

JOSEPH TOMEI
Engineering Consultant
Augsburger Komm Engineering, Inc.
& BTI Consultants
3315 E. Wier Avenue
Phoenix, AZ 85040
602-443-1060
602-443-1074 fax
www.akeinc.com

Education

M.S. Mechanical Engineering, Arizona State University, Current
B.S. Mechanical Engineering, Arizona State University, 2007

Summary

Mr. Tomei's experience in prototype mechanical design and manufacturing provides for his ability to bring state of the art, practical solutions to forensic analysis and expert testimony. Areas of investigation and expertise include:

- Mechanical Failure Analysis
- Fire and Explosion Causation & Analysis
- Product Liability/Design Defect
- Mechanical Engineering & Design
- Prototyping & Analysis
- Machinability & Manufacturability Analysis
- HVAC Systems
- Heat Transfer Analysis
- Property Damage Cause, Origin, and Remediation
- Finite Element Analysis and Stress Analysis

Experience

2007-current – Augsburger Komm Engineering, Inc., Consulting Engineer
2005-2006 – Triumph Air Repair, Development Engineer
2002-2005 – FCP Integrated Systems, Systems Engineer
2001-2002 – MODCO, Mechanical Designer
1999-2001 – Motion Systems, Mechanical Designer
1999-1999 – Aerospec Inc, CAD Detailer
1996-1999 – Ideas in Motion, Mechanical Designer
1996-1998 – Tomei Co, Machinist

Professional Affiliations

National Academy of Forensic Engineers, Correspondent
American Society of Heating, Refrigeration and Air-Conditioning Engineers, Member
American Society of Mechanical Engineers, Member
Society of Automotive Engineers International, Member

Seminars

Forensic Photography Techniques, Michael Wilson, Phoenix, AZ, December 18, 2008
Fire Findings, November 2008
Hangsterfer's Metal Working Lubricants, November 2007
Pro/Engineer Wildfire 2.0, June 2005
Solidworks, April 2004
3-D Parametric Modeling, March 1999

Special Projects

Explosive Chemical Material Handling System, May 2007

Design, calculate, and draw an automated pick-n-place material handling system capable of rapid transit times from fixed "pick" points to variable "place" points.

Flat Panel Television Lift Assembly, December 2006

Design, calculate, and draw a television cabinet for residential use. Design requirements where to house the TV inside the cabinet during non-use and elevate the TV mechanically outside of the cabinet for viewing.

Series of "Quick Change" Oil & Fuel Test Adapters, 2005-2006

Design, draw, and test oil and fuel test adapters, of different materials, that allow multiple pump components to be tested on the same test machine.

Rotary Cam & Follower Analysis, April 2004

Analytically and graphically analyze cam profiles and types to generate a design of predetermined functional specifications—completed using numerical data to plot data points and graph.

Series of Turn Key Warehouse Distribution Conveyor Systems, 2002-2005

Specify throughput, storage requirements, and mechanical components to satisfy given requirements. Generate system drawings for installation purposes.

Electro-Magnetic Driven & Actuated Tilt Tray Sorter, 1999-2001

Design, draft, and test a completely electro-magnetically driven and actuated tilt tray sorter for use in large scale distribution centers of mail and package shipping.

Series of Large Scale Staging & Accumulating Conveyors, 1998-1999

Design and manufacturing instructions of medium to large scale staging and accumulating conveyor systems for food and pharmaceutical industry.

Presentations

Automation Controls & Logic, April 2007

Engineering of Thermoplastic & Thermoset Materials, December 2006

Implementation of Maintenance Equipment, June 2006

Methods of Heating Large Volumes of Water (Swimming Pools) May 2006

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