- sharper edges,
- greater curing predictability,
- higher performance,
- improves contact zone,
- does not adversely affect finishability,
- does not adversely affect pumpability,
- Reduces effect of insufficient external curing.

4. Conclusion

The internal curing (IC) is an effective means of reducing autogenous shrinkage. Since autogenous shrinkage is a main contributor to early-age cracking, it is expected that IC would also reduce early age cracking. As internal curing maintains saturated conditions within the hydrating cement paste, the magnitude of internal self-desiccation stresses are reduced and long term hydration is increased. IC is particularly effective for the high performance concretes containing mineral admixtures.

Apart from the benefits and improvements in concrete which has been already discussed IC is useful when 'performance specifications' are important than 'prescriptive specifications' for concrete. Prime applications of IC could be: concrete pavements. Precast concrete operations, parking structures, bridges, HPC projects, and architectural concretes.

Internal curing compounds are technology yet to get popularized and care should be taken when utilized. With significant research contributions in to this area, Internal curing is an assured futuristic technology which is going to gain popularity and to continue to prevail in the industry for long. Instead of relying only on external applications of water, concrete quality will be engineered through the incorporation of water absorbed within the internal curing agent.

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Author Profile

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