

CoCo-SIM : object-oriented multi-pole modelling and simulation environment for fluid power systems. Part 1, Fundamentals

Grossschmidt, Gunnar; Harf, Mait International journal of fluid power 2009 / 2, p. 91-100 : ill
https://www.researchgate.net/publication/313134680_COCo-SIM_-_Object-oriented_multi-pole_modeling_and_simulation_environment_for_fluid_power_systems_Part_1_Fundamentals

CoCo-SIM : object-oriented multi-pole modelling and simulation environment for fluid power systems. Part 2, Modelling and simulation of hydraulic-mechanical load-sensing system

Grossschmidt, Gunnar; Harf, Mait International journal of fluid power 2009 / 3, p. 71-85 : ill

Computer simulation of transient responses of an electro-hydraulic servo-valve

Grossschmidt, Gunnar; Harf, Mait Машиностроение и техносфера на рубеже XXI века : сборник трудов VIII международной научно-технической конференции : 10-16 сентября 2001 г. в городе Севастополе. Том 1 2001 / p. 124-133 : ill

Creating the classes with NUT language for chain system simulation

Grossschmidt, Gunnar; Vanaveski, Jüri; Harf, Mait; Züger, Armin Proceedings : NordDesign '98 : August 26-28, 1998, Royal Institute of Technology, Stockholm, Sweden 1998 / p. 147-156: ill

Design of a hydraulic-mechanical load-sensing system using object-oriented modelling and simulation

Grossschmidt, Gunnar; Harf, Mait 21st European Conference on Modelling and Simulation : ECMS 2007 : Simulations in United Europe : June 4th-6th, 2007, Prague, Czech Republic 2007 / p. 383-390 https://www.scs-europe.net/conf/ecms2007/ecms2007-cd/ecms2007/ecms2007%20pdf/e_0045.pdf

Effective modeling and simulation of complicated fluid power systems

Grossschmidt, Gunnar; Harf, Mait Modern Fluid Power : Challenges, Responsibilities, Markets : 9th International Fluid Power Conference, 24th-26th March 2014, Aachen, Germany : proceedings. Vol. 2, Conference : tuesday, March 25th + scientific poster session 2014 / p. 374-385 : ill

Model-based simulation of a hydraulic closed-loop rotary transmission with automatic control

Grossschmidt, Gunnar; Harf, Mait International journal of fluid power 2021 / 42 p. : ill <https://doi.org/10.13052/ijfp.1439-9776.2212>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Model-based simulation of a hydraulic open-loop rotary transmission with automatic regulation of hydraulic motor (Part 1: Modelling)

Harf, Mait; Grossschmidt, Gunnar ESM '2018 : The 2018 European Simulation and Modelling Conference, Modelling and Simulation : October 24-26, 2018, NH Gent Belfort, Ghent, Belgium : [Proceedings] 2018 / p. 63-68
<https://www.eurosis.org/cms/files/proceedings/ESM/ESM2018contents.pdf>

Model-based simulation of a hydraulic open-loop rotary transmission with automatic regulation of hydraulic motor (Part 2: Simulation)

Harf, Mait; Grossschmidt, Gunnar ESM '2018 : The 2018 European Simulation and Modelling Conference, Modelling and Simulation : October 24-26, 2018, NH Gent Belfort, Ghent, Belgium : [Proceedings] 2018 / p. 69-73
<https://www.eurosis.org/cms/files/ESM2018FINPROG.pdf>

Model-based simulation of hydraulic hoses in an intelligent environment

Grossschmidt, Gunnar; Harf, Mait International journal of fluid power 2018 / p. 27-41 : ill
<https://doi.org/10.1080/14399776.2017.1374140> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modeling and simulation of a nozzle-and-flapper valve in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait International Symposium on Machine Design OST 2001 : [Tallinn, Estonia, October 4-5, 2001] : abstracts 2001 / [1] p

Modeling and simulation of a nozzle-and-flapper valve in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 321-328 : ill

Modeling and simulation of a torque motor in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 311-319

Modeling and simulation of a torque motor in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait International Symposium on Machine Design OST 2001 : [Tallinn, Estonia, October 4-5, 2001] : abstracts 2001 / [1] p

Modeling and simulation of an electro-hydraulic servo-system in an intelligent programming environment

Grossschmidt, Gunnar; Harf, Mait The 13th Mechatronics Forum International Conference : proceedings vol.3/3 : September 17-

Modeling and simulation of an electro-hydraulic servovalve in an intelligent programming environment

Harf, Mait; Grossschmidt, Gunnar 2012 Proceedings of the ASME 11th Biennial Conference on Engineering Systems Design and Analysis (ESDA2012) 2012 / p. 1-9 <https://asmedigitalcollection.asme.org/ESDA/proceedings/ESDA2012/44854/281/230755>

Modeling and simulation of hydraulic systems in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait Viertes Deutsch-Polnisches Seminar : Innovation und Fortschritt in der Fluidtechnik : 20.-21. September 2001 in Sopot 2001 / p. 329-348 : ill

Modelling and simulation of a hydraulic load-sensing system in the CoCoViLa environment

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [1] 2008 / p. 83-88 : ill

Modelling and simulation of fluid power systems in an intelligent programming environment

Grossschmidt, Gunnar; Harf, Mait 6th International Industrial Simulation Conference 2008 : ISC'2008 : June 9-11, 2008, Lyon, France : proceedings 2008 / p. 224-230

Modelling and simulation of fluid power systems in object-oriented programming environment

Grossschmidt, Gunnar; Harf, Mait; Sallaste, Taavi 8th Biennial ASME Conference on Engineering Systems Design and Analysis : ESDA 2006 : July 4-7, 2006, Torino, Italy : [proceedings] 2006 / paper ESDA2006-95387, [10] p
<https://asmedigitalcollection.asme.org/ESDA/proceedings-abstract/ESDA2006/42495/723/317919>

Modelling and simulation of hydraulic load-sensing systems using object-oriented programming environment

Grossschmidt, Gunnar; Harf, Mait Simulation in Wider Europe : 19th European Conference on Modelling and Simulation ECMS 2005 : June 1st-4th, Riga, Latvia 2005 / p. 605-609 : ill

Modelling and simulation of steady-state conditions of a hydraulic load-sensing system

Grossschmidt, Gunnar; Harf, Mait; Djurovic, Milan International Scientific-technical Conference : Hydraulic and Pneumatics '2005 : Problems and Development Tendencies in the Beginning Decade of the 21st Century : Wroclaw, 17-19 maja 2005 2005 / p. 439-447 : ill

Multi-pole modeling and intelligent simulation of a hydraulic drive with three-directional flow regulating valve

Harf, Mait; Grossschmidt, Gunnar Proceedings of the 10th International Conference of DAAAM Baltic Industrial Engineering, 12-13th May 2015, Tallinn, Estonia 2015 / p. 27-32 : ill

Multi-pole modeling and intelligent simulation of control valves of fluid power systems (part 1)

Harf, Mait; Grossschmidt, Gunnar Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 17-22 : ill

Multi-pole modeling and intelligent simulation of control valves of fluid power systems (part 2)

Harf, Mait; Grossschmidt, Gunnar Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 23-28 : ill

Multi-pole modeling and intelligent simulation of technical chain systems (Part 1)

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 458-463 : ill

Multi-pole modeling and intelligent simulation of technical chain systems (Part 2)

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 464-471 : ill

Multi-pole modeling and simulation of a four-way valve controlled fluid power system in NUT environment

Grossschmidt, Gunnar; Harf, Mait Modelling and Simulation 2002 : 16th European Simulation Multiconference 2002 : ESM'2002, June 3-5, 2002, Darmstadt, Germany 2002 / p. 677-681 : ill

Multi-pole modeling and simulation of an electro-hydraulic servo-system in an intelligent programming environment

Harf, Mait; Grossschmidt, Gunnar International journal of fluid power 2016 / p. 1-13 : ill
<http://dx.doi.org/10.1080/14399776.2015.1110093>

Multi-pole modeling and simulation of dynamics of an electro-hydraulic servo-system

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 27-30 : ill

Multi-pole modelling and computing of steady-state characteristics of a four-way valve controlled hydraulic drive in NUT

environment

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 22-25 : ill

Multi-pole modelling and intelligent simulation environment for fluid power systems

Harf, Mait; Grossschmidt, Gunnar ESM '2013 : The 2013 European Simulation and Modelling Conference, Modelling and Simulation : October 23-25, 2013, Lancaster University, Lancaster, UK : [proceedings] 2013 / p. 247-254

Multi-pole modelling and intelligent simulation of a fluid power feeding system with a pneumo-hydraulic accumulator

Harf, Mait; Grossschmidt, Gunnar 16th International Conference on Modeling and Applied Simulation (MAS 2017) : held at the International Multidisciplinary Modeling and Simulation Multiconference (I3M 2017), Barcelona, Spain, 18 – 20 September 2017 2017 / p. 128-135 <http://www.scopus.com/inward/record.uri?eid=2-s2.0-85035125034&partnerID=40&md5=1383db926eab8e4c7540e2c6d237033c>

Multi-pole modelling and simulation of a hydraulic mechanical load-sensing system using the CoCoViLa programming environment

Grossschmidt, Gunnar; Harf, Mait Proceedings of 6th International Fluid Power Conference "Fluid Power in Motion" : April 1st and 2nd 2008 in Dresden. Volume 2 2008 / p. 553-568

Multi-pole modelling and simulation of an electro-hydraulic servo-system with a non-linear regulator in NUT environment

Grossschmidt, Gunnar; Harf, Mait Fünftes Deutsch-Polnisches Seminar Innovation und Fortschritt in der Fluidtechnik : Warszawa, 18.-19. September 2003 : Vorträge 2003 / p. 146-161 : ill

Multi-pole modelling and simulation of hydraulic chain elements

Grossschmidt, Gunnar; Vanaveski, Jüri; Harf, Mait Прогрессивные технологии и системы машиностроения : международный сборник научных трудов 2000 / p. 210-216 : ill

Multi-pole modelling and simulation of hydraulic chain systems

Grossschmidt, Gunnar; Vanaveski, Jüri; Harf, Mait Машиностроение и техносфера на рубеже XXI века : сборник трудов VII международной научно-технической конференции : 11-17 сентября 2000 г. в городе Севастополе 2000 / p. 216-222 : ill

Simulation of an electro-hydraulic servo-valve in NUT programming environment

Grossschmidt, Gunnar; Harf, Mait Simulation in Industry'2001 : 13th European Simulation Symposium 2001 : ESS'2001 : October 18-20, 2001, Marseille, France 2001 / p. 229-233 : ill

Simulation of hydraulic chains using multi-pole models in the NUT programming environment

Grossschmidt, Gunnar; Vanaveski, Jüri; Harf, Mait Simulation and Modelling : Enablers for a Better Quality of Life : 14th European Simulation Multiconference 2000 : ESM'2000 : May 23-26, 2000, Ghent, Belgium 2000 / p. 709-713 : ill
<https://dl.acm.org/doi/10.5555/647917.740018>

Simulation of hydraulic circuits in an intelligent programming environment (Part 1)

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [I] 2010 / p. 148-153 : ill

Simulation of hydraulic circuits in an intelligent programming environment (Part 2)

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [I] 2010 / p. 154-161 : ill

Simulation of statics and steady state conditions of an electro-hydraulic servo-system

Grossschmidt, Gunnar; Harf, Mait Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 31-34 : ill

Structural synthesis of programs using regular data structures

Harf, Mait; Penjam, Jaan Abstracts of the 6-th Nordic Workshop on Programming Theory, 17-19 October 1994, Aarhus, Denmark 1994 / p. 19

Using multi-pole modeling and intelligent simulation in design of a hydraulic drive

Harf, Mait; Grossschmidt, Gunnar The 14th International Conference on Modeling and Applied Simulation, MAS 2015 : September 21-23 2015, Bergeggi, Italy : proceedings 2015 / p. 89-95 <http://www.scopus.com/inward/record.url?eid=2-s2.0-84960887645&partnerID=40&md5=fda00b9d82183bf4f2361f9f0e6f4237>

Using multi-pole modeling and intelligent simulation in design of a hydraulic drive with two-directional flow regulating valve [part 1]

Harf, Mait; Grossschmidt, Gunnar Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 13-18 : ill <http://innomet.ttu.ee/daaam/>

Using multi-pole modeling and intelligent simulation in design of a hydraulic drive with two-directional flow regulating

valve [part 2]

Harf, Mait; Grossschmidt, Gunnar Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 19-24 : ill <http://innomet.ttu.ee/daaam/>