

GREENTECH - PV Solar Cells

Solexel Facility Expansion



OVERVIEW

IES provided design and engineering services for multiple facility system upgrades, tool installs and facility reconfigurations.

Solexel required increased Hydrogen at a space-restricted site that required creative solutions to obtain permits. Through their growth phase, IES upgraded the Chilled Water, Process Cooling Water, Cleanroom and HVAC systems. New bulk TCS delivery and storage system installation with point-of-use scrubber to enable their state-of-the-art Kokusai processing tool were installed which triggered the preparation of a Risk Management Plan per CalArp.

PROJECT DETAILS

- 3,500 gallons LH2 tank and larger delivery system
- Relocation of HEPA systems for new cleanroom
- New Bulk Trichlorosilane storage and delivery system
- New liftstations within very tight constraints
- Design and install new N2, H2, CDA and DI Water piping systems
- Converted PCW system from closed to open loop
- Laser, DNS, APCVD, HPPVD and Metrology Equipment

IES SOLUTIONS

- Obtained permit for LH2 using AMMR
- Specified and bid out P.O.U. abatement system for TCS
- Upgrade PCW/CHW system w/minimal shutdown time
- Creative space planning to accommodate numerous pieces of process equipment within very tight space constraints
- Prepared detailed risk management plan (RMP) in accordance with CalARP regulations for bulk TCS
- Cost savings through design for all lab expansions

LOCATION

Milpitas, California

TEAM (PARTNERS)

Architect: TDS Architects

Structural: PASE

GC: Bay Area Builders

PROJECT DURATION

Design & Permit: 36 months

Construction: 36 months

PROJECT VALUATION

\$10,000,000 - \$50,000,000

ABOUT IES

Integrated Engineering Services (IES) is an established firm providing innovative and cost-effective solutions to meet your complex engineering, design and operational needs.

When experience, knowledge and innovation matter most.

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