



# Benefits of Accelerators

*– In a Modern Precast Works*

**ARMCON**  
CERTAINTY: IN CONCRETE



## Benefits of accelerators in the modern pre-cast works:

### Accelerator Benefits

- Maintain production in cold weather.....*Improved profitability*
- Rapid early strength development.....*without extra cement*
- Reduced cycle times.....*maximise mould utilisation*
- Reduction in breakages.....*less waste, more products to market*
- Earlier demoulding guaranteed.....*dependable strengths*
- Reduced heating in pre-stressing beds.....*fuel cost savings*
- Double-cast in summer.....*double production*

### Overview

The benefits of accelerators are numerous and this leaflet aims to highlight when and why they should be used.

Accelerators work by speeding up the hydration process, that's the reaction between the cement and water in newly formed concrete. Hydration creates heat and this in turn helps to speed up the curing of the concrete. It is important to keep this heat in the concrete during curing and this can be done by covering the concrete with insulated blankets. A beneficial side effect of using insulated blankets is they help to keep the concrete moist, an essential aid to higher strengths.

Accelerator is a vital tool to assist you in maintaining full production during cold weather. The cost of the admixture is less than the cost of cement and means you can use the same mix design throughout the year.

Many companies add extra cement in the winter when the temperature starts to fall in a misguided effort to replace lost strength; this is a costly unnecessary way of maintaining production in cold weather.

*Remember:* You need high early strength for next day demould.  
You do not need higher 28 day strength.

Accelerator can be used in conjunction with superplasticiser to ensure optimum early strength.

**Warning:** Never mix admixtures in the same storage tank, always keep separate until they are added to the mix.

Typical dose rates form 1 litre to 5 litres per 100kg cement added to mix water.

We hope you have found this information useful and can put some of it to good use in your business.