



## **REINHARD G SEIDL, P.E.**

Reinhard Seidl is a registered mechanical engineer with an MS in Mechanical Engineering from the Delft University of Technology in the Netherlands.

He has about 20 years of commercial and industrial HVAC system design experience, initially with a Dutch construction company specializing in industrial projects in Africa and the Middle East, and subsequently with a design-build construction company in California.

Mr. Seidl has experience in a wide range of project types, including petrochemical, semiconductor, pharmaceutical, clean room, heavy industrial, hospital and office buildings:

Designing a Shell refinery control building in Mombasa, Kenya, involved various stages of chemical filtration and detection, as well as a blast-proof mechanical room able to withstand explosions on site.

A Urea factory for Khorasan Petrochemical required another blast-proof building with chemical filtration, as well as the design of a steam heating facility for the Urea storage warehouses.

Mr. Seidl's design of a Aluminum Rolling Mill in Egypt added to his experience with large industrial projects, specifications and project partners.

Upon his arrival in the United States, Mr. Seidl acted as project engineer for ACCO Engineered Systems, one of the oldest mechanical and specialty contractors on the West Coast. His first project with ACCO was the Silicon Graphics Headquarters in Mountain View, California. The campus project included 550,000 ft<sup>2</sup> of office and server room space, divided over a 4-building campus.

The Palo Alto Medical Foundation headquarters in Palo Alto, and the Sun Microsystems campus in San Jose are other examples of large, multi-building complexes Mr. Seidl has worked on.

His work at the Palo Alto Medical Foundation also allowed Mr. Seidl to familiarize himself with standards for medical facilities, and included the construction supervision of CatScans, MRI's, Linear accelerators, Lasers for Ophthalmology, and other specialized equipment.

In ACCO's process division, Mr. Seidl acted as project manager for that company's first design-build semiconductor project, and the first pharmaceutical design-build project.

This work involved the development of new standards, both for the engineering and construction crews, and the additional management required to successfully execute a new process throughout the organization. Mr. Seidl further developed his skills in operating in new territory in this role, while providing customers with the professionalism and support they had come to expect from an industry leader like ACCO.

At Taylor Engineering, Mr. Seidl is using the experience he has gained in over 10 years of field-related construction work to combine the theoretical considerations of planning and specifying with real-world constraints to produce cost-effective results that meet customer's requirements for quality.

While remaining involved in day-to-day engineering operations, his role as principal means he also manages workload planning for the office, and provides teaching and organizational support to our employees.



# Taylor Engineering

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## **REINHARD G SEIDL, P.E.**

### **Education**

1991 Delft University of Technology, M.S. Mechanical Engineering

### **Registration**

1998 – present State of California: Mechanical Engineer M-030676.

### **Experience**

2003 – present: Taylor Engineering, Alameda, CA  
Principal. Responsible for HVAC and Controls design, specifications, conducting energy studies. Representing Taylor Engineering as commissioning agent in the field.

2002 – 2003 ACCO Engineered Systems, San Carlos, CA  
Project Manager. Process systems group; responsible for semiconductor and pharmaceutical projects including cGMP construction and validation. Helped to establish engineering guidelines for process projects.

2000 – 2001: ACCO Engineered Systems, San Carlos, CA  
Project Manager. Responsible for budgeting, bid presentation, project scheduling, completion of construction activities within deadlines, single point of contact to customer in “cradle-to-grave” concept.

1996 – 2000: ACCO Engineered Systems, San Carlos, CA  
Project Engineer. Responsible for layout and design of mechanical systems, equipment selections, site visits, point of contact for construction team.

1991 – 1996: Stork Bronswerk, Amersfoort, the Netherlands  
Project Engineer. Site visits & coordination with customers and other contractors. Coordination of electrical, mechanical and drawing departments. Detailed HVAC calculations.

### **Professional Associations**

American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE)  
Voting member of Guideline committee GPC 30, Commissioning of Existing Buildings.  
<http://gpc30.ashraeps.org/>  
Voting member of Technical Committee 7.5, Smart Building Systems

### **Teaching Experience**

“X472 HVAC System Design Considerations,” instructor, University of California Extension, Berkeley, CA, 2007 – present  
“X471 Principles of Refrigeration,” instructor, University of California Extension, Berkeley, CA, 1998 – 2002



## **Publications**

*Using Demand-based reset strategies*, Consulting Specifying Engineer, July 2008  
*Universal Translator*, ASHRAE, Atlanta, GA, July 2007  
*Trend Analysis for Commissioning*, ASHRAE, Atlanta GA, January 2006  
*Staying Online: Data Center Commissioning*, co-authored with Mark Hydeman and Chuck Shalley, ASHRAE, Atlanta, GA, June 2005

## **Presentations and Seminars**

*Functional Testing: From Basics to Critical Facilities*, Seminar 12, ASHRAE Conference, Orlando, FL, January 2010  
*A Scalable Approach To Energy Improvements*, Energy Management Conference, Long Beach, CA, June 2009  
*EMCS Data Exchange – Challenges and Lessons Learned*, Seminar 27, ASHRAE conference, Salt Lake City, June 2008  
*The Way Things Work: Publicly Available Cx Tools*, Universal Translator presentation, National Conference on Building Commissioning (NCBC), Newport Beach, CA, April 2008, see [http://www.peci.org/ncbc/2008/ncbc\\_proceedings\\_08.html](http://www.peci.org/ncbc/2008/ncbc_proceedings_08.html)  
*Supply Air Temperature and Pressure Setpoint Reset in VAV Systems Based on Zone Demand*, National Conference on Building Commissioning (NCBC), Newport Beach, CA, April 2008, see [http://www.peci.org/ncbc/2008/ncbc\\_proceedings\\_08.html](http://www.peci.org/ncbc/2008/ncbc_proceedings_08.html)  
*Universal Translator Demonstration Case Study*, California Commissioning Council, Newport Beach, CA, April 2008  
*Design and Commissioning of Optimized Chilled Water Plants*, PG&E Energy Center, San Francisco, CA, 2007  
*Commissioning Made Accessible*, California Commissioning Council, San Ramon, CA, 2006  
*Data Analysis with the Universal Translator*, PG&E Energy Center, San Francisco, CA, 2006  
*Universal Translator – Advanced Topics*, PG&E Energy Center, San Francisco, CA, 2006  
*Retrofits for High-Tech Facilities*, PG&E Energy Center, San Francisco, CA, 2006  
*Using EMS Systems for Building Performance and Retro-Commissioning*, presented at National Conference on Building Commissioning, San Francisco, CA (2006), PG&E Energy Center, San Francisco, CA (2006), PG&E Energy Center, San Ramon, CA (2006), AMD, Sunnyvale, CA (2006), Radisson Hotel, Fresno, CA (2006)  
*Innovations in Evaporative Cooling and Water Treatment*, PG&E Energy Center, San Francisco, CA, 2005

## **Representative Projects**

Bay View Tower	San Mateo, CA, 200,000 ft <sup>2</sup>
Cathedral of Christ the Light	Oakland, CA, 235,000 ft <sup>2</sup>
Contemporary Jewish Museum	San Francisco, CA, 63,000 ft <sup>2</sup>
Egyptalum Aluminum Rolling Mill	Nag Hammady, Egypt, 200,000 ft <sup>2</sup>
Fremont Fire Station	Fremont, CA, 45,000 ft <sup>2</sup> , LEED NC
Hewlett Packard chiller plant	Palo Alto, CA, 3,000 tons
Joyce Ellington Branch Library	San Jose, CA, 13,000 ft <sup>2</sup>
Khorasan Petrochemical Control Bldg	Khorasan, Iran, 3,000 ft <sup>2</sup>
Khorasan Petrochemical, Urea storage	Khorasan, Iran, 150,000 ft <sup>2</sup>
KLA Tencor	Livermore, CA, 120,000 ft <sup>2</sup>
KLA Tencor	Milpitas, CA, 680,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab, Adv.light source, B6	Berkeley, CA, 130,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab, Auditorium, B50	Berkeley, CA, 45,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab, B62	Berkeley, CA, 45,000 ft <sup>2</sup>



Lawrence Berkeley Nat'l Lab Laser Lab, B71	Berkeley, CA, 5,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab Machine Shop, B77	Berkeley, CA, 68,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab, B74	Berkeley, CA, 56,000 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab Animal Lab, B86	Berkeley, CA, 4,600 ft <sup>2</sup>
Lawrence Berkeley Nat'l Lab Data Center, NERSC	Oakland, CA, 2,400 tons
Macromedia, 625 Townsend Street	San Francisco, CA, 56,000 ft <sup>2</sup>
nVidia Data Center	San Jose, CA, 15,000 ft <sup>2</sup>
nVidia Santa Clara Corporate Campus	Santa Clara, CA, 1, 770,000 ft <sup>2</sup>
Oracle 3OP	Redwood Shores, CA, 330,000 ft <sup>2</sup>
Palo Alto Medical Foundation Fremont	Fremont, CA, 75,000 ft <sup>2</sup>
Palo Alto Medical Foundation Clark Bldg.	Palo Alto, CA, 40,000 ft <sup>2</sup>
Palo Alto Medical Foundation, incl. animal labs	Palo Alto, CA, 300,000 ft <sup>2</sup>
Palo Alto Westin Hotel	Palo Alto, CA
Pixar 53 <sup>rd</sup> Street Areas A and B, Phase 1	Emeryville, CA, 40,000 ft <sup>2</sup>
Pixar West Village Phase 5	Emeryville, CA, 35,000 ft <sup>2</sup>
Pixar Phase II	Emeryville, CA, 150,000 ft <sup>2</sup>
Ross Stores Headquarters	Pleasanton, CA, 150,000 ft <sup>2</sup>
San Francisco General Hospital	San Francisco, CA, 415,000 ft <sup>2</sup> , LEED NC
San Francisco SPCA	San Francisco, CA, 45,000 ft <sup>2</sup>
San Francisco State University	San Francisco, CA, 1,300,000 ft <sup>2</sup>
San Quentin Central Health Services Center	San Quentin, CA, 115,000 ft <sup>2</sup> , LEED NC
Santa Clara Community Center	Santa Clara, CA, 34,000 ft <sup>2</sup>
Shell/KPRL Petroleum Refinery Control Bldg	Mombasa, Kenya, 5,000 ft <sup>2</sup>
Silicon Graphics HQ	Mountain View, CA, 550,000 ft <sup>2</sup>
UC Berkeley Bancroft Library	Berkeley, CA, 110,000 ft <sup>2</sup>
UC Berkeley Stanley Hall	Berkeley, CA, 285,000 ft <sup>2</sup>
Veterans Administration	Palo Alto, CA, 750,000 ft <sup>2</sup>
Watergate Towers	Emeryville, CA, 800,000 ft <sup>2</sup>
Yahoo	Mountain View, CA, 900,000 ft <sup>2</sup>

### **Other Projects and Studies**

Projects for which Mr. Seidl was the construction project manager:

Chukchansi Casino and Resort	Fresno, CA, 250,000 ft <sup>2</sup>
Form Factor, clean rooms/process systems	Livermore, CA, 17,000 ft <sup>2</sup>
ISE Labs semiconductor testing facility	Fremont, CA, 20,000 ft <sup>2</sup>
Mendel Biotech, plant growth rooms	Hayward, CA, 2,000 ft <sup>2</sup>
Palo Alto Medical Foundation, Fremont	Fremont, CA, 5,000 ft <sup>2</sup>
Point Biomedical, clean rooms/process systems	San Carlos, CA, 10,000 ft <sup>2</sup>
San Jose Sharks ice rink	San Jose, CA, 20,000 ft <sup>2</sup>
Santur semiconductor	Fremont, CA, 3,000 ft <sup>2</sup>
Sun Microsystems San Jose Campus	San Jose, CA, 250,000 ft <sup>2</sup>

### **Simulation Tools**

TrendAnalyzer	Conceived of a tool for automating large scale whole-building trend analysis for commissioning. Supervised in-house implementation of programming.
Universal Translator	Managed merging of TE-developed program code into Pacific Gas & Electric Universal Translator (UT). The UT is a free tool, available at <a href="http://www.utoonline.org">www.utoonline.org</a> , that allows commissioning agents and building engineers to assess how well their building is working. The effort was recently expanded using a California Energy Commission Grant and will see significant upgrades in 2010-2012.