Volvo Materials Technology - Gothenburg Lab

Group BF67320 - Metallic Materials

Ulla Boman - Manager Metallic Materials

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Rasha Alkaisee

Telephone: +46 31 322 0663 Email address: <u>Rasha.Alkaisee@volvo.com</u>

Main Competence Areas: Residual stress measurements by XRD, Shot peening, Steel **Typical Components:** Pusher and front axles, Axle stubs, Valve springs, Drive shafts, Gears **Responsibility:** X-Ray Diffractometers

Ingemar Bertilsson

Telephone: +46 31 322 1396 Email address: Ingemar.Bertilsson@volvo.com

Main Competence Areas: Cast aluminum, Magnesium, (grey iron)

Typical Components: Aluminum Pistons, Cylinder Liners Responsibility: Material Courses

Johan Eriksson

Telephone: +46 31 322 3366 Email address: <u>Johan.Lar.Eriksson@volvo.com</u>

Main Competence Areas: Grey iron, CGI, Nodular iron, Databases, Image analysis Typical Components: Cylinder- blocks and heads

Jonas Höijer

Telephone: +46 31 322 3354 Email address: <u>Jonas.Hoijer@volvo.com</u> Main Competence Areas: Forged components, Heat treatment. Typical Components: Crankshafts, Connecting rods, Bearings.









Daniel Kihlbaum

Telephone: +46 31 322 5437 Email address: <u>Daniel.Kihlbaum@volvo.com</u>

Main Competence Areas:

Forged components, Precipitation hardened steels, Springs (leaf & helical), SiMo

Typical Components: Steering arms, Axles, Valve springs, Exhaust manifolds

Equipment responsibility: Cutting equipment, VMT Webpage

Niklas Köppen

Telephone: +46 31 322 4932 Email address: <u>Niklas.Koppen@volvo.com</u>

Main Competence Areas: Cast Aluminium, Grey Iron, Compacted Graphite Iron (CGI) and Spheroidal Graphite Iron

Typical Components: Cylinder Heads and Blocks (passenger cars), Brackets and Coolant Cover Ducts **Equipment responsibility:** Stereo and Light Optical Microscopes

Joachim Lindkvist

Telephone: +46 31 322 3357 Email address: <u>Joachim.Lindkvist@volvo.com</u>

Main Competence Areas: Grey iron, CGI, Spheroidal graphite iron Typical Components: Cylinder blocks and heads, brackets

Equipment responsibility: Hardness machines (Brinell)

Anton Marberg

Telephone: +46 31 323 4693 Email address: <u>Anton.Marberg@volvo.com</u>

Main Competence Areas: Cast Aluminium

Typical Components: Cylinder heads and blocks, Brackets, Housings, EGR-components

Mikael Nordqvist

Telephone: +46 31 322 3351 Email address: <u>Mikael.Nordqvist@volvo.com</u> Main Competence Areas: Welding & Brazing, Stainless Steels Typical Components: Weld- and Brazed Components Equipment responsibility:

GDOES











Johan Pal Telephone: +46 31 322 4557 Email address: Johan.Pal.2@consultant.volvo.com

Main Competence Areas: Cast Aluminium, Copper

Typical Components:

Fredrik Sandberg Telephone: +46 31 322 2320 Email address: Fredrik.Jt.Sandberg@volvo.com Main Competence Areas:

Forged Components, Steel & Heat Treatment

Typical Components: Gears and shaft

Equipment responsibility: Scanning Electron Microscopy & Energy Dispersive X-ray Spectroscopy

Pål Schmidt

Telephone: +46 31 322 3367 Email address: <u>Pal.Schmidt@volvo.com</u>

Main Competence Areas: Grey iron, CGI, Nodular iron, Cast aluminium, Casting simulation

Typical Components: Cylinder blocks and -heads, Housings, Brackets Equipment responsibility:

Non-destructive testing

Henrik Svensson

Telephone: +46 31 323 7486 Email address: <u>Henrik.Svensson@consultant.volvo.com</u>

Main Competence Areas: Grey iron, CGI, Spheroidal graphite iron **Typical Components:** Cylinder blocks and heads, brackets

Equipment responsibility: Scanning Electron Microscopy & Energy Dispersive X-ray Spectroscopy









Group BF67380 - Surface Technology & Testing

Henrik Karlsson

Acting Manager Surface Technology & Testing Telephone: +46 323 54 71

Email address: <u>Henrik.Karlsson.8@volvo.com</u>

Main Competence Areas: Powder metallurgy, Steel and heat treatment, Surface technology **Typical Components:** Injector yokes, Valve calipers, Valves and Springs **Equipment responsibility:** Heat treatment furnaces

Maqsood Ahmad

Telephone: +46 31 322 3370 Email address: <u>Maqsood.Ahmad@volvo.com</u>

Main Competence Areas: Fatigue and mechanical testing at high temperature, Low cycle fatigue, Creep, Material data for FE analysis

Typical Components:

Components working at elevated temperature such as exhaust manifold, Cylinder heads MTS hydraulic system for fatigue testing

Equipment responsibility: MTS hydraulic system for fatigue testing

Filip Bergman

Telephone: +46 31 322 3362 Email address: <u>Filip.Bergman@volvo.com</u>

Main Competence Areas: Screw joint testing, Courses in screw joint design Typical Components:

All types of screw joints **Equipment responsibility:** Screw joint test equipment

Karin Björkeborn

Telephone: +46 31 322 2933 Email address: <u>Karin.Bjorkeborn@volvo.com</u> Main Competence Areas:

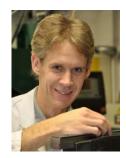
Screw joint testing **Typical Components:** All types of screw joints

Christer Buchwald

Telephone: +46 31 32 21380 Email address: <u>Christer.Buchwald@volvo.com</u> **Main Competence Areas:** Database development, PL hybrid system **Typical Components:** Common Materials Database (CMD) **Equipment responsibility:** FileMaker server, Web server, Database hosting etc.











Dazheng Jing

Telephone: +46 31 323 7587 Email address: <u>Dazheng.Jing@volvo.com</u> **Main Competence Areas:** Ceramic materials, Catalysis

Typical Components: EATS components

Erik Larsson

Telephone: +46 739 02 87 88 Email address: <u>Erik.Larsson@consultant.volvo.com</u> Main Competence Areas:

Sintered steels, Corrosion, Surface technology

Typical Components: Camshafts, Valves Equipment responsibility: Chemicals responsible

Josefin Ratcovich

Telephone: +46 31 32 21 591 Email address: <u>Josefin.Ratcovich@volvo.com</u>

Main Competence Areas: Surface Technology, Electrical contacts and Sensors Typical Components: Connectors, Sensors and Terminals

Göran Wahlberg

Telephone: +46 31 322 3377 Email address: <u>Goran.Wahlberg@volvo.com</u>

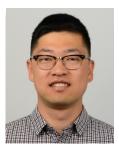
Main Competence Areas: Electrical contacts and electronics Typical components: Connectors, Sensors and Terminals

Mattias Widmark

Telephone: +46 31 322 3374 Email address: <u>Mattias.Widmark@volvo.com</u> **Main Competence Areas:** Fatigue testing and calculation, Fracture mechanics, Defect sensitivity **Typical components:** Engine and chassis component **Equipment responsibility:** Macro photo room

Reza Zarabi

Telephone: +46 322 3361 Email address: <u>Reza.Zarabi@volvo.com</u> **Main Competence Areas:** Screw joint testing **Typical Components:** Screw, nut, gasket and rivet













Gunnar Åkerström

Telephone: +46 31 322 33 68 Email address: <u>Gunnar.Akerstrom@volvo.com</u>

Main Competence Areas:

Mechanical testing method development, Strength of metallic materials, Residual stresses

Typical Components:

Crank shafts, Gears, Rocker arms, Springs

Equipment responsibility:

Hydraulic and electromagnetic load frames, measuring systems

