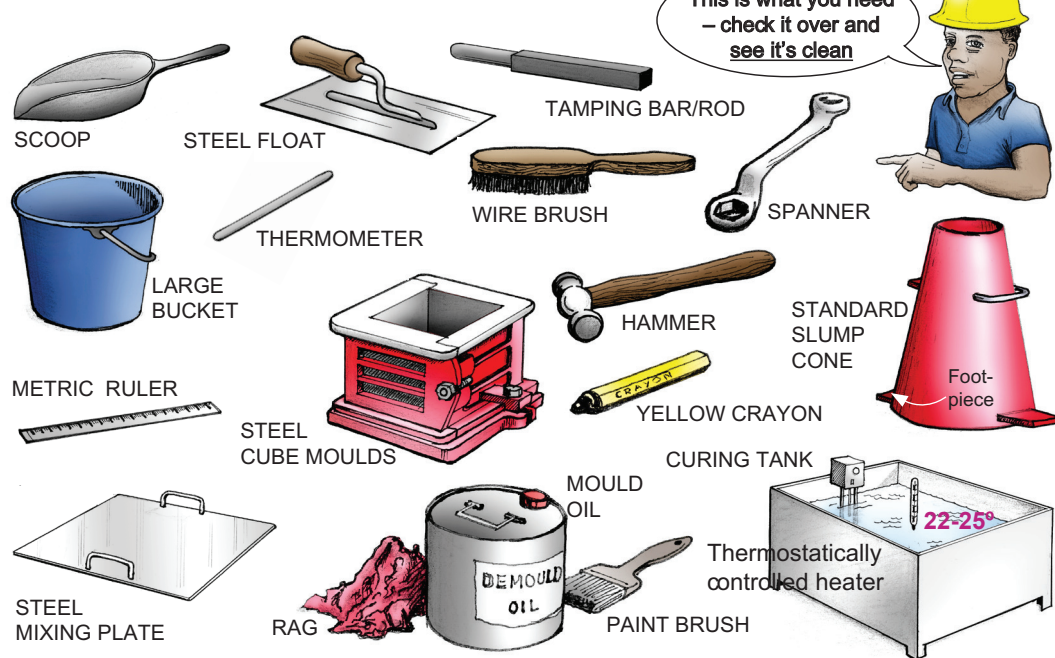




BETTER CUBE MAKING

• TAKING A SAMPLE • THE SLUMP TEST • MAKING CUBES • CURING CUBES

GOT ALL THE EQUIPMENT?



When you clean the equipment finish off with an oily rag to keep it clean

This is what you need – check it over and see it's clean

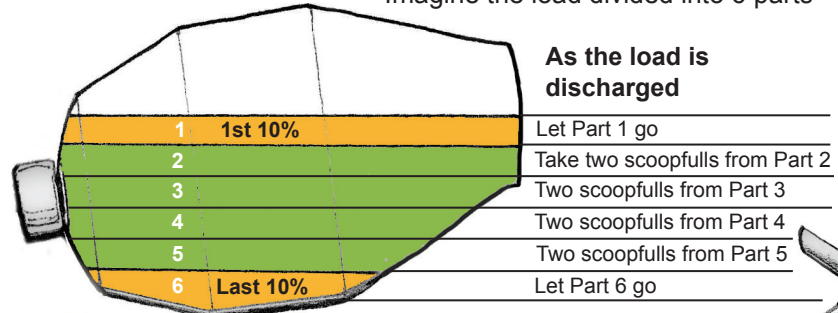
TAKING A SAMPLE

A proper sample consists of scoopfuls taken from 4 different parts of the load.

To get a true sample you must follow a simple plan – a sampling plan.

THE SAMPLING PLAN

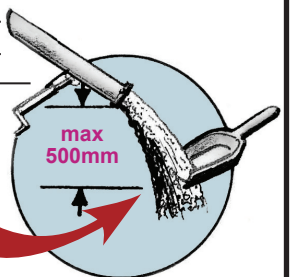
Imagine the load divided into 6 parts



This is the sampling plan – the only way to get a true and proper sample – mix the drum for 5 minutes

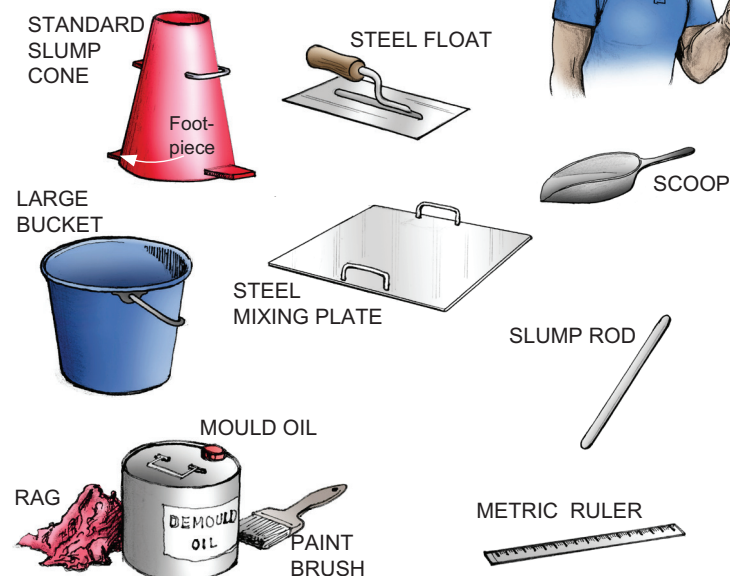
This is the sampling procedure – the only way to get a true sample!

Scoopfuls must be taken from the moving stream



THE SLUMP TEST

Use this equipment and work to a simple plan.



You must have a method!

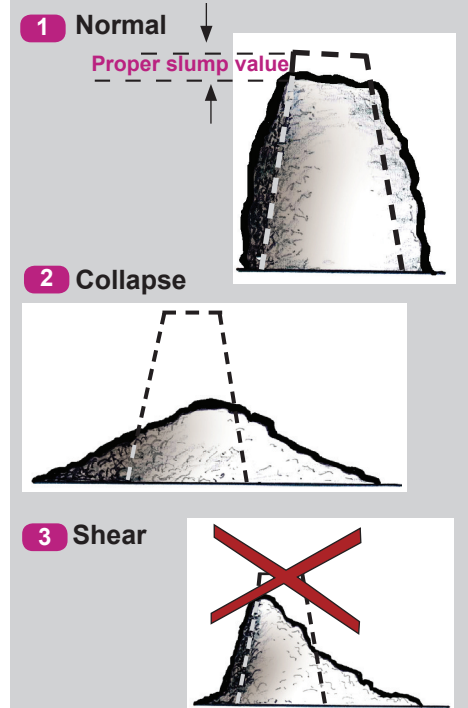
1. Mix the sample you've already taken, on the mixing plate and put it back in the bucket.
2. Place the slump cone on the leveled mixing plate and stand with feet on the foot pieces.
3. Fill the slump cone in 3 equal layers. Rod each layer with exactly 25 strokes making sure the rod penetrates the layer below.
4. Strike off the excess concrete, using a sawing and rolling motion of the tamping rod. Then slowly lift the cone straight up and off within 5 seconds.
5. Lay the slump rod across the up-turned slump cone.

Proper slump value

Measure the distance between the underside of the rod and the original centre of the top of the specimen. Record the distance in millimeters.

If you don't get a 'normal' slump (see first diagram), repeat test. If the second slump isn't right, ...get advice!

There are three kinds of SLUMP

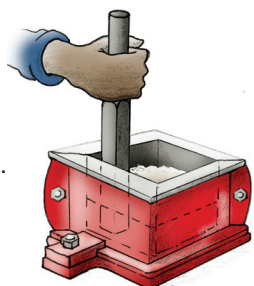


MAKING CUBES...

After doing the slump test use the rest of the sample to make cubes.

This is the procedure for making 150mm cubes.

1. Mix the concrete thoroughly on the mixing plate.
2. Check the mould is fixed firmly to its baseplate and all nuts are tight – fill to about 1/3 full.
3. Tamp all over especially in the corners. Use at least 35 tamps with a tamping bar/rod.
4. Fill the mould to 2/3 full. Tamp again but do not penetrate the previous layer.
5. Remove surplus concrete, smooth over with a float.
6. Cover the mould with a damp cloth and a polythene sheet and store in a safe place for ± 24 hours.



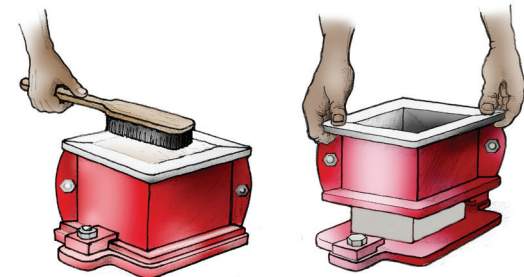
Get all the air out!

MARK THE CUBES WHEN WET FOR IDENTIFICATION LATER ON.

If you're making 100 mm cubes fill the mould in 2 layers

CURING CUBES... Handle with care, keep warm and wet

The cubes should be taken from the mould the day after making (preferably 20-24hrs later), numbered and put in the curing tank.



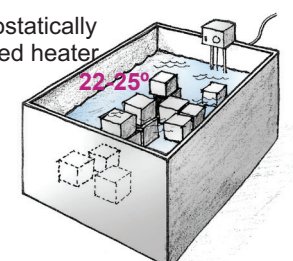
1. Remove the surplus concrete using the wire brush. Slacken off all nuts with the spanner.
2. Part the sides of the mould tapping gently with the hammer and lift off.

Remember. New cubes are fairly soft and could be damaged unless handled carefully. They harden only when they are warm and wet.



3. Don't forget to number the cubes before putting them into the curing tank.

Thermostatically controlled heater



Check that the thermostat is set at 22-25°C and the cubes are completely covered by the water.

WHEN ORDERING READY MIX CONCRETE FROM YOUR SUPPLIER HE NEEDS TO KNOW THE FOLLOWING:

- The contractors name
- Mix strength (MPa)
- Slump required eg. pump mix
- Special mix requirements (if any)
- The site address
- Date and time
- Type of pour
- Method of discharge
- The volume (m³)
- Fast or slow discharge

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