

SAMPLING METHOD MB6

SAMPLING OF STEEL FOR CONCRETE REINFORCEMENT

1 SCOPE

This method describes the taking of samples of structural steel for determining the tensile strength and other characteristics as specified in SABS 920. The method can also be applied to the taking of samples for determining the strength of welded joints

2 APPARATUS

- 2.1 A hacksaw or
- 2.2 An oxy-acetylene cutting torch

3 SAMPLE SIZE

The sample size will depend on the test which are to be done on the steel. At least three rods, each about 1m long, are needed for one series of test done according to SABS 920. To ensure that there will be sufficient rods for repeating some of the tests, it is recommended that at least six rods, each approximately 1m long are sampled from each batch.

4 METHOD

4.1 Definition

A lot is applicable mass (given below) of rods of the same type, normal size, cross-section, grade and mould number, from onemanufacturer, and which are simultaneously considered for inspection and acceptance.

Nominal size of bars, mm	Maximum batch size,kg
up to 10	2 000
12	5 000
16 to 20	10 000
25 to 32	15 000
over 32	20 000

A bundle is regarded as rods of the same type, nominal size, cross-section, grade and mould number which are bound together for delivery purposes.

4.2 Taking of samples

Take sufficient rods, at random, from each lot so that when they have been sawn up the desired number of samples is obtained. If more than one rod is needed, they must be taken from different bundles. Using a hacksaw or a gas flame, cut off as many one-metre-long pieces as are needed for the test from the sampled rod or rods. When welded joints are being sampled, the joint must be in the middle of the rod.

Tie the cut-off pieces from each lot together with wire and mark properly.

5 REPORTING

Every bundle of steel samples must be identified with a proper label and be sent to the laboratory under cover of a sample data from giving:

Type of steel
Nominal size
Cross-section
Grade and mould number
Test to be done on the samples.

REFERENCE

SABS 620