

# Technical Services

Silicon Chemical Corporation (SCC) provides technical services that increase the competitive advantage of polysilicon companies and address compliance with new regulatory policies.

SCC offers services which provide: improved raw material efficiency, waste recycling, reduction of utility needs, improvement in uptime, reduced maintenance expenses, conservation of land usage, and reduction of environmental wastes. Our consulting services, engineering, technology and equipment can be incorporated into an existing or greenfield polysilicon production facility. Implementation often has minimal operational impact, low capital cost, and a high return on investment.

## SCC Offers:

- Operability assessments
- Process troubleshooting
- Corrective action plans
- Corrective action execution
- Personnel training
- Standard Operating Procedure (SOP) update and development
- Integration of process technology

## Implementation Provides:

- Improved plant safety
- Reduced operating costs
- Increased product quality
- Reduced environmental impacts
- Reduced energy consumption
- Increased process reliability
- Startup advantages



## SCC Abilities:

- Uncover and exploit opportunities throughout the plant for energy recovery
- A proprietary database and process models for chlorosilane systems, historically validated with over 30 years of plant operational experience, increases accuracy of modeling results and simulation studies
- Silicon tetrachloride (STC) impact assessment and mass balance services to provide for better integration and mitigation of STC problem areas
- Knowledge and familiarity with trichlorosilane, polysilicon, and silane production, including STC conversion technologies
- Over 100 years of plant operation, troubleshooting and process optimization experience
- State of the art fluidized bed reactor (FBR) computational fluid dynamic modeling to optimize various reactor systems