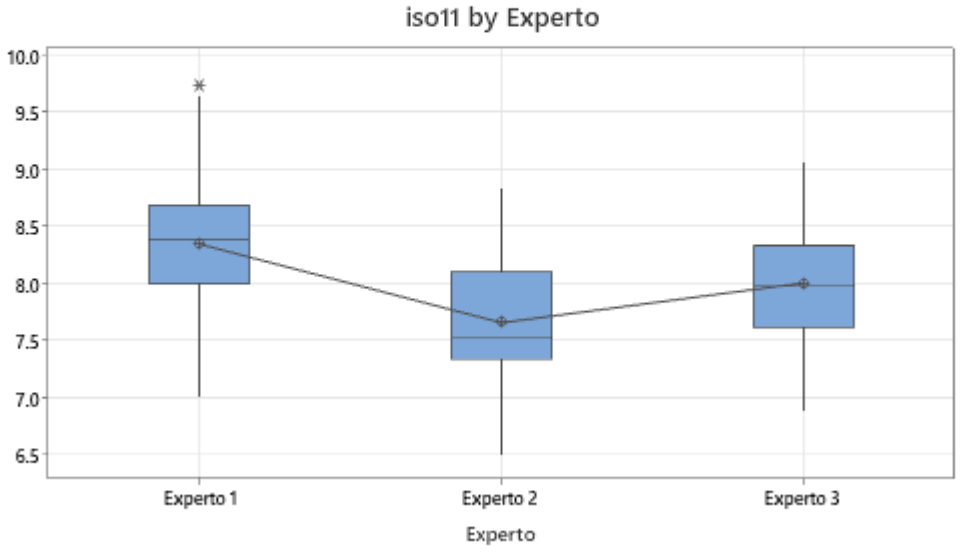
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso11

Gage name:
Date of study:

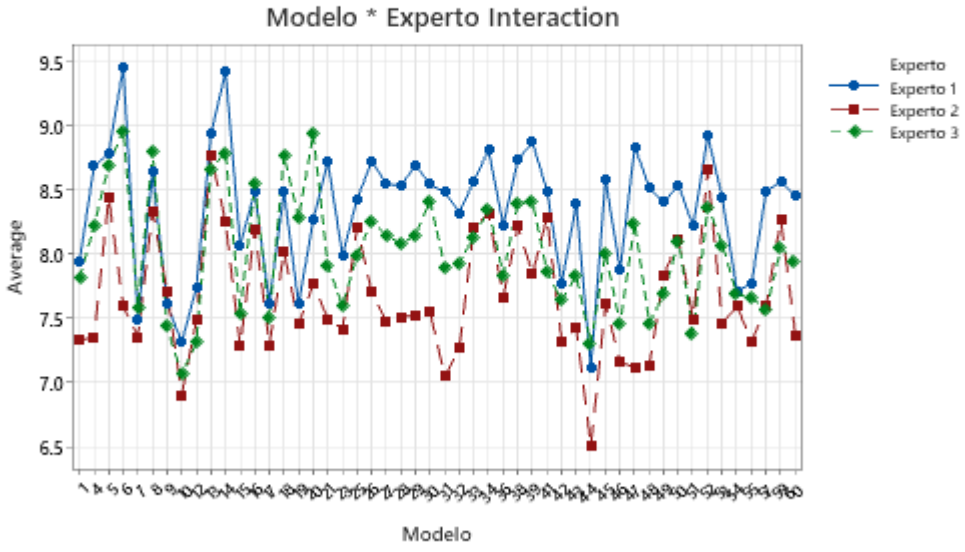
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso11

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

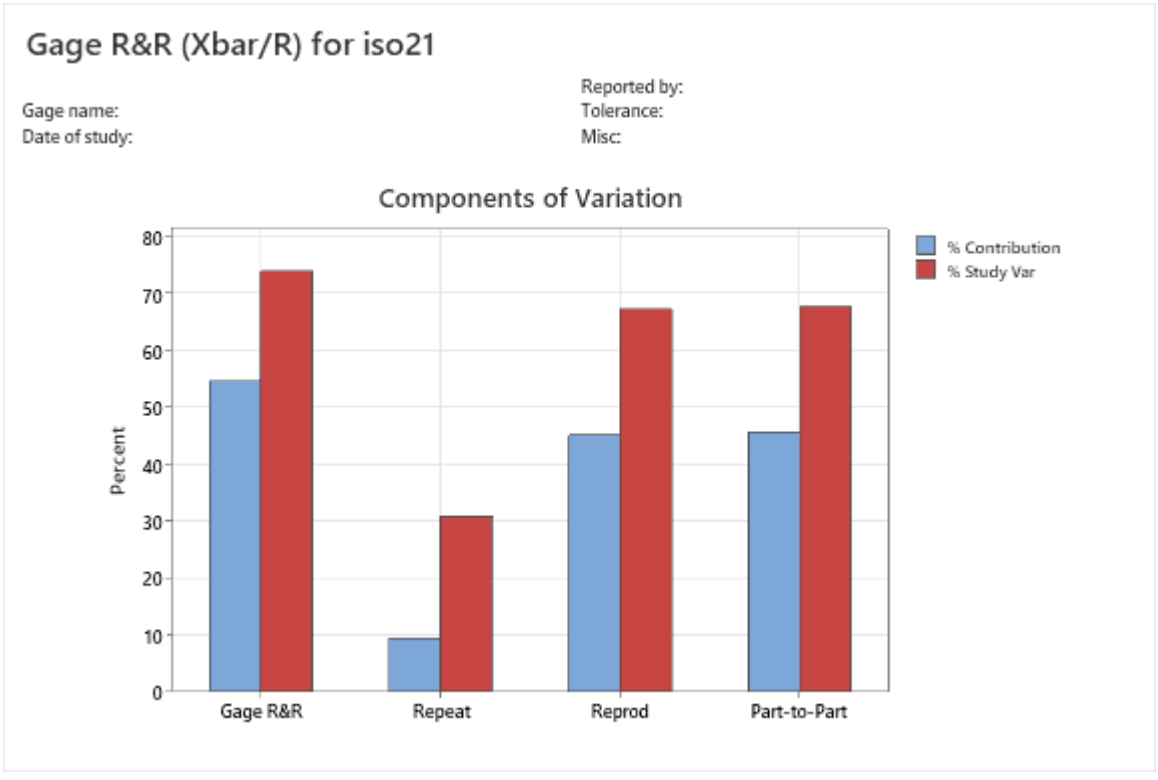
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.186660	54.45
Repeatability	0.032316	9.43
Reproducibility	0.154344	45.03
Part-To-Part	0.156134	45.55
Total Variation	0.342794	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.432041	2.59225	73.79
Repeatability	0.179765	1.07859	30.70
Reproducibility	0.392866	2.35720	67.10
Part-To-Part	0.395138	2.37083	67.49
Total Variation	0.585486	3.51291	100.00

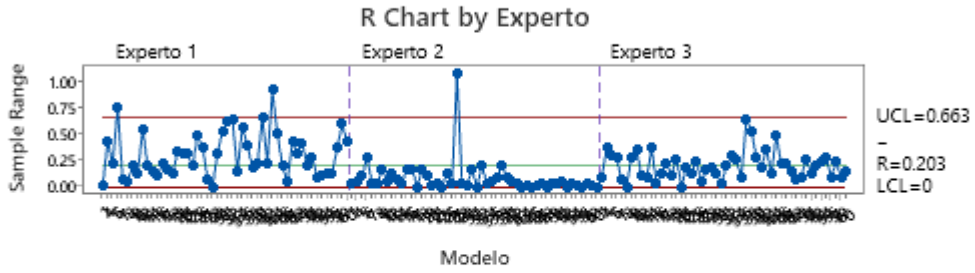
Number of Distinct Categories = 1

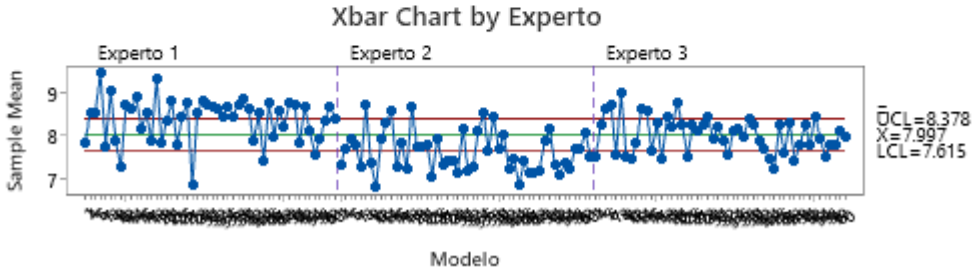


Gage R&R (Xbar/R) for iso21

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

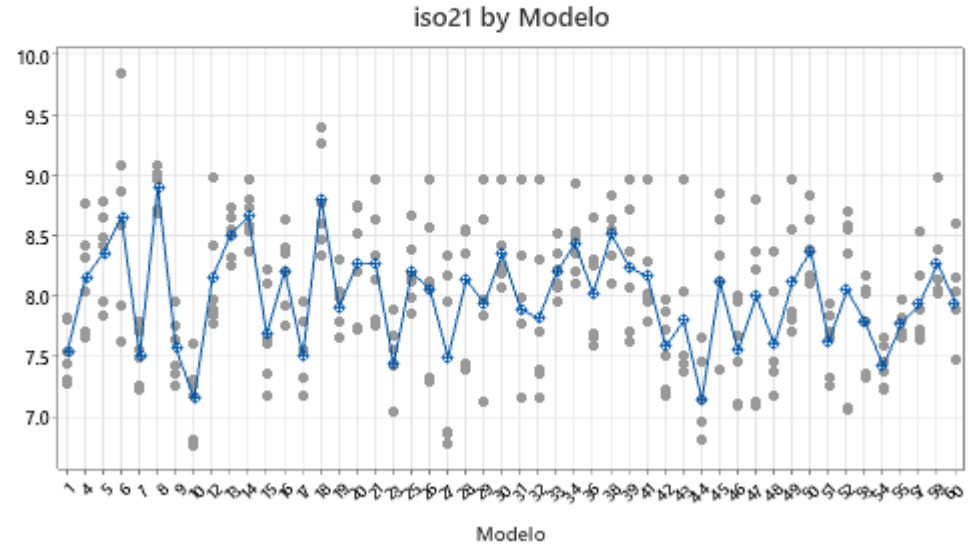




Gage R&R (Xbar/R) for iso21

Gage name:
Date of study:

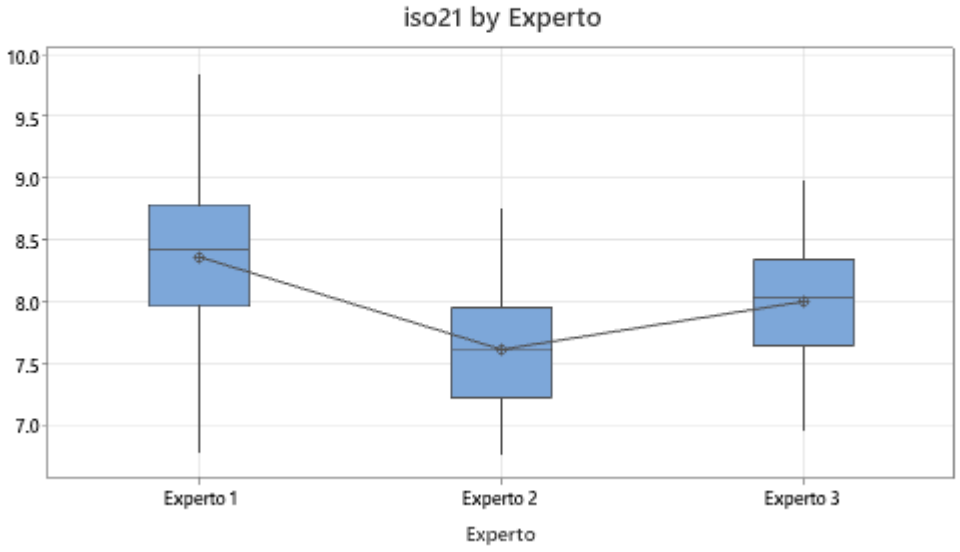
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso21

Gage name:
Date of study:

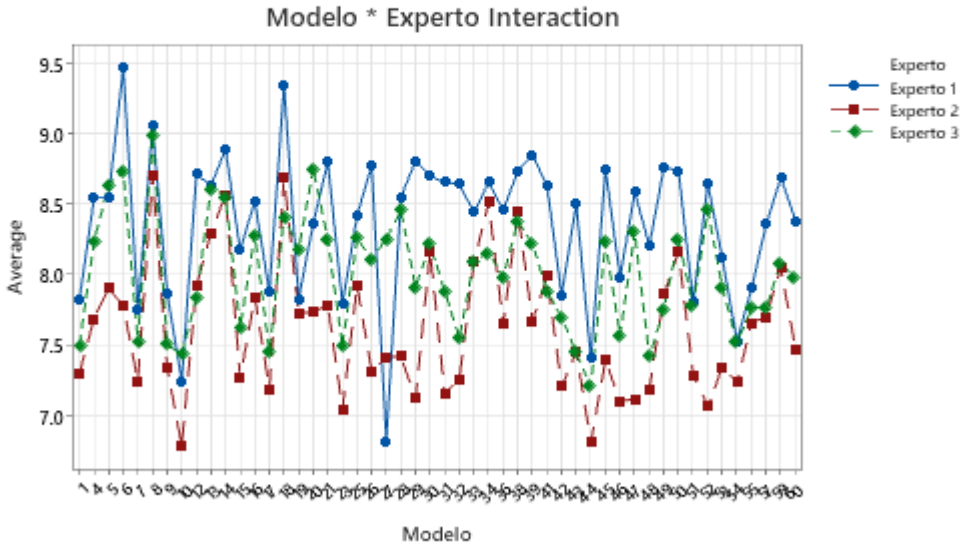
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso21

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

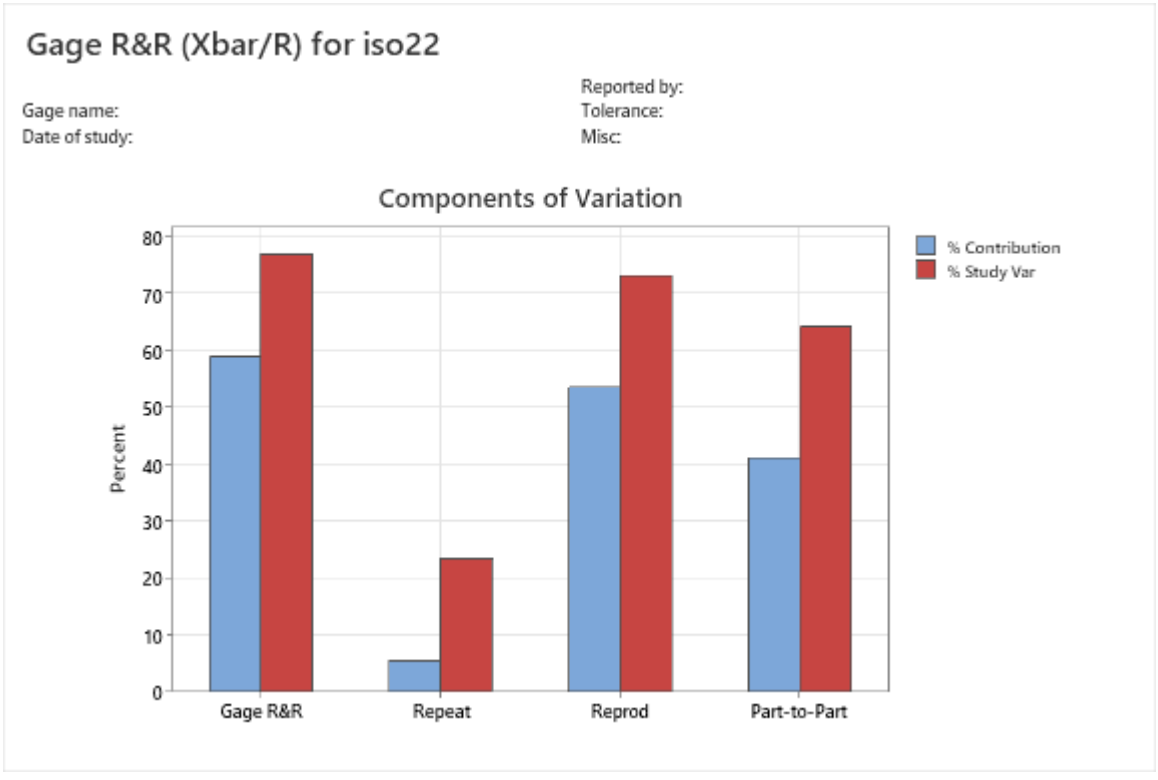
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.266443	58.90
Repeatability	0.024754	5.47
Reproducibility	0.241689	53.43
Part-To-Part	0.185925	41.10
Total Variation	0.452369	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.516181	3.09709	76.75
Repeatability	0.157334	0.94400	23.39
Reproducibility	0.491619	2.94971	73.09
Part-To-Part	0.431191	2.58714	64.11
Total Variation	0.672583	4.03550	100.00

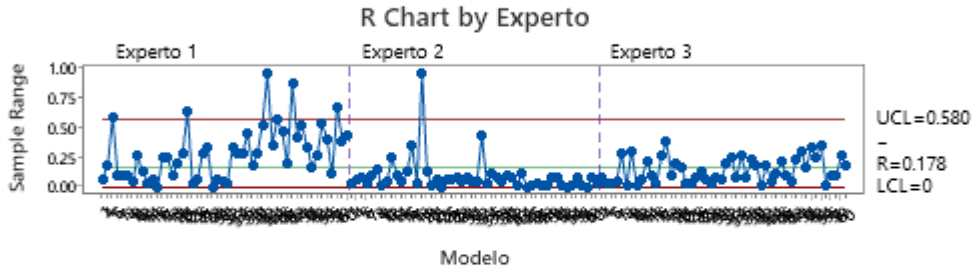
Number of Distinct Categories = 1

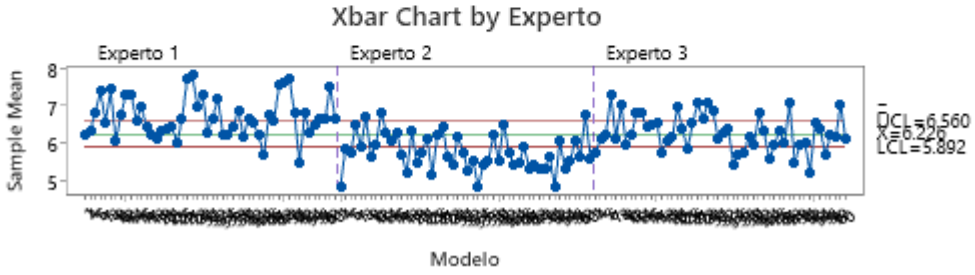


Gage R&R (Xbar/R) for iso22

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

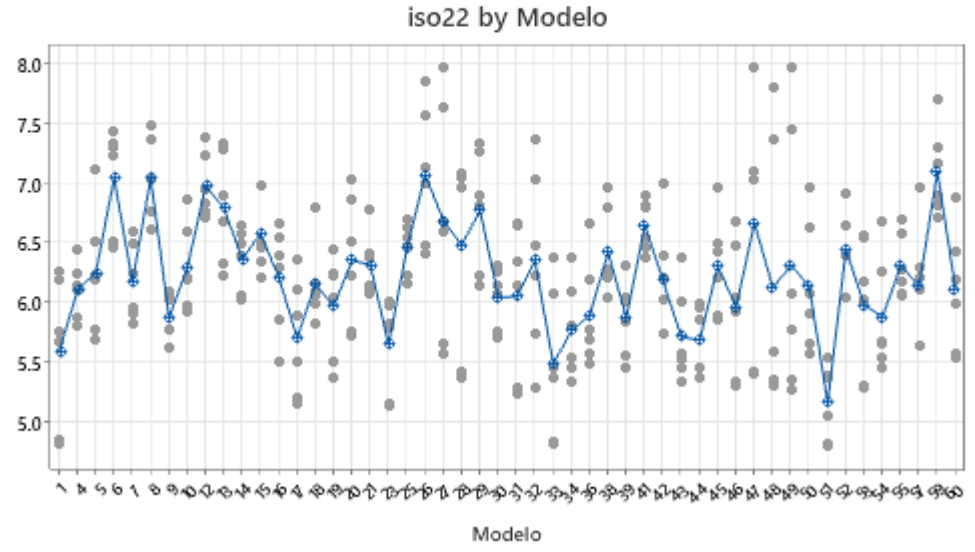




Gage R&R (Xbar/R) for iso22

Gage name:
Date of study:

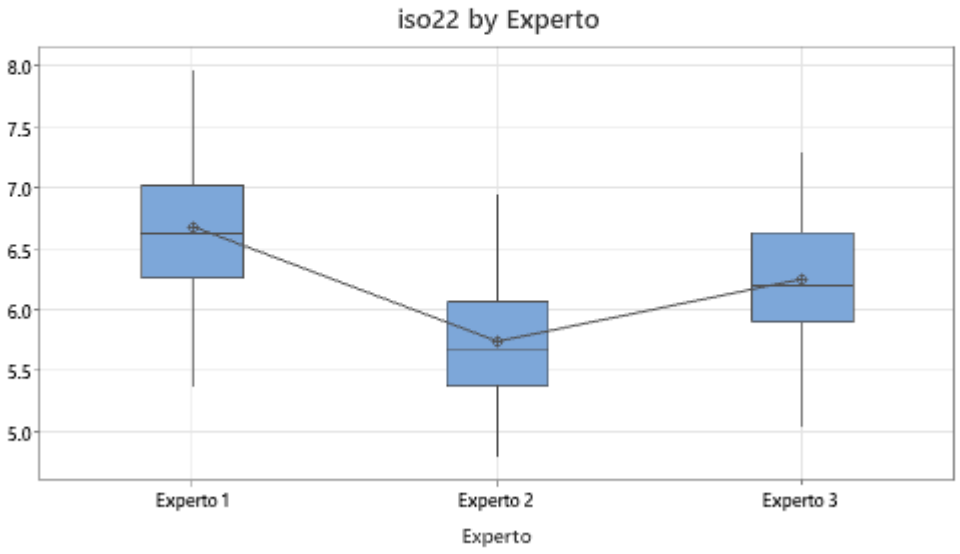
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso22

Gage name:
Date of study:

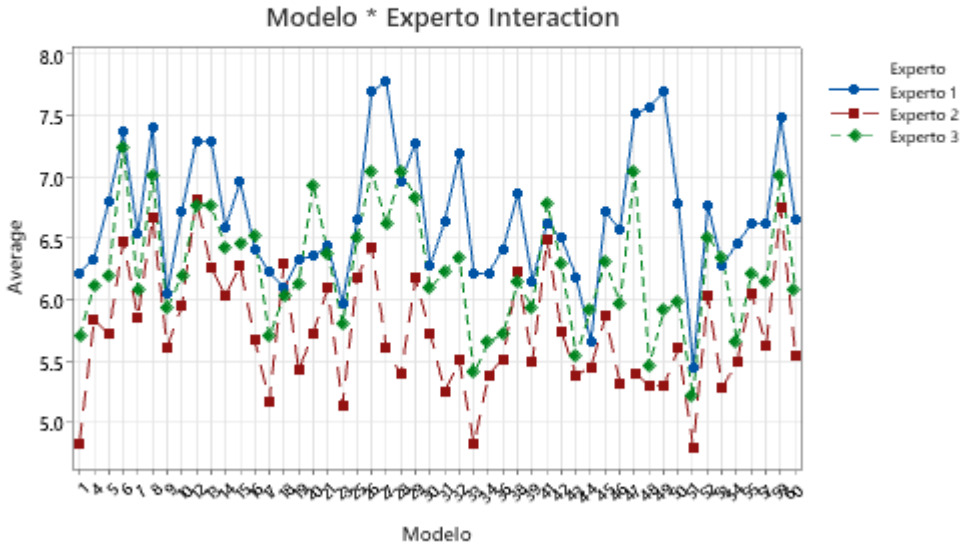
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso22

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

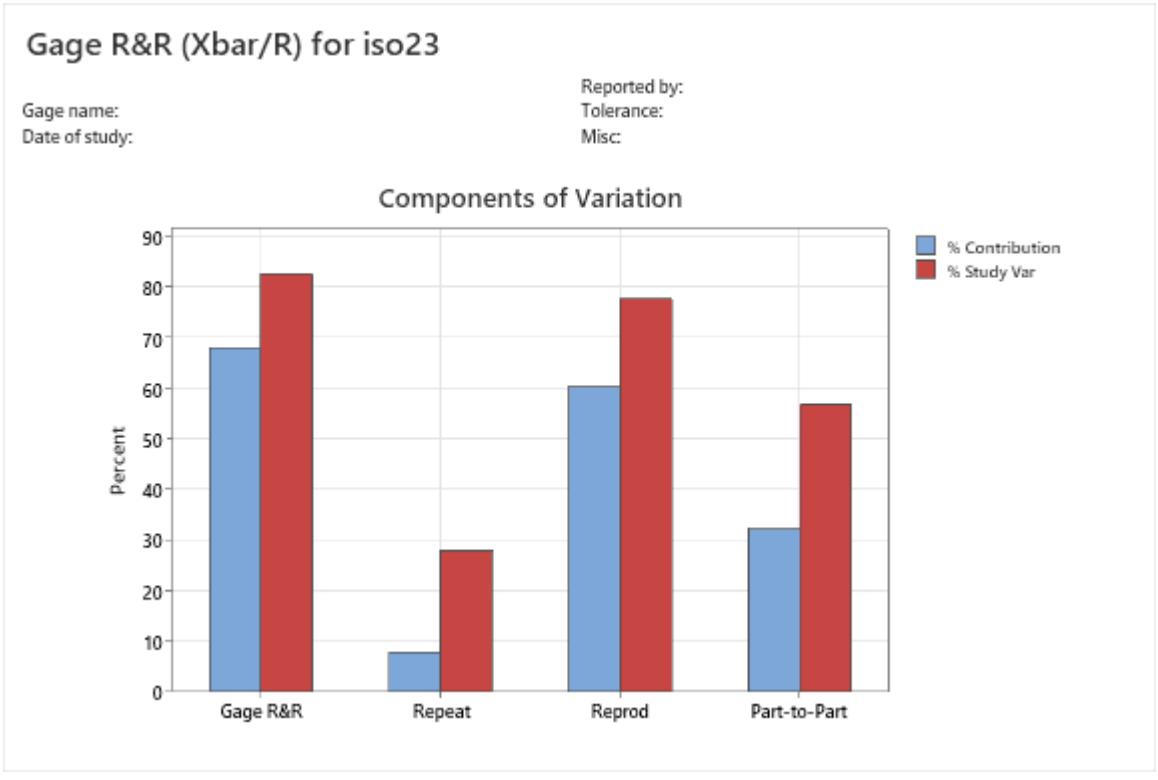
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.334500	67.92
Repeatability	0.038196	7.76
Reproducibility	0.296304	60.17
Part-To-Part	0.157979	32.08
Total Variation	0.492479	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.578360	3.47016	82.41
Repeatability	0.195439	1.17263	27.85
Reproducibility	0.544338	3.26603	77.57
Part-To-Part	0.397465	2.38479	56.64
Total Variation	0.701768	4.21061	100.00

Number of Distinct Categories = 1

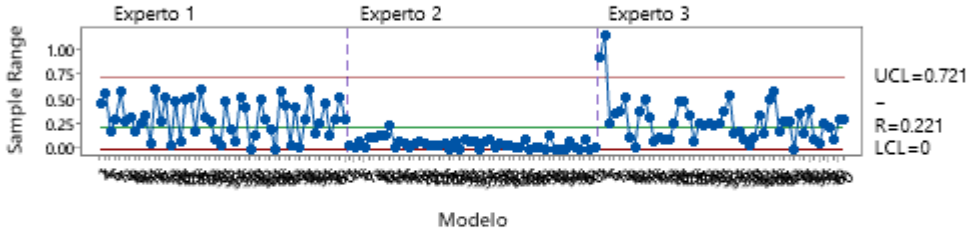


Gage R&R (Xbar/R) for iso23

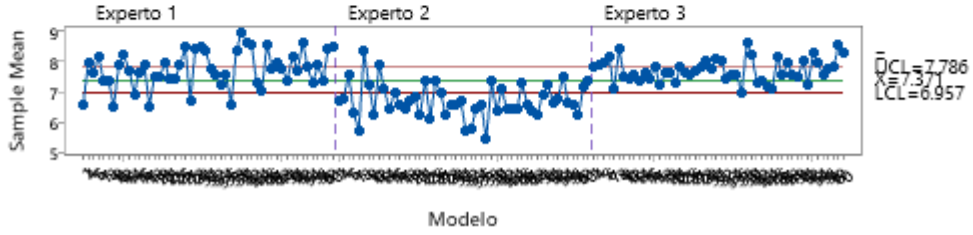
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

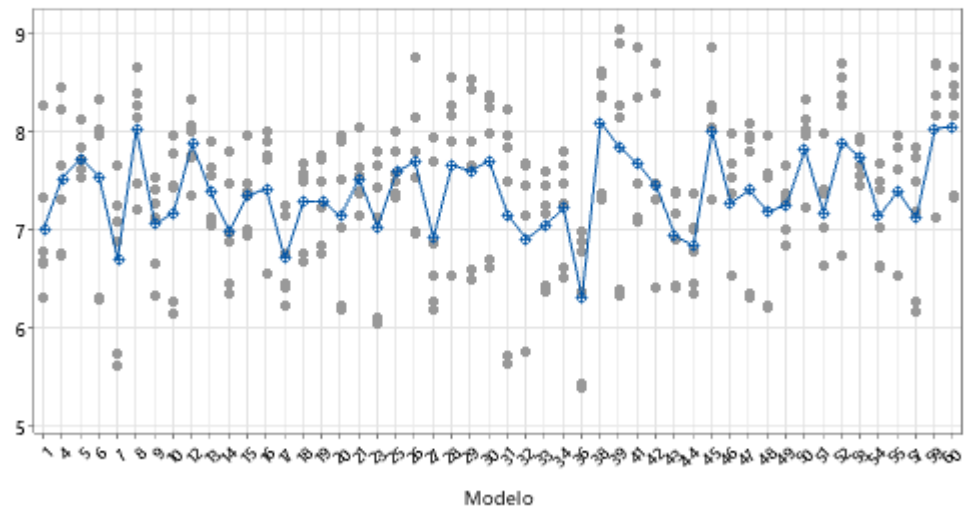


Gage R&R (Xbar/R) for iso23

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

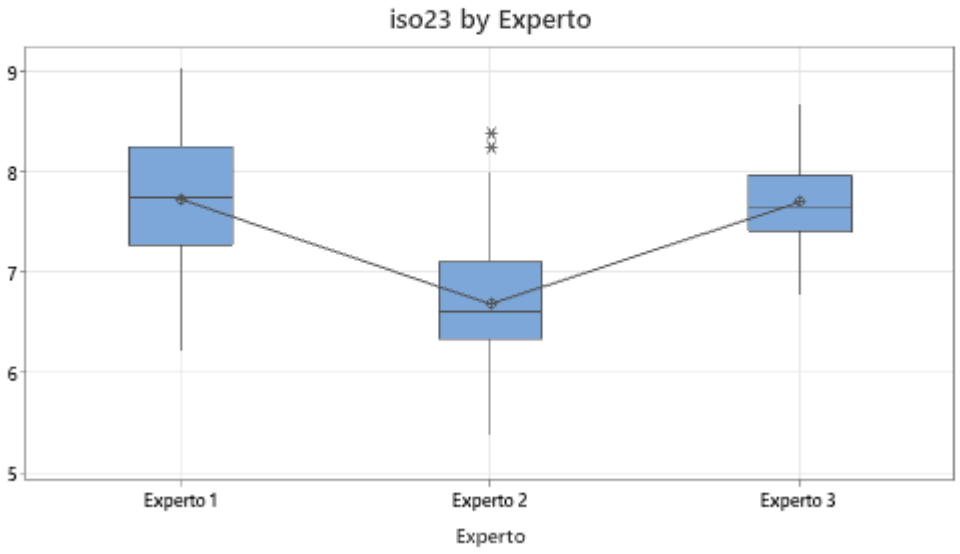
iso23 by Modelo



Gage R&R (Xbar/R) for iso23

Gage name:
Date of study:

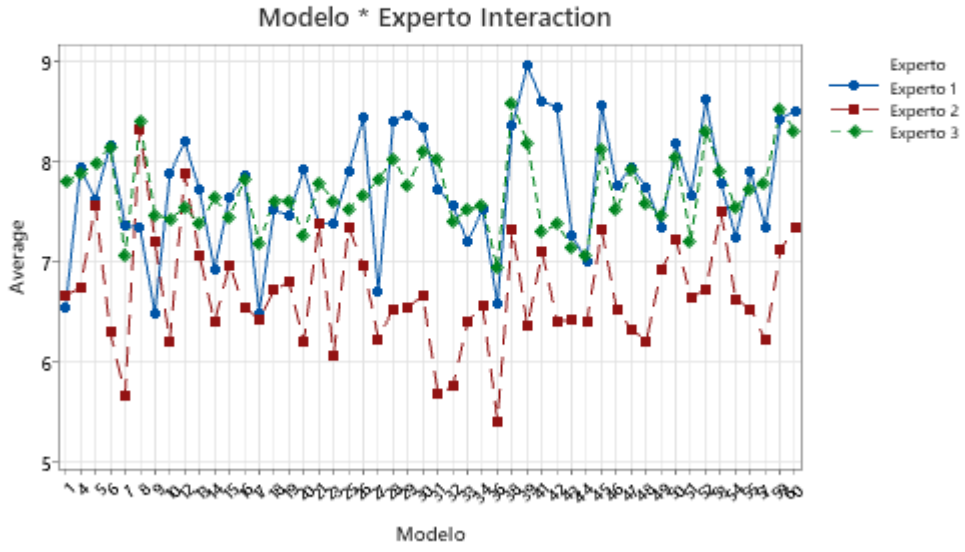
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso23

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



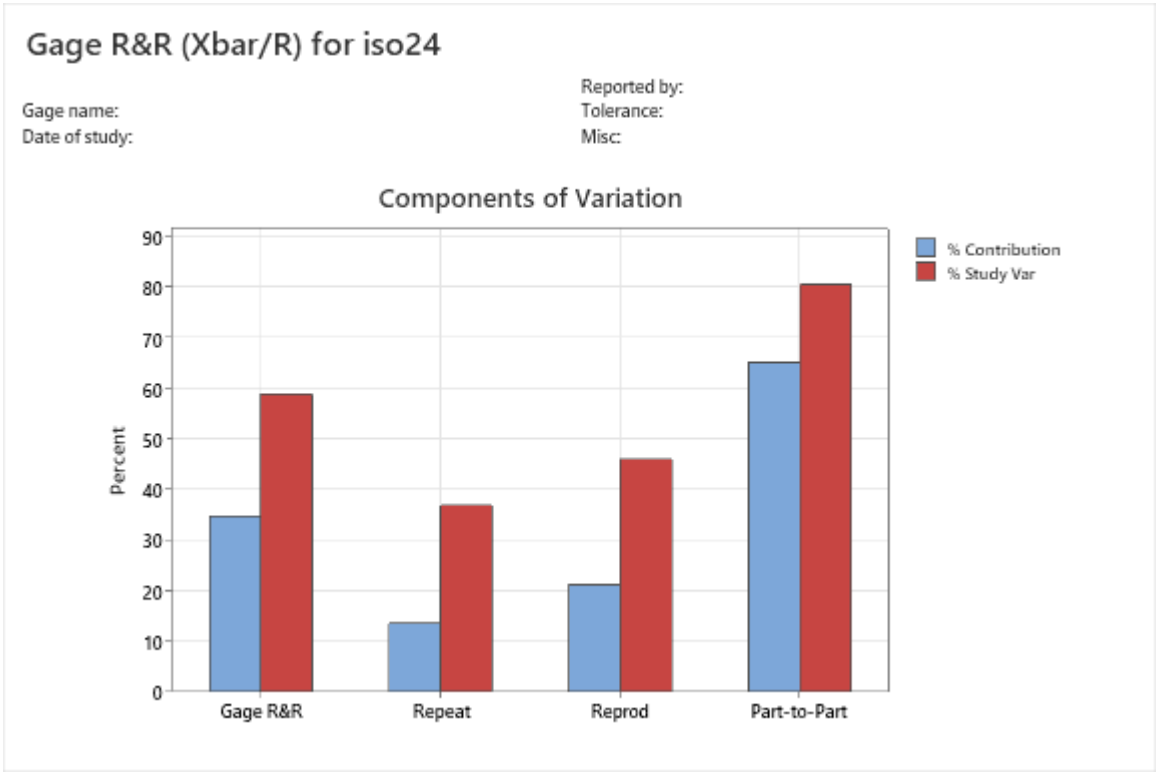
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.084895	34.80
Repeatability	0.033242	13.63
Reproducibility	0.051653	21.17
Part-To-Part	0.159056	65.20
Total Variation	0.243952	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.291368	1.74821	58.99
Repeatability	0.182324	1.09395	36.91
Reproducibility	0.227274	1.36364	46.01
Part-To-Part	0.398819	2.39291	80.75
Total Variation	0.493915	2.96349	100.00

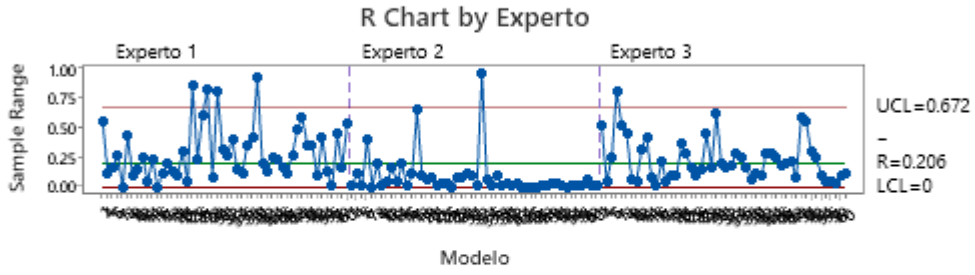
Number of Distinct Categories = 1

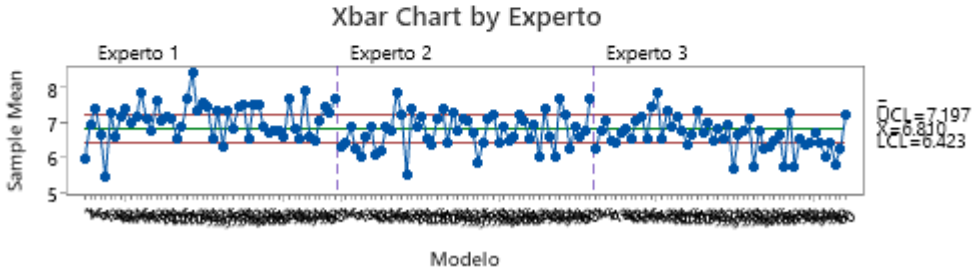


Gage R&R (Xbar/R) for iso24

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

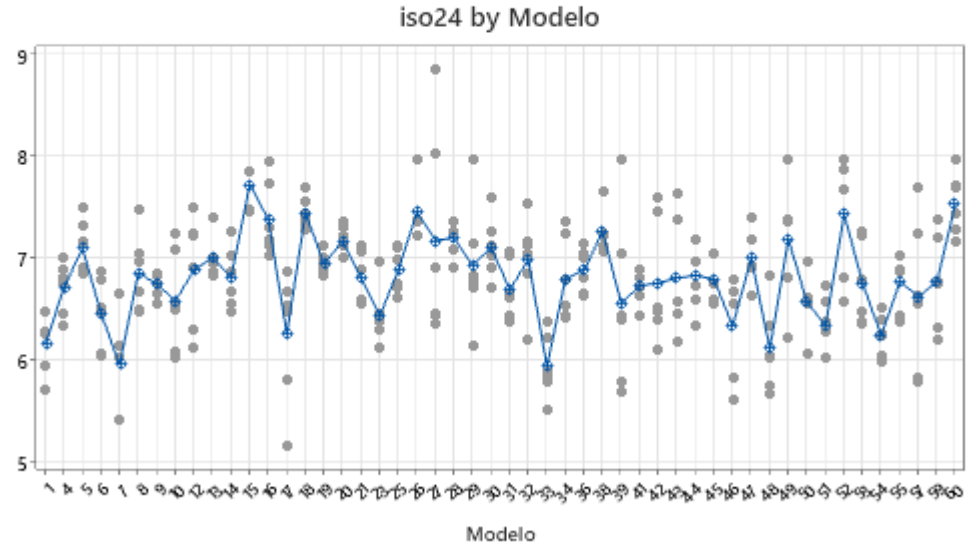




Gage R&R (Xbar/R) for iso24

Gage name:
Date of study:

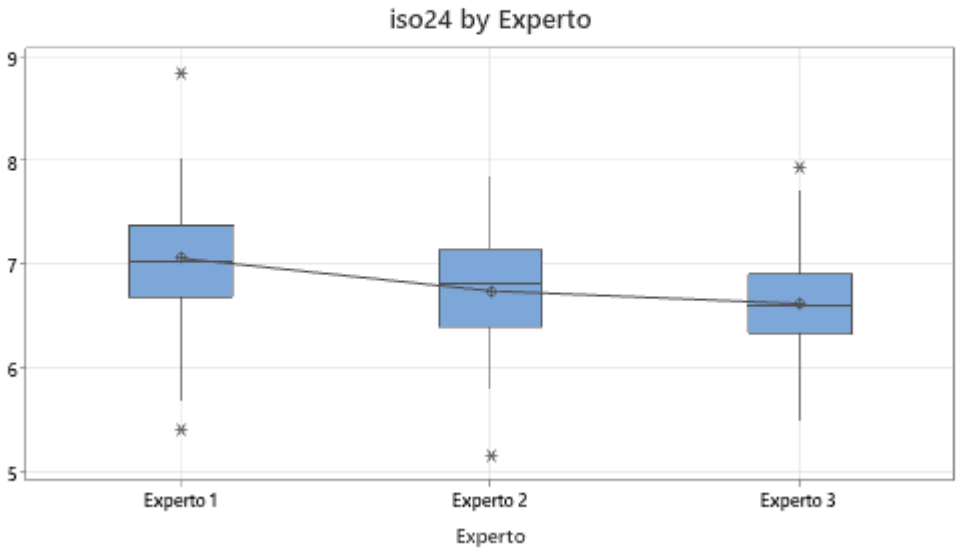
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso24

Gage name:
Date of study:

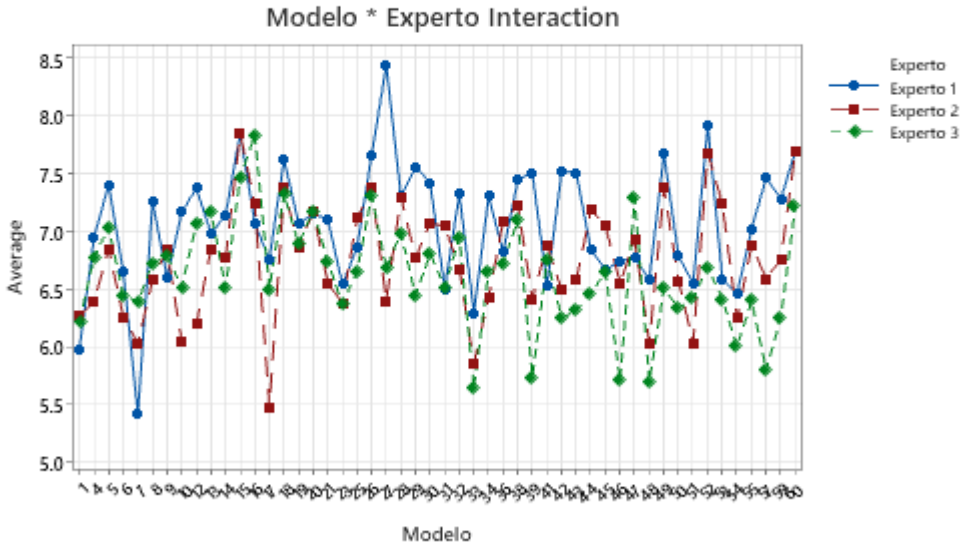
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso24

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

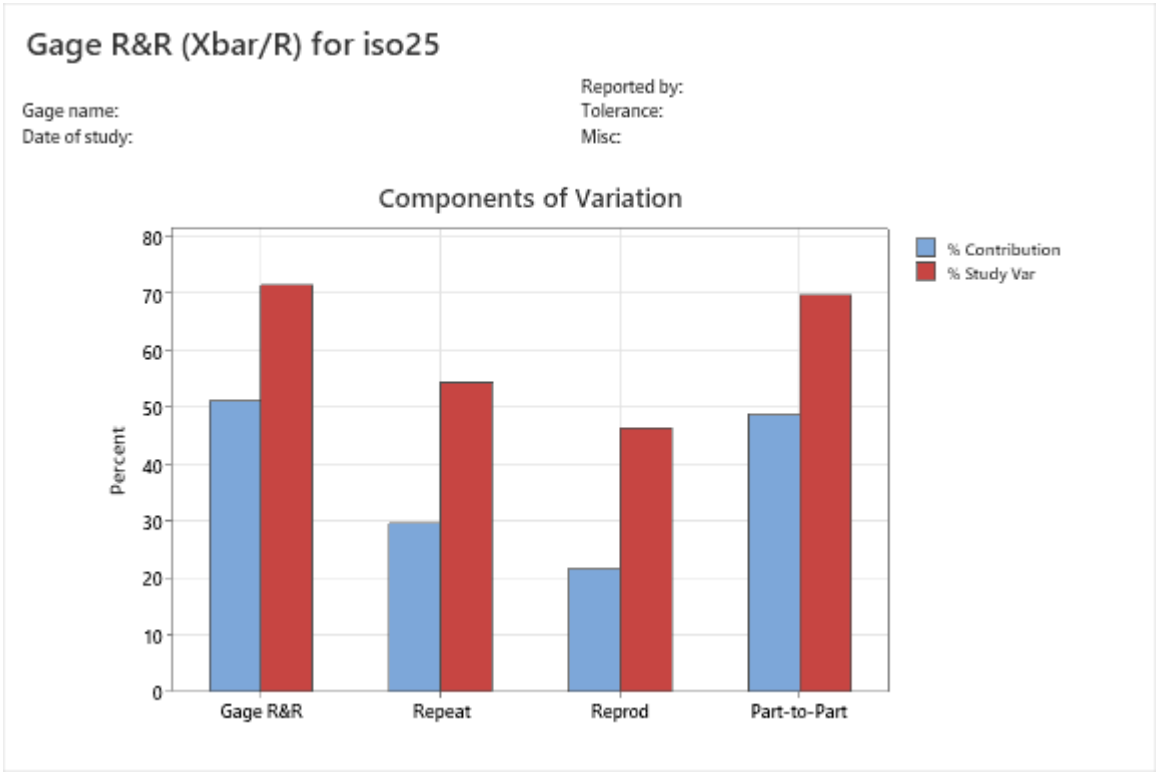
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.082167	51.23
Repeatability	0.047518	29.63
Reproducibility	0.034649	21.60
Part-To-Part	0.078230	48.77
Total Variation	0.160397	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.286648	1.71989	71.57
Repeatability	0.217986	1.30791	54.43
Reproducibility	0.186143	1.11686	46.48
Part-To-Part	0.279697	1.67818	69.84
Total Variation	0.400496	2.40298	100.00

Number of Distinct Categories = 1

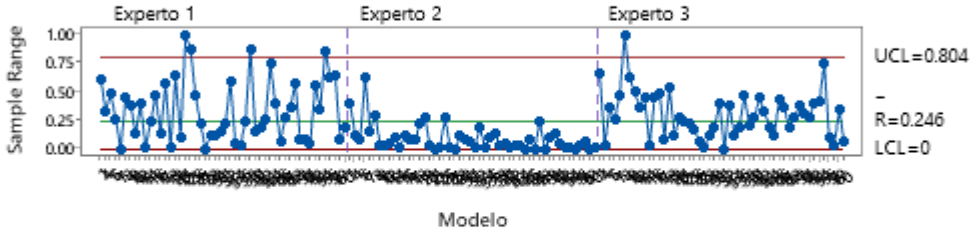


Gage R&R (Xbar/R) for iso25

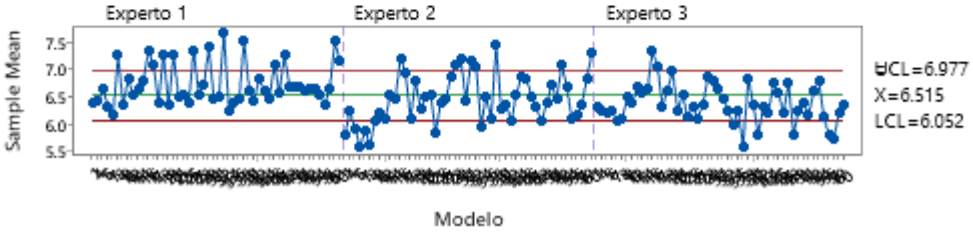
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

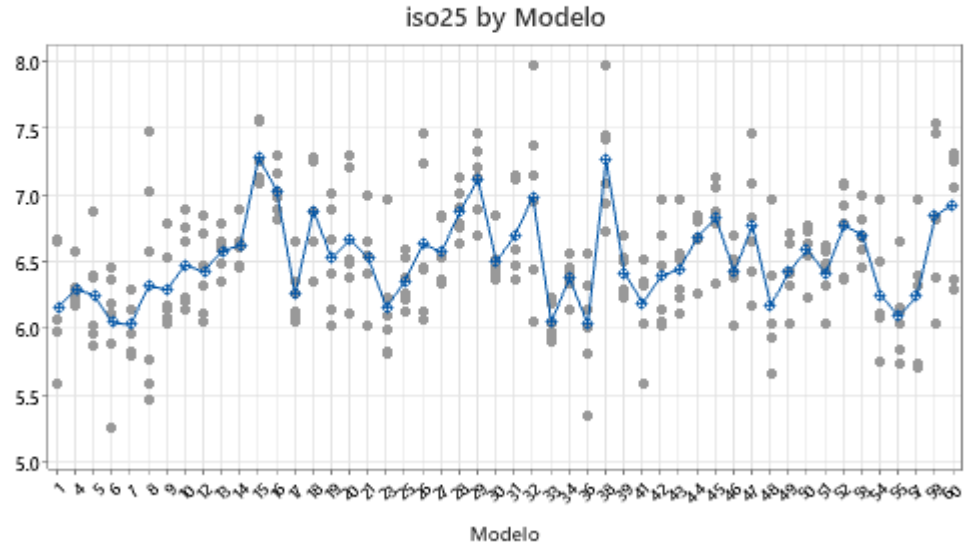


Gage R&R (Xbar/R) for iso25

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

iso25 by Modelo



Gage R&R (Xbar/R) for iso25

Gage name:
Date of study:

Reported by:
Tolerance:
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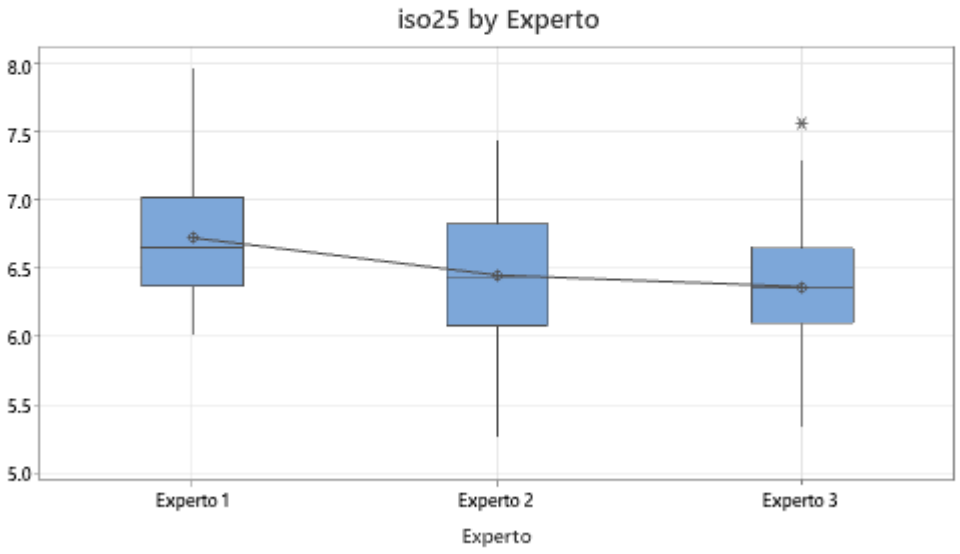
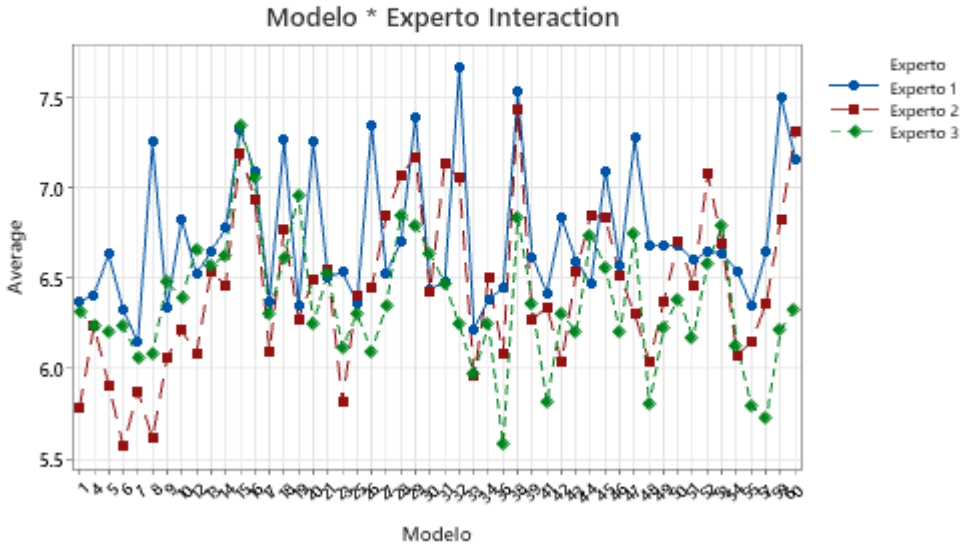


Gage R&R (Xbar/R) for iso25

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



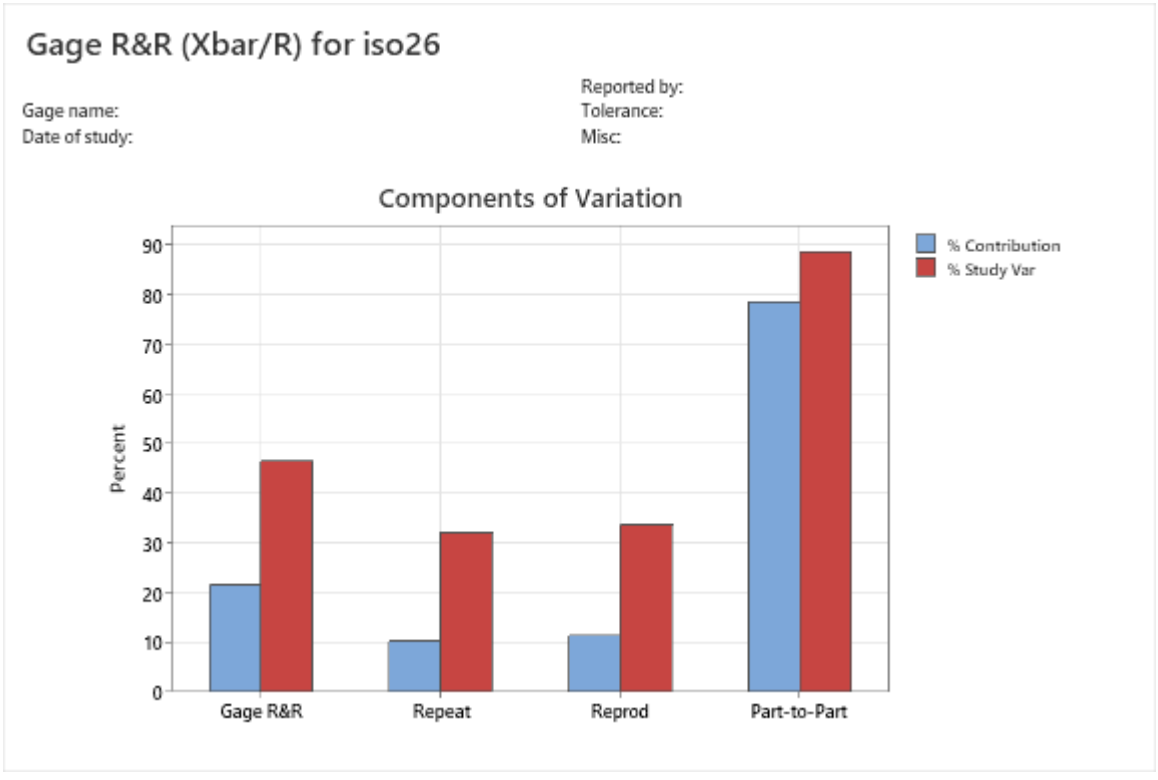
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.054786	21.58
Repeatability	0.026049	10.26
Reproducibility	0.028737	11.32
Part-To-Part	0.199116	78.42
Total Variation	0.253902	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.234064	1.40439	46.45
Repeatability	0.161398	0.96839	32.03
Reproducibility	0.169520	1.01712	33.64
Part-To-Part	0.446224	2.67735	88.56
Total Variation	0.503887	3.02332	100.00

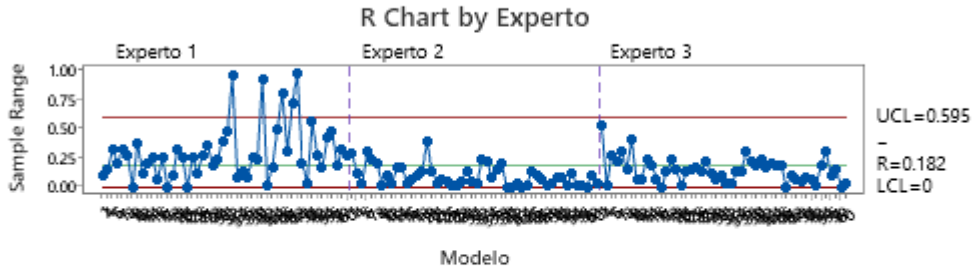
Number of Distinct Categories = 2

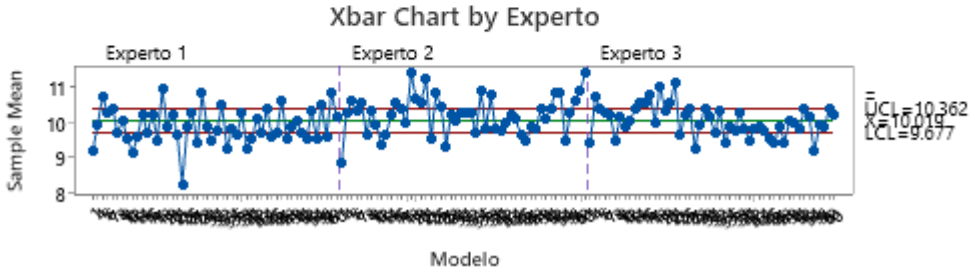


Gage R&R (Xbar/R) for iso26

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

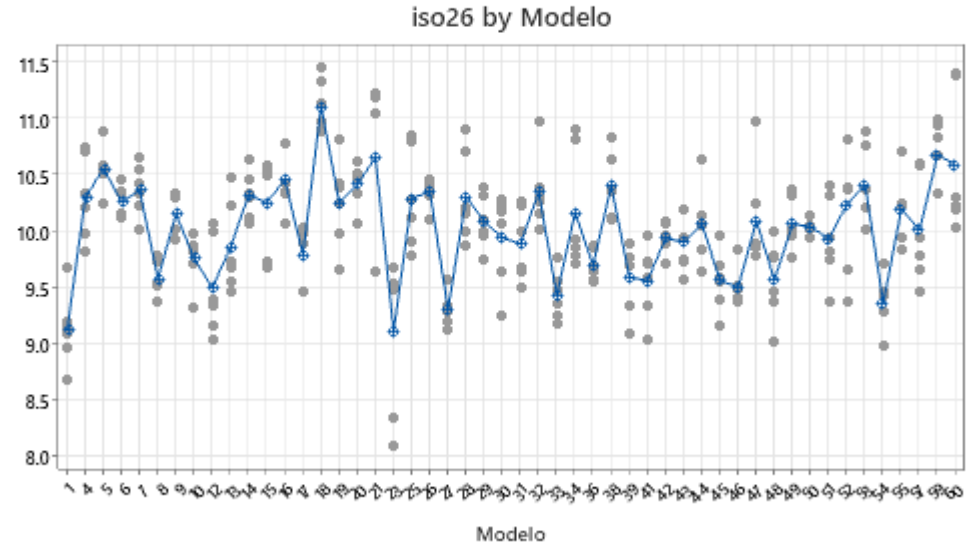




Gage R&R (Xbar/R) for iso26

Gage name:
Date of study:

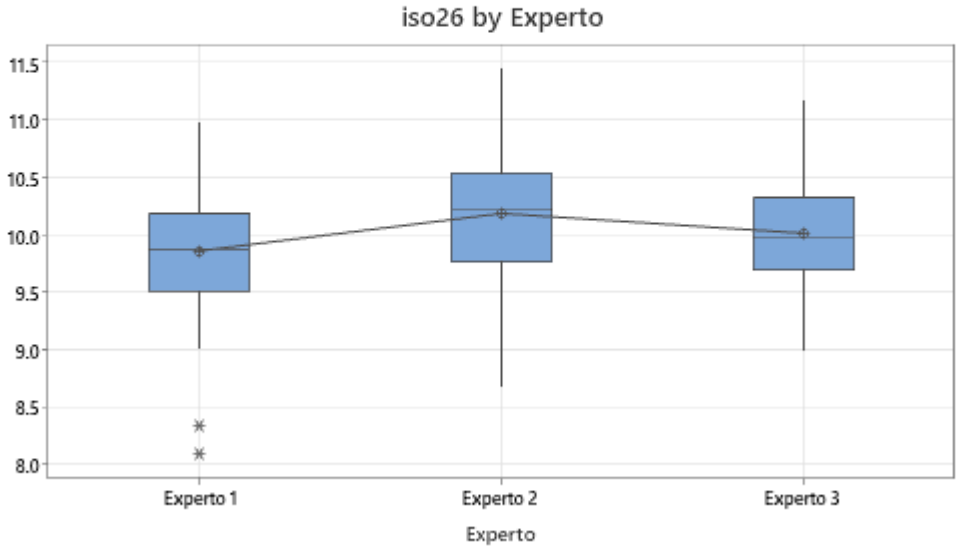
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso26

Gage name:
Date of study:

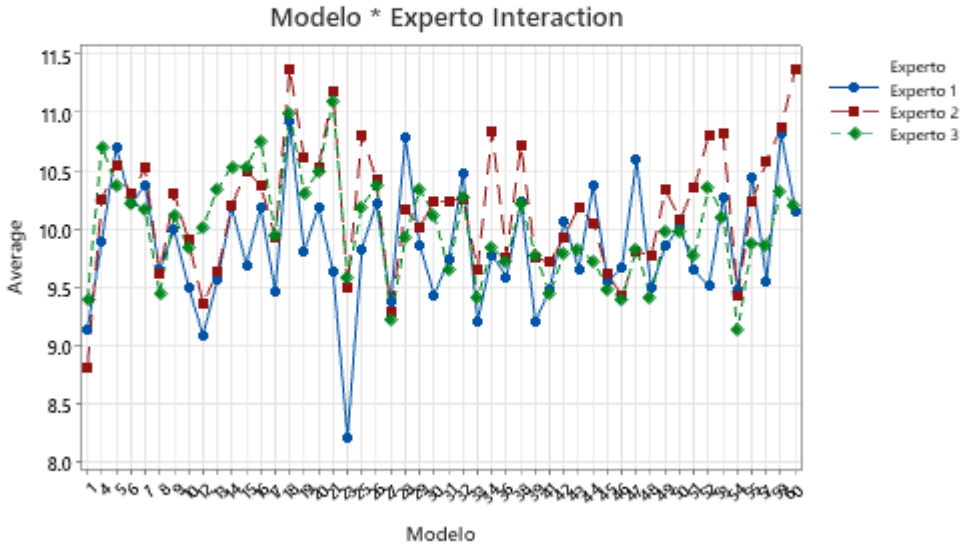
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso26

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

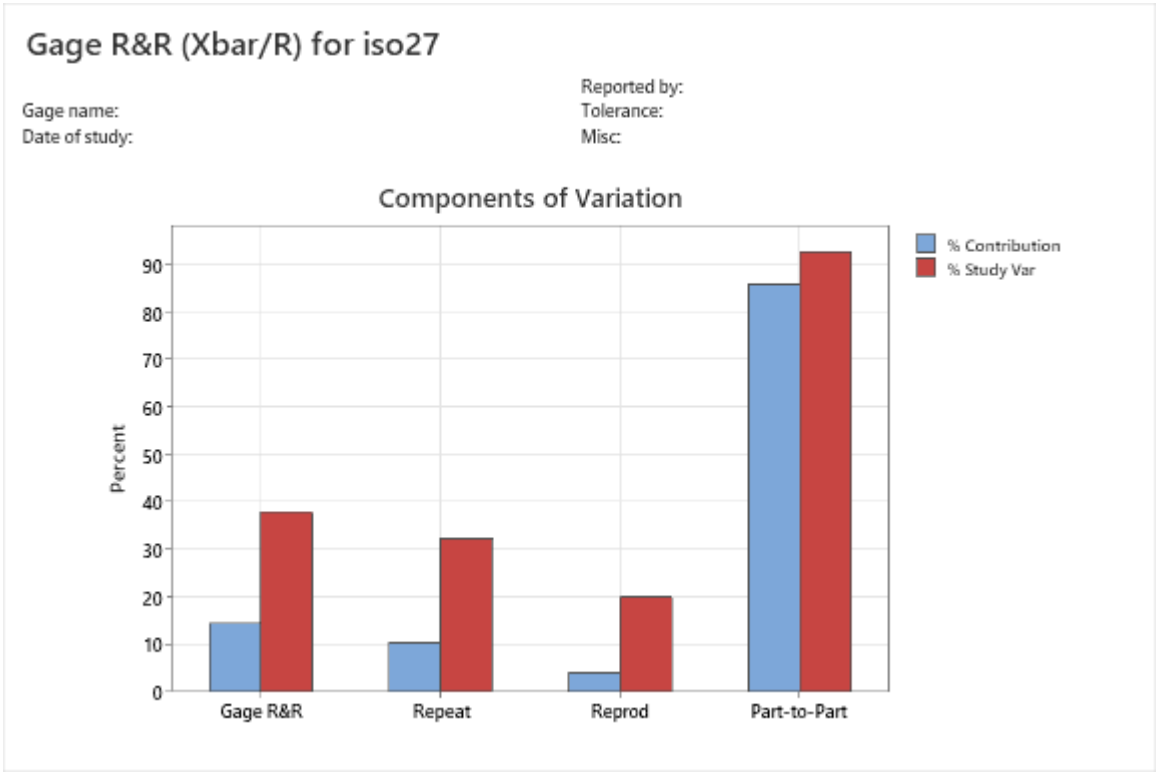
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.048778	14.33
Repeatability	0.035209	10.34
Reproducibility	0.013569	3.99
Part-To-Part	0.291653	85.67
Total Variation	0.340431	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.220858	1.32515	37.85
Repeatability	0.187641	1.12584	32.16
Reproducibility	0.116488	0.69893	19.96
Part-To-Part	0.540049	3.24029	92.56
Total Variation	0.583465	3.50079	100.00

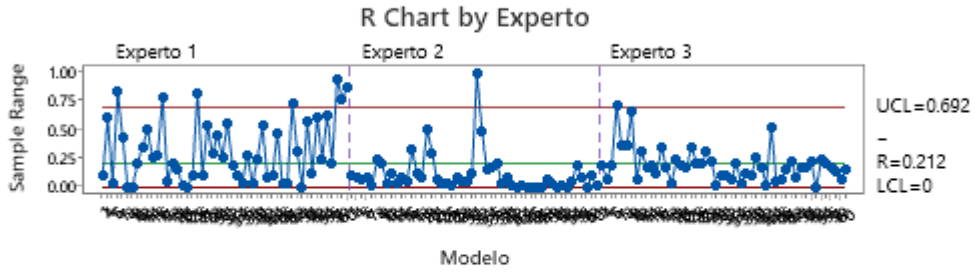
Number of Distinct Categories = 3

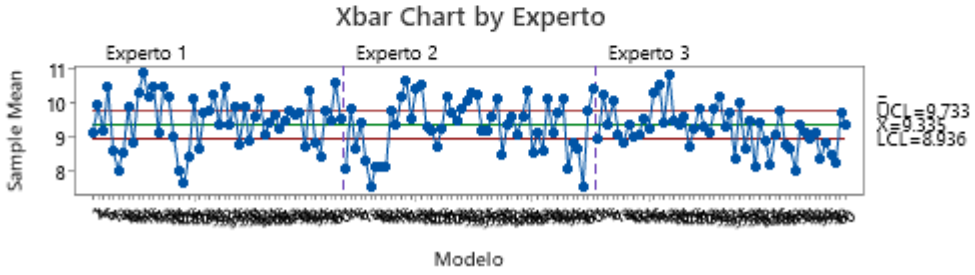


Gage R&R (Xbar/R) for iso27

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

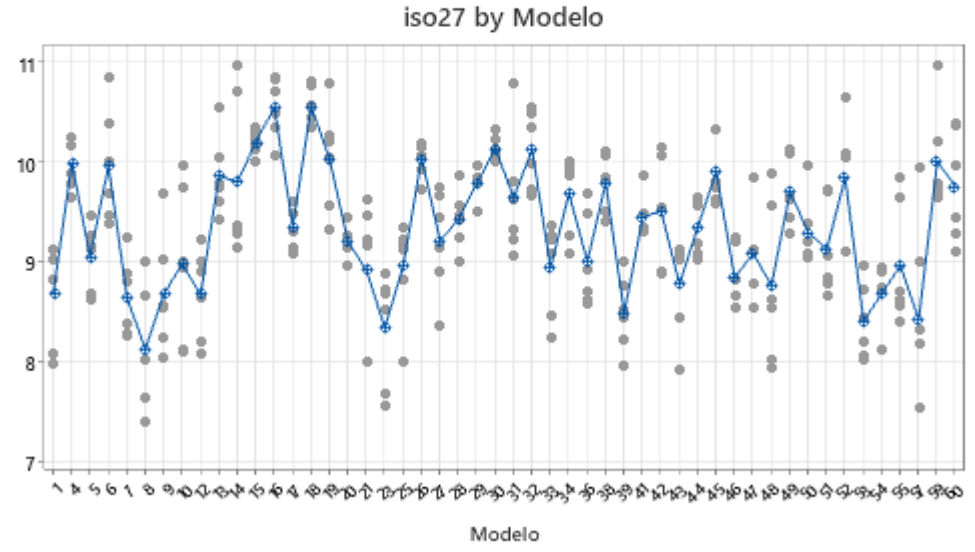




Gage R&R (Xbar/R) for iso27

Gage name:
Date of study:

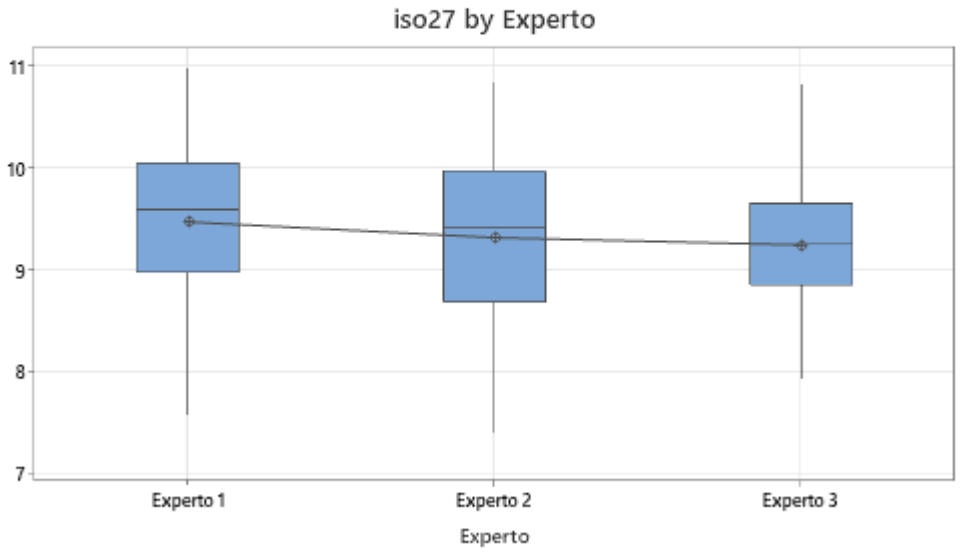
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso27

Gage name:
Date of study:

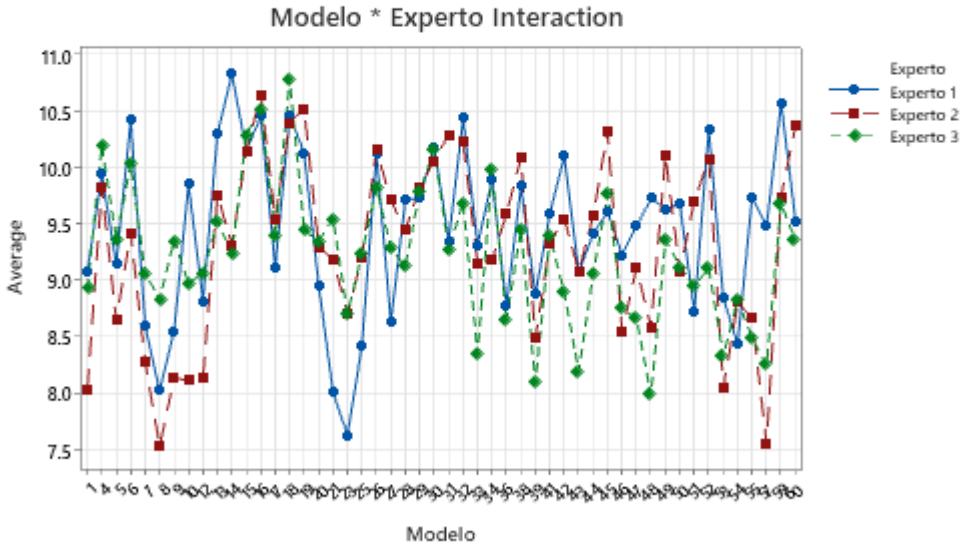
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for iso27

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



1 intercanine width, 1 intermolar width, and 2 interpremolar widths.

COPY FROM 17-27

Gage R&R Study - XBar/R Method

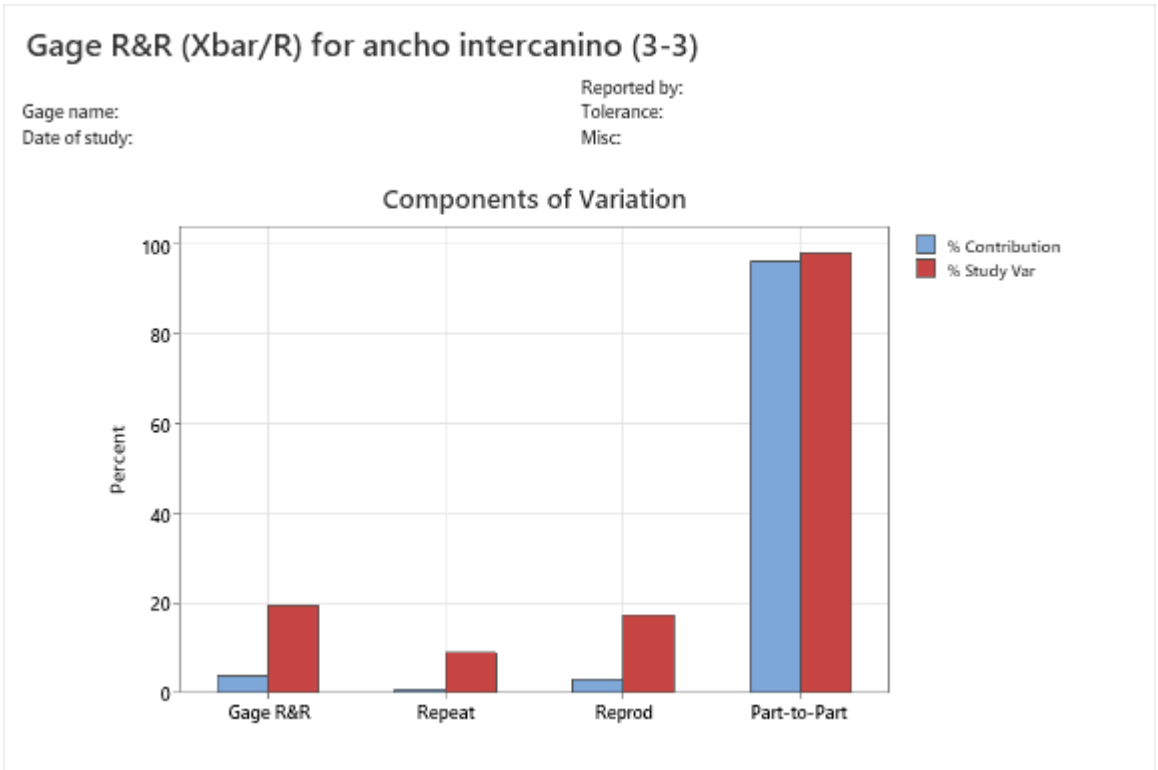
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.27693	3.81
Repeatability	0.05798	0.80
Reproducibility	0.21895	3.01
Part-To-Part	6.99775	96.19
Total Variation	7.27467	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.52624	3.1574	19.51
Repeatability	0.24079	1.4448	8.93
Reproducibility	0.46792	2.8075	17.35
Part-To-Part	2.64533	15.8720	98.08
Total Variation	2.69716	16.1830	100.00

Number of Distinct Categories = 7

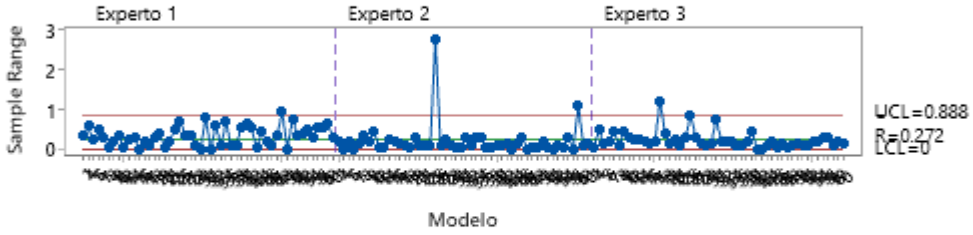


Gage R&R (Xbar/R) for ancho intercanino (3-3)

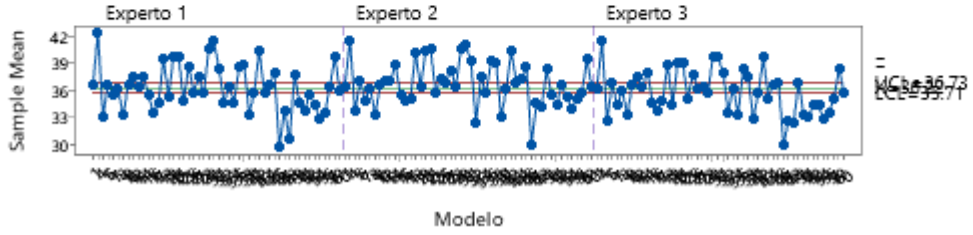
Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

R Chart by Experto



Xbar Chart by Experto

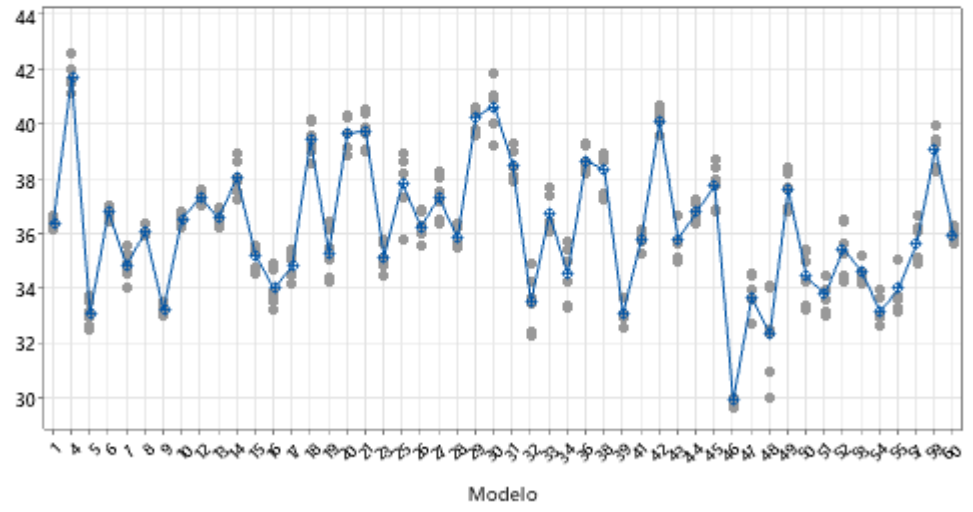


Gage R&R (Xbar/R) for ancho intercanino (3-3)

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

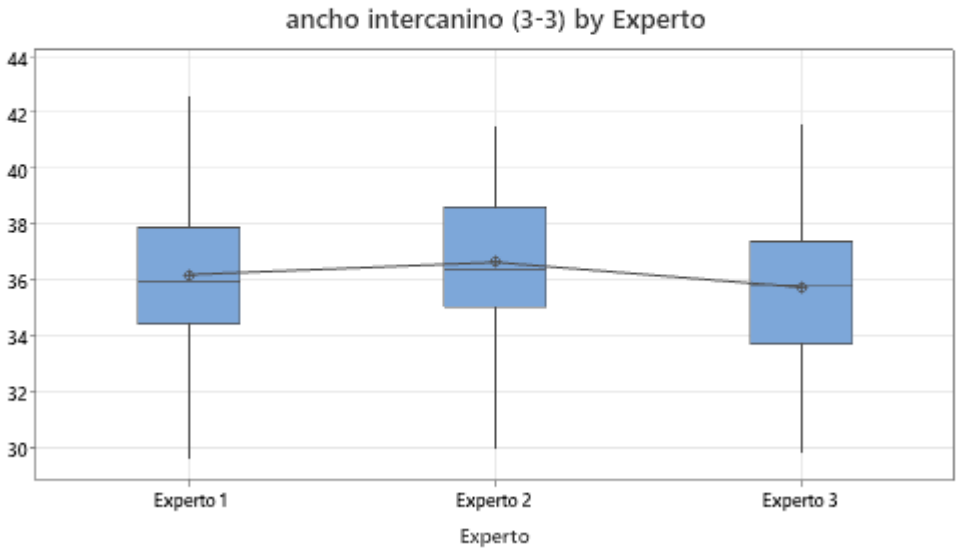
ancho intercanino (3-3) by Modelo



Gage R&R (Xbar/R) for ancho intercanino (3-3)

Gage name:
Date of study:

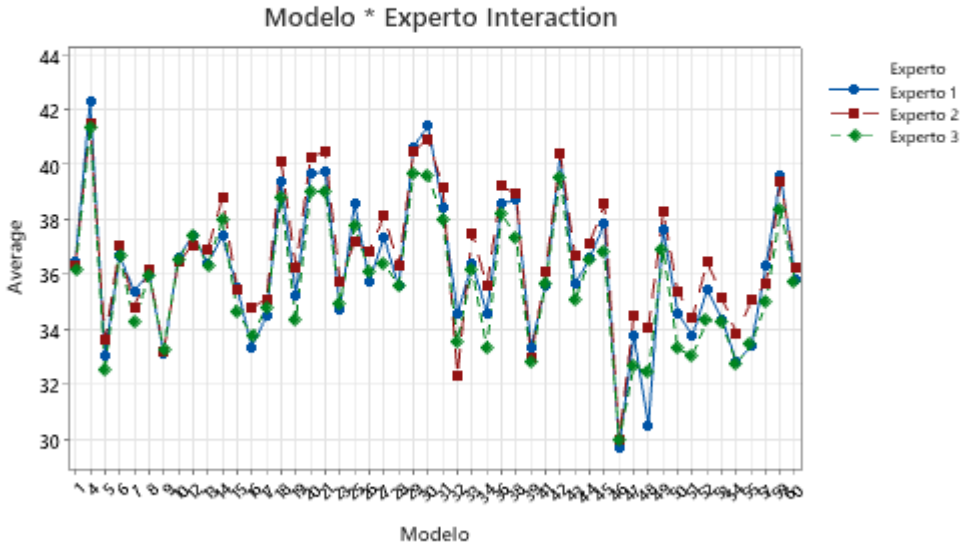
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for ancho intercanino (3-3)

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

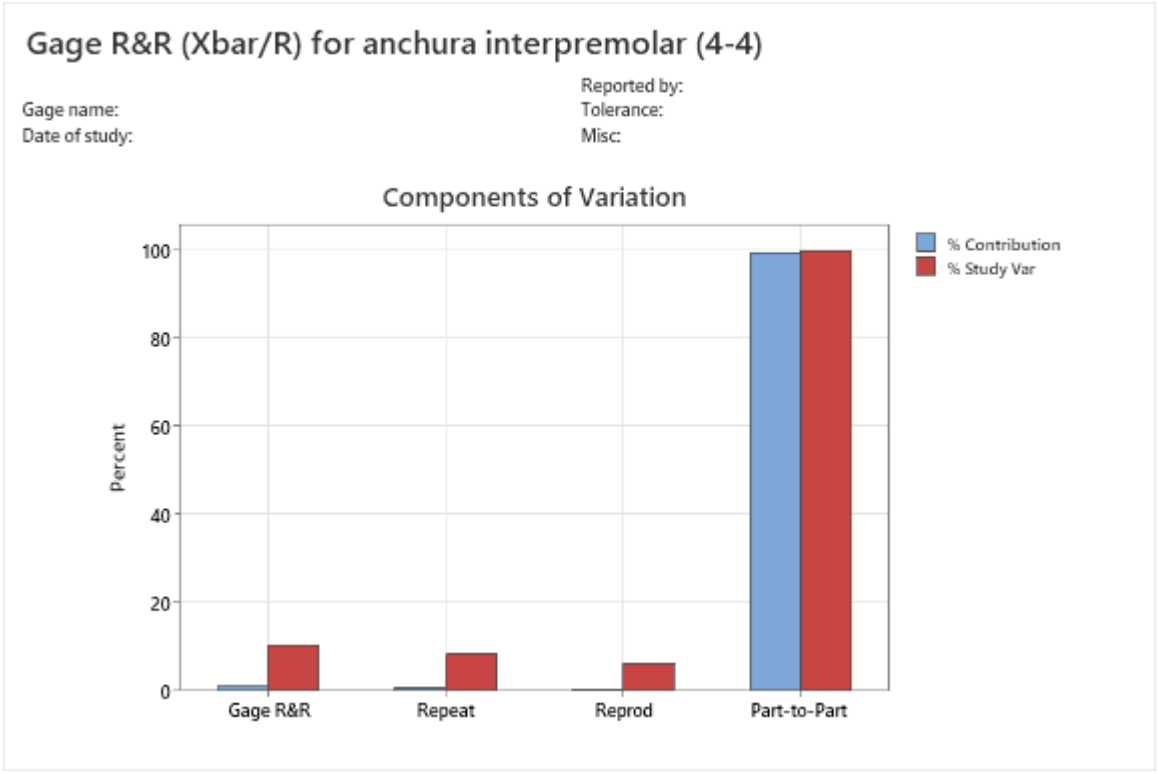
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.09811	1.07
Repeatability	0.06441	0.70
Reproducibility	0.03370	0.37
Part-To-Part	9.09688	98.93
Total Variation	9.19499	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.31323	1.8794	10.33
Repeatability	0.25380	1.5228	8.37
Reproducibility	0.18357	1.1014	6.05
Part-To-Part	3.01610	18.0966	99.47
Total Variation	3.03232	18.1939	100.00

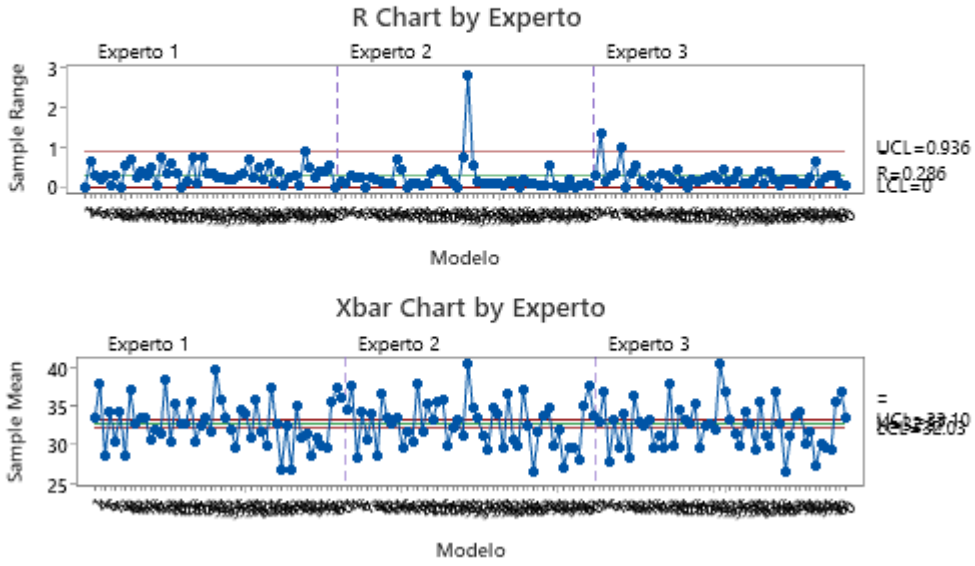
Number of Distinct Categories = 13



Gage R&R (Xbar/R) for anchura interpremolar (4-4)

Gage name:
Date of study:

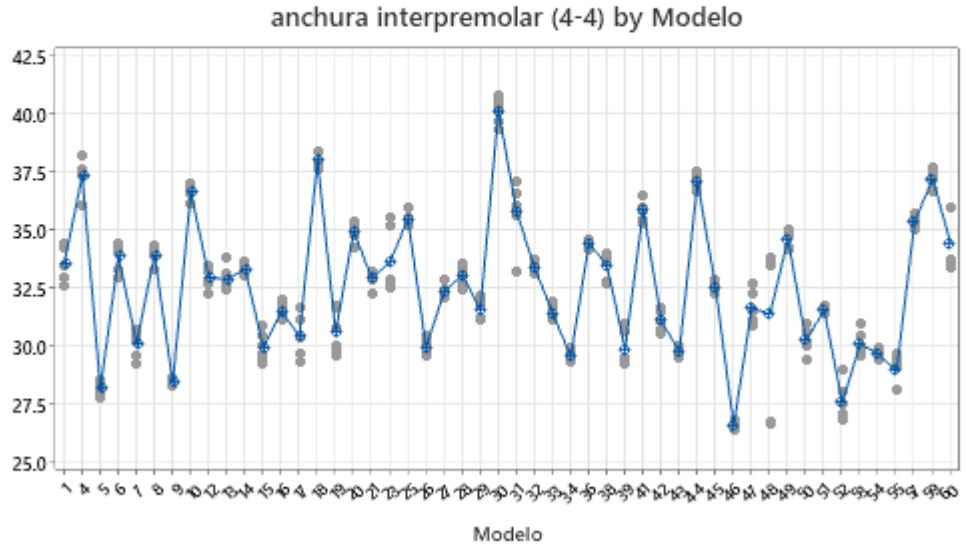
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for anchura interpremolar (4-4)

Gage name:
Date of study:

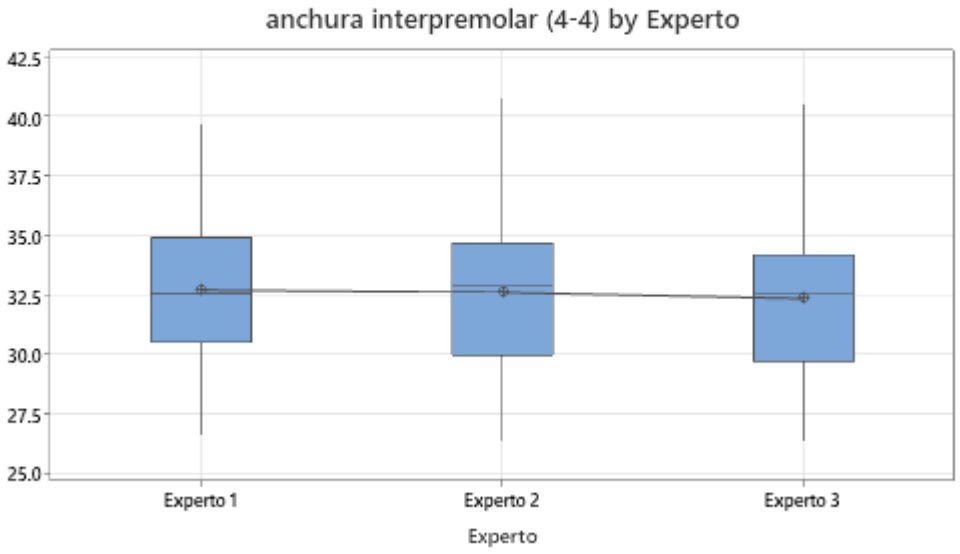
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for anchura interpremolar (4-4)

Gage name:
Date of study:

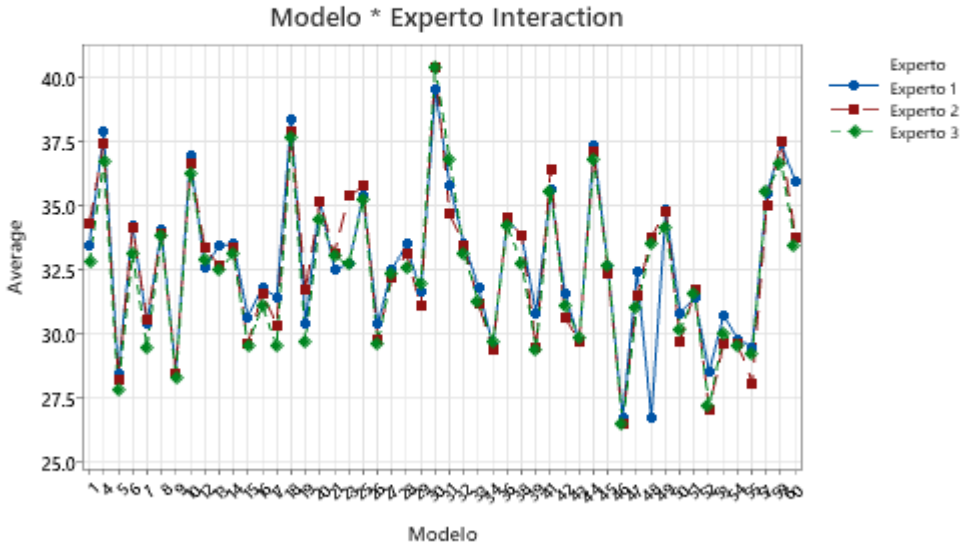
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for anchura interpremolar (4-4)

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

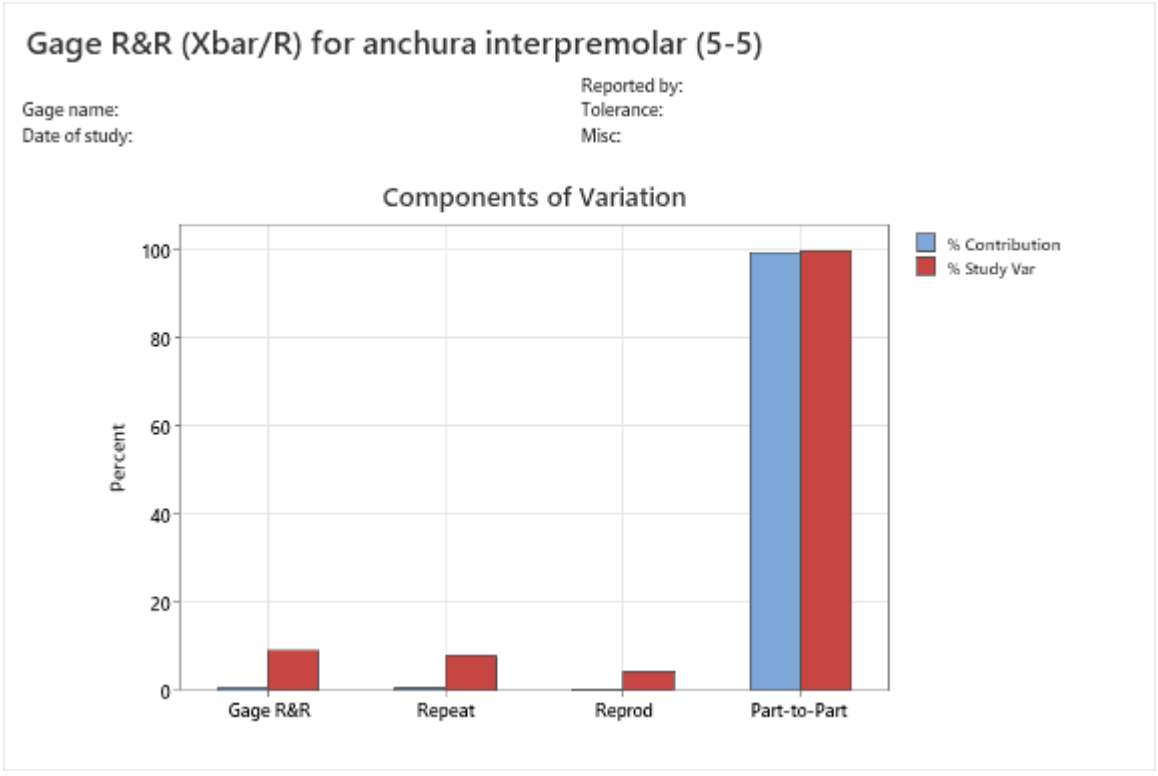
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.0991	0.82
Repeatability	0.0769	0.64
Reproducibility	0.0222	0.18
Part-To-Part	11.9397	99.18
Total Variation	12.0388	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.31480	1.8888	9.07
Repeatability	0.27722	1.6633	7.99
Reproducibility	0.14916	0.8949	4.30
Part-To-Part	3.45539	20.7324	99.59
Total Variation	3.46970	20.8182	100.00

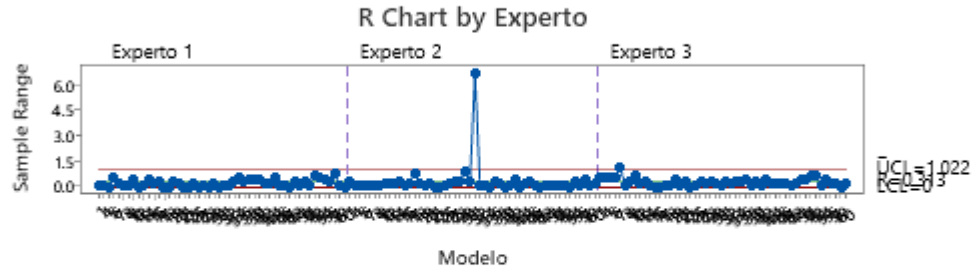
Number of Distinct Categories = 15

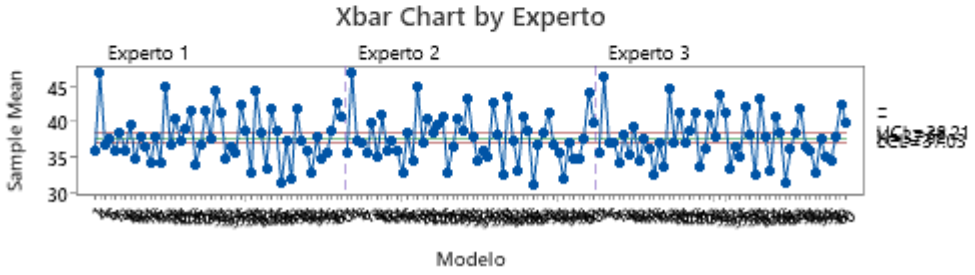


Gage R&R (Xbar/R) for anchura interpremolar (5-5)

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:

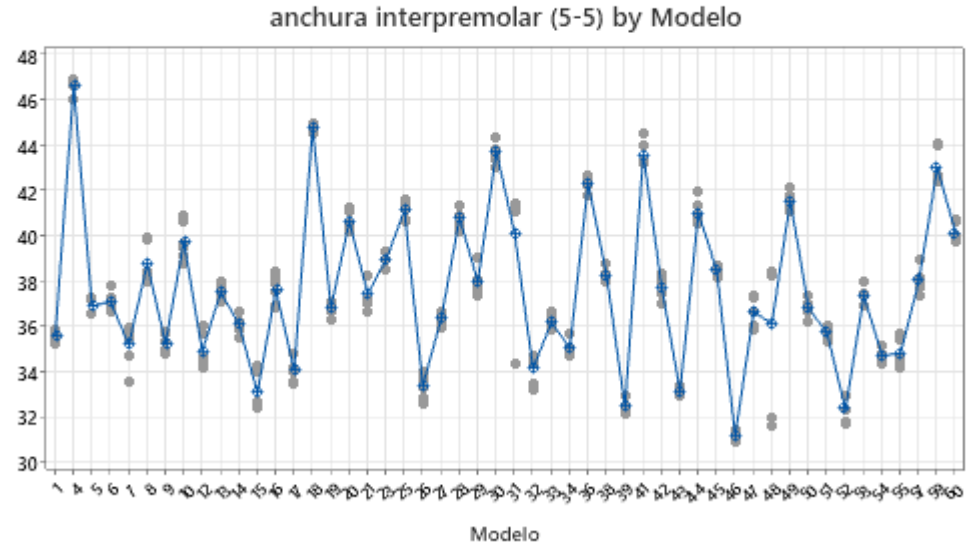




Gage R&R (Xbar/R) for anchura interpremolar (5-5)

Gage name:
Date of study:

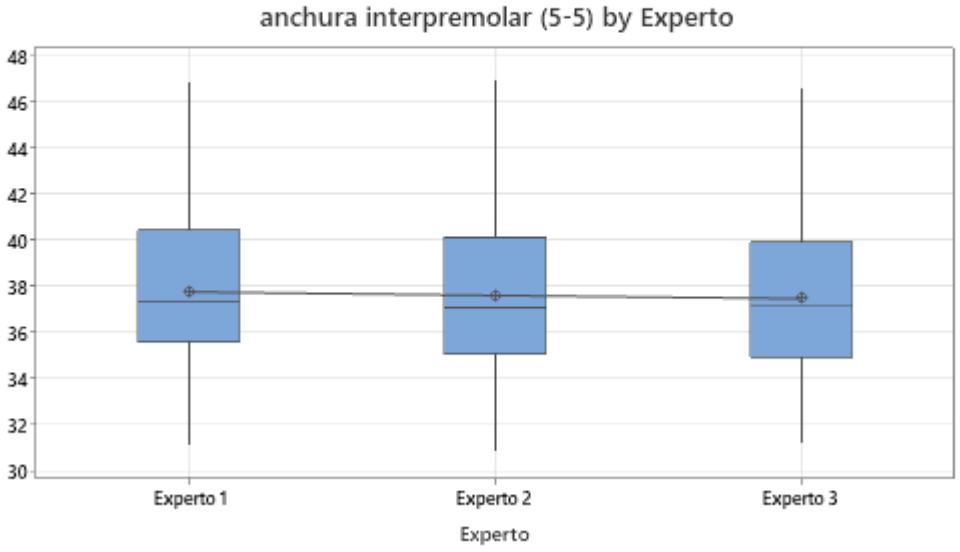
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for anchura interpremolar (5-5)

Gage name:
Date of study:

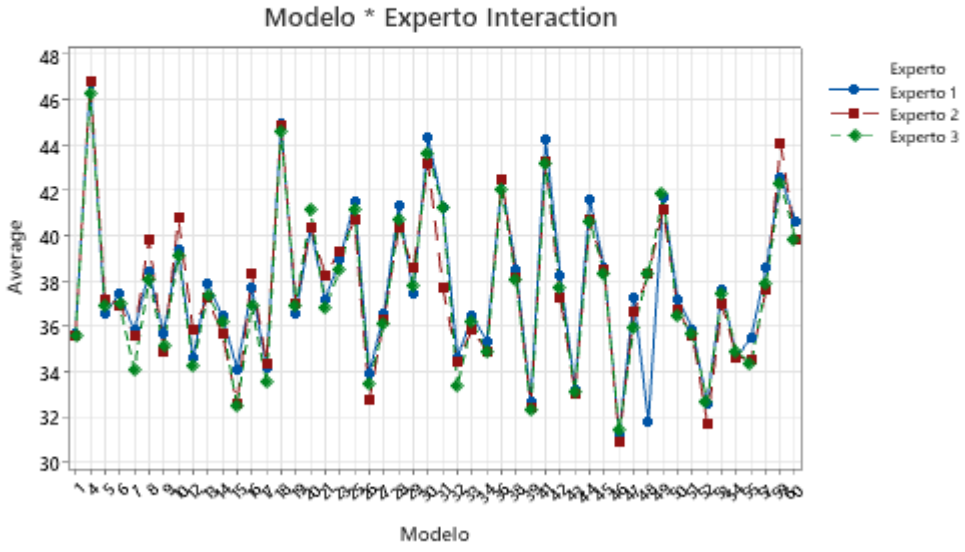
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for anchura interpremolar (5-5)

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Gage R&R Study - XBar/R Method

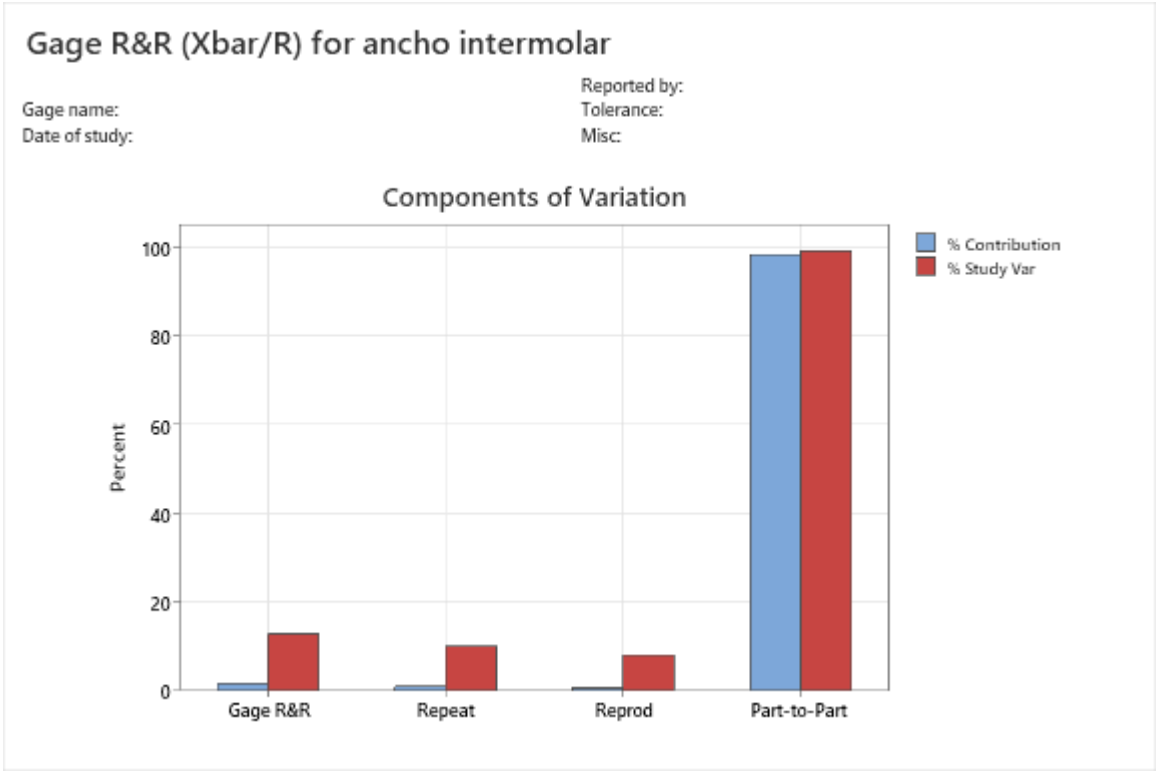
Variance Components

Source	VarComp	%Contribution (of VarComp)
Total Gage R&R	0.12798	1.66
Repeatability	0.07764	1.01
Reproducibility	0.05035	0.65
Part-To-Part	7.59576	98.34
Total Variation	7.72374	100.00

Gage Evaluation

Source	StdDev (SD)	Study Var (6 × SD)	%Study Var (%SV)
Total Gage R&R	0.35775	2.1465	12.87
Repeatability	0.27863	1.6718	10.03
Reproducibility	0.22438	1.3463	8.07
Part-To-Part	2.75604	16.5362	99.17
Total Variation	2.77916	16.6750	100.00

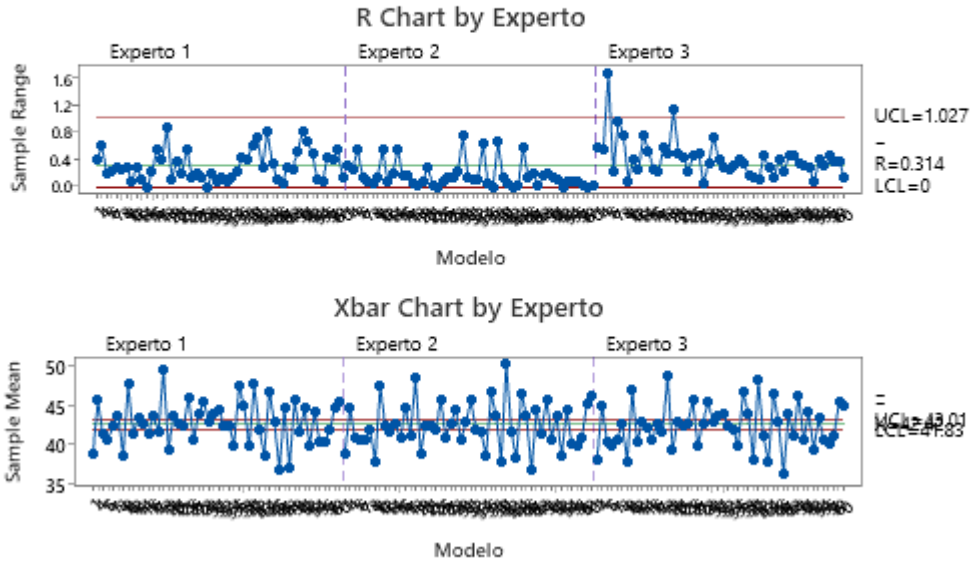
Number of Distinct Categories = 10



Gage R&R (Xbar/R) for ancho intermolar

Gage name:
Date of study:

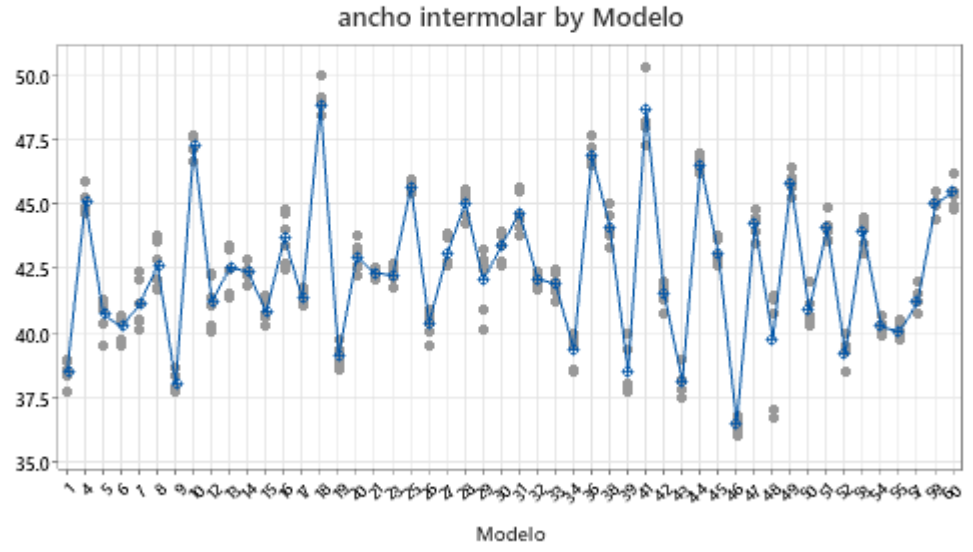
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for ancho intermolar

Gage name:
Date of study:

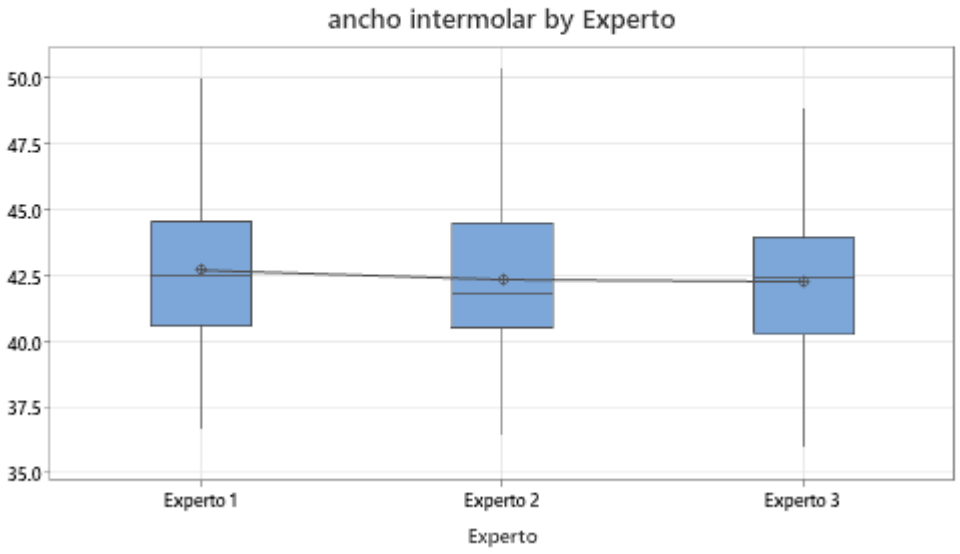
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for ancho intermolar

Gage name:
Date of study:

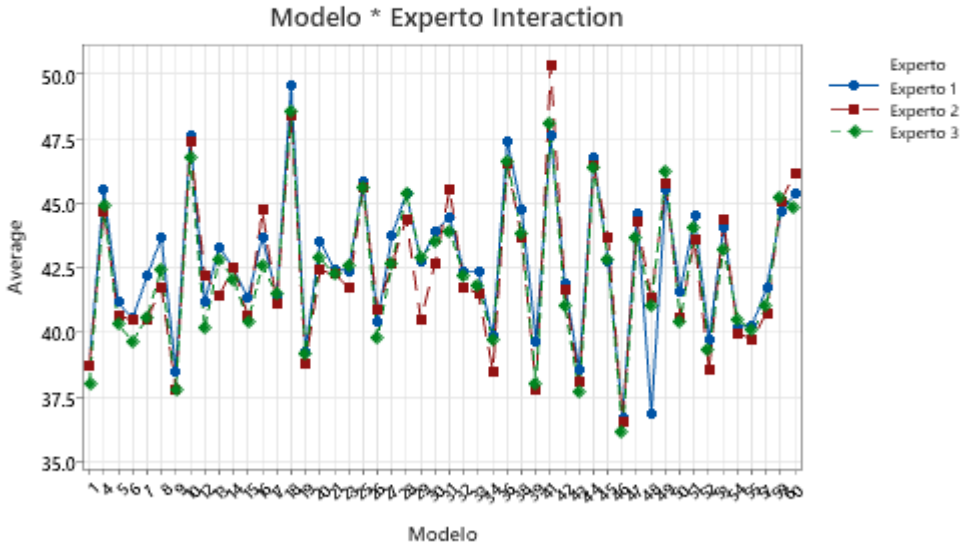
Reported by:
Tolerance:
Misc:



Gage R&R (Xbar/R) for ancho intermolar

Gage name:
Date of study:

Reported by:
Tolerance:
Misc:



Conclusions:

The Gage R&R studies from the upper jaw measurements (17 to 27 mesiodistal widths) offer a detailed look at the measurement system's performance, with a focus on Total Gage R&R, Repeatability, Reproducibility, and Part-To-Part variation across various measurements. When we examine the data for 1 intercanine width, 1 intermolar width, and 2 interpremolar widths, the insights provide substantial evidence towards understanding the efficacy of the DentalArch v2 system.

Key Observations:

Low Total Gage R&R for Dental Widths: The Total Gage R&R values for the dental widths (intercanine, intermolar, and interpremolar widths) show a significantly lower percentage contribution to the total variance compared to other measurements. Specifically, Total Gage R&R percentages are within a lower range (e.g., 3.81% for intercanine width, intermolar width, and interpremolar widths combined), highlighting the measurement system's consistency and reliability for these dental metrics.

High Part-To-Part Variation: The Part-To-Part variation dominates, contributing significantly to the total variance (e.g., 96.19% for dental widths), indicating that the variability within the parts being measured (i.e., the actual dental widths) is substantial. This high variation is desirable in dental studies as it reflects true differences among the dental features being assessed.

High Number of Distinct Categories for Dental Widths: The number of distinct categories for dental width measurements is considerably higher (up to 15 distinct categories), suggesting that the measurement system can effectively discriminate between very fine differences in dental widths. This is crucial for accurate dental assessments, orthodontic planning, and research, where distinguishing between subtle variations can be critical.

Implications for DentalArch v2:

The data supports the utility and effectiveness of DentalArch v2, particularly its focus on simplified key measurements for the dental arch. By concentrating on four critical dimensions that exhibit low measurement system variability and high discrimination capability, DentalArch v2 aligns its design with the strengths identified in the Gage R&R studies. This approach not only makes the tool more efficient and easier to use but also ensures it retains a high level of accuracy and reliability, crucial for dental assessments.

Despite a marginal decrease in accuracy for the lower jaw (93.0%) and upper jaw (92.7%) compared to its predecessor, DentalArch v2's streamlined focus on essential measurements without significantly compromising accuracy demonstrates its enhanced utility. The tool provides a balanced solution that prioritizes efficiency, user-friendliness, and accuracy, making it a valuable asset in dental practice and research.

The high Part-To-Part variation and the ability to discriminate between numerous distinct categories underline the natural variability in dental arches, emphasizing the importance of precise and reliable measurement tools like DentalArch v2 in capturing these nuances.