

### • Research • Develop • Manufacture

- R&D Building : 52,000 sq. ft.
- Pilot Plant Capacity : 70 KL with Clean Room
- Major Reaction Capabilities : Hydrogenation, Reduction, Cryogenic Reactions, Chiral Synthesis
- Manufacturing Blocks : 5 Blocks of 240 KL total
- Major R&D Equipment's : Fume Hoods, Hydrogenators & Fermenters
- Plants Equipment : SSR, GLR's, Distillation Columns & Hydrogenators
- Technical Strength : 80

### SHAMROCK CRAMS • Research • Develop • Manufacture

- Technical evaluation & Identifying ROS.
- Patent / IP evaluation (Non infringing ROS).
- Setting targeted yields for efficiency.
- Setting quality standards.
- Economic & commercial viability.
- Repeated batches & validation of process R&D stage.
- Process validation at pilot stage / trials.
- Commercialization of pilot trials .
- Setting batch size.
- Scale up to commercial batches at plant level.
- Analytical method validation.
- Impurity profiling, characterization, Identification.
- Stability studies Realtime & Accelerated.
- Regulatory documentation & validation.

