

Ready Mix Concrete

CTLGroup provides the ready mixed concrete industry with much more than just standard testing services.

Our expertise includes developing specialized concrete mixture proportions to meet challenging placement requirements or modern performance specifications. We help improve overall concrete production quality, plant performance and environmental compliance, and we assist with on-site plant set up and qualification. Additionally, CTLGroup experts optimize proportions to help clients gain a competitive edge, meet performance based specifications and determine difficult mixture interactions in the field. We tackle a diverse set of challenges for our cement clients, including:

Products + Services

- Materials testing + new product development
- Education + training
- Plant services + optimization: On-site batch plant configuration and troubleshooting, quality control evaluations, equipment performance inspection, plant audits, energy use audits, and environmental compliance testing
- Mixture proportion consulting + optimization: Review of concrete mixture proportions + specifications; low heat mass concrete mixture optimization; aggregate optimization + void space/particle packing analysis; mixture development for creep + shrinkage performance; sustainable concrete mixture development to reduce carbon footprint; fiber reinforced concrete (FRC); flowable, tremie + self-consolidating concrete (SCC); rapid setting or high early strength concrete; mixture development for durability/service life requirements or performance based specification assistance; mixture cost optimization
- Engineering + problem solving: Concrete precooling + thermal analysis; extended slump life/pumpability troubleshooting; setting time/early strength troubleshooting + maturity for early formwork removal; formwork pressure assessment; admixture - cementitious material interaction + fly ash troubleshooting

Representative Projects

- Illinois Tollway: development of high-early strength concrete for pavement + bridge deck repair
- Kiewit: concrete mixture development of South River Tunnel + Pumping Station
- Prairie, Inc.: creep testing for Trump Tower
- Walsh Construction: batch plant consulting + development of self-consolidating mass concrete for the Holtwood hydroelectric project

