



TAYLOR RYMAN
CORPORATION

ABILITY *“Great ability develops and reveals itself with every new assignment.”*

-Baltasar Gracian

ADVANCED TECHNOLOGY MANUFACTURING FACILITIES

Critical building systems are at the heart of every high-tech manufacturing facility. TRC has provided engineering design services for a variety of these facilities, including electronics manufacturing; biosciences manufacturing, research & development; micro-chip manufacturing; satellite and space craft manufacturing; and product assembly & test facilities.

Intesys VOC Abatement

System Tempe, AZ This fast-track design/build industrial project involved the installation of a carbon-based VOC abatement system for a spray-painting process. The classification of the chemicals used and dilution calculations were performed to satisfy county air compliance requirements. The electrical service was upgraded to accommodate the new process equipment and a new abatement exhaust system with an automatic fire suppression system was installed.



Motorola Ocotillo Facility Chandler, AZ

TRC provided all electrical engineering for the construction of this 400,000 square foot high tech engineering, research and manufacturing facility located in Chandler, AZ. The design included medium voltage distribution systems, 480/277 volt and 208/120 volt power distribution systems, all interior and exterior lighting, emergency power systems, stand-by power systems and UPS power systems. TRC continues to provide on-going engineering support for this facility, including electrical systems studies, circuit breaker maintenance and coordination assistance, and facility remodel and expansion projects.

ON Semi-Conductor Phoenix, AZ TRC has been involved in dozens of projects at ON Semiconductor's 52nd Street Facility. We have provided engineering services for numerous remodels and tenant improvements, expansions to existing computer room facilities (including revisions to associated UPS power distribution systems), clean room projects, tool installations, modifications and additions to building HVAC systems, revisions to campus electrical power distribution systems, as well as engineering studies.



ENGINEERING *“Engineering is the professional art of applying science to the optimum conversion of natural resources to the benefit of man.” -Ralph J. Smith*

Orbital Sciences Corporation/Space Data Division Chandler, AZ This manufacturing and office facility includes 140,800 square feet of manufacturing space, 118,600 square feet of office and engineering space, and a 9,600 square foot atrium. Additional projects in the facility have included high-bay manufacturing expansions, electrical service expansions, a process chiller installation and cooling tower replacements.

Synetics Solutions Manufacturing Expansion

Tigard, Oregon This project included a clean environment chamber, conveyor systems, powder coat painting equipment, and drying ovens in a 45,000 square foot electronics manufacturing facility. TRC worked closely with other design team members, the owner, and the contractor to meet the fast-track construction schedule.



Flip Chip Phoenix, AZ TRC has provided City of Phoenix Annual Facilities Permit (AFP) agent services and on-going engineering for Flip Chip since 2000. Projects have involved several process modifications and cleanroom tool installations, including a class 10,000 cleanroom expansion and an office facility expansion. Engineering designs include power distribution, lighting, process exhaust, grounding, and process piping.

Neltec, Inc. Tempe, AZ

TRC has provided engineering design for several projects in the Neltec, Tempe facility including a 24,000 square foot assembly facility with a 2,800 square foot cleanroom, a 9,500 square foot manufacturing and lab expansion, and a new laboratory and press room for relocation of operations from another facility.

Engineering design has included an electrical service equipment upgrade, a hot-oil piping system, cleanroom HVAC systems, exhaust systems, and process piping systems.



CREATIVITY *“Creativity can solve almost any problem. The creative act, the defeat of habit by originality, overcomes everything.”-George Lois*

Durel Corporation Chandler, AZ TRC has provided on-going engineering and design for Durel Corporation since the facility was constructed in 1997. The original building includes 75,000 square feet of office and manufacturing space and (2) 3600-amp electrical services. In 2000, TRC designed a 68,000 square foot manufacturing expansion that included (2) additional 3600-amp electrical services and 16,000 square feet of cleanroom manufacturing space. Other projects at the facility have included emergency power systems upgrades, modifications for a phosphor production facility, installation of (2) 300 HP thermal oxidizers, fire alarm system upgrades, and power factor and power quality engineering studies.



California Micro Devices Facility Tempe, AZ TRC has provided California Micro Devices with mechanical, plumbing, fire protection and electrical engineering services for numerous projects in their Tempe, Arizona manufacturing facility. Projects include tenant improvements and remodels, tool installations, and processing line installations.

Amersham Biosciences Chandler, AZ This fast-track design and construction project involved relocating Motorola’s Life Sciences division to an existing facility at Amkor, after the division was purchased by Amersham Biosciences. The design effort involved coordination with Amersham’s local and out-of-state personnel, Motorola and Amkor facilities staff, and out-of-state mechanical and electrical contractors. The project included approximately 24,000 square feet of cleanroom and laboratory space for biosciences manufacturing, research, and development. Engineering included cleanroom air distribution, humidity control, process exhaust, power distribution, emergency and UPS power for computer and manufacturing equipment, and process piping for manufacturing equipment.

