

# List of publications

January 13, 2012

## Peer reviewed papers

“Some common errors of experimental design, interpretation and inference in agreement studies”

*Statistical Methods in Medical Research* (in press).

Tashi Erdmann, Jeroen de Mast and Matthijs Warrens.

“Improving Processes in Financial Service Organizations: Where To Begin?”

[B] *International Journal for Quality and Reliability Management* (in press).

Joran Lokkerbol, Ronald Does, Jeroen de Mast, Marit Schoonhoven.

“The tactical use of constraints and structure in diagnostic problem solving”

[B] *Omega* **39**(6) 702–709 (2011).

Jeroen de Mast.

“Assessment of Binary Inspection with a Hybrid Measurand”

[B] *Quality and Reliability Engineering International* (in press)

Tashi Erdmann and Jeroen de Mast.

“Measurement system analysis for binary inspection: Continuous versus dichotomous measurands”

[A] *Journal of Quality Technology* **43**(2) 99–112 (2011).

Jeroen de Mast, Tashi Erdmann and Wessel van Wieringen.

“Process improvement in healthcare: A model for overall resource efficiency”

[B] *Quality and Reliability Engineering International* **27**(8) 1095–1106 (2011).

Jeroen de Mast, Benjamin Kemper, Ronald Does, Michel Mandjes, Yohan van der Bijl.

“Generic project definitions for improvement of healthcare delivery: A case-based approach”

*Quality Management in Health Care* **20**(2) 152–164 (2011).

Gerard Niemeijer, Ronald Does, Jeroen de Mast, Albert Trip, Jaap van den Heuvel.

“Modeling and evaluating repeatability and reproducibility of ordinal classifications”

[A] *Technometrics* **52**(1) 94–106 (2010).

Jeroen de Mast and Wessel van Wieringen.

“Improving quality in healthcare while reducing costs”

*Quality Management Forum* **36**(3) 12–15 (2010).

Ronald Does, Jaap van den Heuvel, Jeroen de Mast and Gerard Niemeijer.

“Discussion” of “Statistical Thinking and Methods in Quality Improvement: A look to the future” by R. Hoerl and R. Snee.

*Quality Engineering* **22**(3) 130–132 (2010).

Jeroen de Mast and Ronald Does.

“Modeling process flow using diagrams”

[B] *Quality and Reliability Engineering International* **26**(4) 341–349 (2010).

Benjamin Kemper, Jeroen de Mast, and Michel Mandjes.

“Nonrepeatable Gauge R&R Studies Assuming Temporal or Patterned Object Variation”

[A] *Journal of Quality Technology* **41**(4) 426–439 (2009).

Frank van der Meulen, Henk de Koning, and Jeroen de Mast.

“Principles of exploratory data analysis in problem solving: What can we learn from a well-known case?”, with discussion and rejoinder.

*Quality Engineering* **21**(4) 366–375 (paper) 382–383 (rejoinder) (2009).

Jeroen de Mast and Benjamin Kemper.

“Measurement system analysis for binary data”

[A] *Technometrics* **50**(4) 468–478 (2008)

Wessel van Wieringen and Jeroen de Mast.

“Generic Lean Six Sigma project definitions in financial services”

[B] *Quality Management Journal* **15**(4) 32–45 (2008)

Henk de Koning, Jeroen de Mast, Ronald Does, Thijs Vermaat, and Serge Simons.

“Discussion” of “An overview of the Shainin System for quality improvement” by S. Steiner, R. MacKay and J. Ramberg.

*Quality Engineering* **20**(1) 20–22 (2008)

Jeroen de Mast and Ronald Does.

“Integrating the many facets of Six Sigma”

*Quality Engineering* **19**(4) 353–361 (2007)

Jeroen de Mast.

“Agreement and kappa type indices”

*The American Statistician* **61**(2) 148–153 (2007)

Jeroen de Mast.

“Destructive testing in gauge R&R studies”, “Six Sigma method”, “Sigma metric”, and other contributions in

*Encyclopedia of Statistics in Quality and Reliability*, Wiley (2007)

Jeroen de Mast, Albert Trip, and Ronald Does

“The CTQ flowdown as a conceptual model of project objectives”

[B] *Quality Management Journal* **14**(2) 19–28 (2007)

Henk de Koning and Jeroen de Mast

“Exploratory data analysis in quality improvement projects”

[A] *Journal of Quality Technology* **39**(4) 301–311 (2007)

Jeroen de Mast and Albert Trip.

“The science in Six Sigma”

*Quality Progress* **40**(1) 25–29 (2007)

Jeroen de Mast and Søren Bisgaard

“Measurement system analysis for categorical data: Agreement and kappa type indices”

[A] *Journal of Quality Technology* **39**(3) 191–202 (2007).

Jeroen de Mast and Wessel van Wieringen

“Industrial statistics: A discipline with opportunities and challenges”

[B] *Statistica Neerlandica* **60**(3) 1–13 (2006).

Jeroen de Mast and Ronald Does.

“Six Sigma and competitive advantage”

*Total Quality Management and Business Excellence* **17**(4) 455–464 (2006).

Jeroen de Mast.

“After Six Sigma – What’s next?”

*Quality Progress* **39**(1) 30–36 (2006).

Søren Bisgaard and Jeroen de Mast.

“Hypothesis generation in improvement projects: Approaches for exploratory studies”

[B] *Quality and Reliability Engineering International* **22**(7) 839–850 (2006).

Jeroen de Mast and Marcus Bergman.

“A rational reconstruction of Six Sigma’s Breakthrough Cookbook”

[B] *International Journal of Quality and Reliability Management* **23**(7) 766–787 (2006).

Henk de Koning and Jeroen de Mast

“Grounding of Six Sigma’s Breakthrough Cookbook: How to research a methodology?”

*International Journal of Six Sigma and Competitive Advantage* **1**(3) 263–275 (2005).

Henk de Koning and Jeroen de Mast.

“Gauge R&R studies for destructive measurements”

[A] *Journal of Quality Technology* **37**(1) 40–49 (2005).  
Jeroen de Mast and Albert Trip.

“Measurement system analysis for bounded ordinal data”  
[B] *Quality and Reliability Engineering International* **20**(5) 383–395 (2004).  
Jeroen de Mast and Wessel van Wieringen.

“Robust Individuals Control Chart for Exploratory Analysis”  
*Quality Engineering* **16**(3) 407–421 (2004).  
Jeroen de Mast and Kit Roes

“A methodological comparison of three strategies for quality improvement”  
[B] *International Journal of Quality and Reliability Management* **21**(2) 198–213 (2004).  
Jeroen de Mast.

“Quality improvement from the viewpoint of statistical method”  
[B] *Quality and Reliability Engineering International* **19**(4) 255–264 (2003).  
Jeroen de Mast.

“The multi-vari chart: a systematic approach”  
*Quality Engineering* **13**(3) 437–447 (2001).  
Jeroen de Mast, Kit Roes and Ronald Does.

“Steps and strategies in process improvement”  
[B] *Quality and Reliability Engineering International* **16**(4) 301–311 (2000).  
Jeroen de Mast, Werner Schippers, Ronald Does and Edwin van den Heuvel.

“Six Sigma’s DMAIC method from the perspective of problem solving”  
Submitted to [A] *International Journal of Production Economics*.  
Jeroen de Mast and Joran Lokkerbol.

“Strategies for diagnostic quality problem solving”  
Submitted to [A] *Journal of Quality Technology*.  
Jeroen de Mast.

[A] [B] journal ranking according to RESAM.

## Books

*Lean Six Sigma for Services and Healthcare*  
Beaumont Quality Publications, Alphen aan den Rijn (2012).  
Jeroen de Mast, Ronald Does, Henk de Koning, and Joran Lokkerbol.

*Lean Six Sigma Stap voor Stap*  
Beaumont Quality Publications, Alphen aan den Rijn (2008).  
Ronald Does, Henk de Koning, and Jeroen de Mast.

*Lean Six Sigma for Service and Healthcare*  
Beaumont Quality Publications, Alphen aan den Rijn (2006).  
Jeroen de Mast, Ronald Does, and Henk de Koning.

*Six Sigma Stap voor Stap*  
Beaumont Quality Publications, Alphen aan den Rijn (2003).  
Ronald Does and Jeroen de Mast.

*Quality Improvement from the Viewpoint of Statistical Method*  
Ph.D. thesis, University of Amsterdam (2002).  
Jeroen de Mast.

*Zes Sigma zakelijk verbeterd*  
Samsom, Alphen aan den Rijn (2001).  
Ronald Does, Edwin van den Heuvel, Jeroen de Mast, Werner Schippers, Albert Trip,  
and Jaap Wieringa.

## Supervised PhD-theses

*Process Flow Improvement in Services and Healthcare.*  
Benjamin Kemper (2011).

*Scientific Grounding of Lean Six Sigma's Methodology.*  
Henk de Koning (2007).  
Winnaar Onderzoeksprijs Kwaliteitsmanagement (NNK) 2008.

*Statistical Models for the Precision of Categorical Measurement Systems.*  
Wessel van Wieringen (2003).

Current projects:

- *Modeling and evaluating uncertainty in measurements*, Tashi Erdmann.

## Other

*Industriële statistiek als technologie voor het oplossen van problemen.*  
Inaugural address, University of Amsterdam (2012).  
Jeroen de Mast.

"Quality Quandaries: The Case of Premature Drill Wear-out", in  
*Quality Engineering* (in press).  
Jo Mooren, Jeroen de Mast, and Ronald Does.

"Quality Quandaries: Design for Six Sigma: Method and Application", in  
*Quality Engineering* **23**(2) 204–211 (2011).  
Jeroen de Mast, Gerjan Diepstraten, and Ronald Does.

"A history of industrial statistics and quality and efficiency improvement", in  
*Statistical Practice in Business and Industry*, S. Coleman, T. Greenfield, D. Montgomery,  
and D. Stewardson (eds.) 15–27 (2008).  
Jeroen de Mast.

"The scientific underpinning of Lean Six Sigma", in  
*Bulletin of the International Statistical Institute* **LXII** 1560–1566 (2007).  
Ronald Does, Jeroen de Mast, Henk de Koning, and Søren Bisgaard.

"Lean Six Sigma en innovatie", in  
*Synaps* **21** 17–22 (2006).  
Henk de Koning, Ronald Does, and Jeroen de Mast.

"Lean Six Sigma: gebruik maken van het beste van beide werelden", in  
*Kwaliteit in Bedrijf* **21**(8) 10–13 (2006).  
Henk de Koning, Ronald Does, and Jeroen de Mast.

"Six Sigma als blauwdruk voor de kenniseconomie"  
*Sigma* nr. 3 (2005).  
Jeroen de Mast and Ronald Does.

"Six Sigma"  
*Kwaliteit in Praktijk* F28 (2005).  
Ronald Does and Jeroen de Mast.

"Steekproefkeuring"  
*Kwaliteit in Praktijk* F19 (2004).  
Albert Trip and Jeroen de Mast.

"Six Sigma deployment strategy"  
*Proceedings of the Six Sigma International Conference*, Wroclaw Univ. of Technology  
33–40 (2004).  
Ronald Does and Jeroen de Mast.

"Procesprestatieanalyse"



*Kwaliteit in Praktijk* F18 (2003).  
Albert Trip and Jeroen de Mast.

“Het Nederlandse model van Zes Sigma”  
*Sigma* 01/4 12–17 (2001).  
Ronald Does and Jeroen de Mast.

“Comparing nonmanufacturing with traditional applications of Six Sigma”  
*Quality Engineering, Qual. Quandaries* **15**(1) 177–182 (2002).  
Ronald Does, Edwin van den Heuvel, Jeroen de Mast, and Søren Bisgaard.