SAMPLING OF THE REFRACTORY SPECIMEN FOR INSPECTION

The sample selection or what is know as Sampling, is an important function of inspection. The inspection procedure starts by selecting, generally a minimum number of units, called a ‘Sample’, from the lot. A ‘Lot’ is meant for the quantity of refractory materials from which sample specimens are drawn for inspection. The test results of these samples make the basis for acceptance or otherwise of the refractory lot. Since Refractories are characteristically anisotropic in nature so instead of drawing only one sample, a predefined number of sample specimens are collected from the lot while sampling. Although there are provisions for ‘Hundred percent inspection’ and ‘Sampling inspection’ but, hundred percent inspections is not preferred generally since most of the tests are destructive type besides, consideration of factors like time consumption and the costs involved.
Sampling inspection of both refractory bricks and monolithic refractories can be done by two methods - (1) Inspection by Attributes, (2) Inspection by Variables. The first method is performed visually by gauging or counting the number of defects and so, is non-destructive and cost effective. The second method is performed by all tests including the destructive ones on Refractories.

Sample size or the number of samples to be drawn from the Refractory lots to be inspected depends on the type of Standard Method being followed for testing. Sampling and their testing are done strictly according to the specified procedures already mentioned in that Method, the results of which should be binding for both the manufacturer and the customer.

Source: http://viewforyou.blogspot.in/2008/10/sampling-of-refractory-specimen-for.html