TR9_185_186

R. 465, R. 466

1. CLAY FROM WYNYARD

Sample

Two samples were obtained from the Quiggins Road area, Wynyard, by Department of Mines Officers (see p. 11) for brick manufacturing tests for comparison with results obtained from previous samples submitted by Brian R. Archer Pty. Ltd. and stated to be from the same locality (Manson and James, 1964).

Sample numbers and descriptions are as follows:—

R.465. Quiggins Road—Forestry Quarry. (For comparison with R.443-4).

R.466. Quiggins Road—Walker. (For comparison with R.444-5 and R.445-6).

Preparation and Testing

The samples were prepared in a similar manner to that outlined in Report No. R.440 to R.448 (Manson and James, 1964)., and brick manufacturing tests were carried out by semi-dry and stiff plastic pressing methods.

Both samples were also tested for refractoriness.

Summary

The results of brick manufacturing tests on samples R.465 and R.466 closely approximate those obtained from the samples previously submitted. The raw materials are similar in appearance and the fired bricks are almost identical with those obtained from the earlier samples.

Detailed test results are shown in the following tabulation. For convenient comparison, results of tests on the earlier samples are also shown in this tabulation.

Results

Moisture Contents of the Green Pressed Bricks

Forming Method	Per Cent Moisture				
	R.465	R.443-4	R.466	R.444-5	R.445-6
Semi-dry pressing	10.1	10.2	10.0	9.5	9.9
Stiff-plastic pressing	17.2	19.0	18.6	17.4	17.0

Drying and Firing Contractions

Sample No.	Contractions—Per Cent					
	Semi-dry Pressing			Stiff-plastic Pressing		
	Drying 110°C	Firing 1050°C	Total	Drying 110°C	Firing 1050°C	Total
R.465	Nil	6.0	6	3	9	12
R.443-4	0.5	5.5	6	4	9	13
R.466	Nil	7	7	3	9	12
R.444-5	0.5	4.5	5	3	9	12
R.445-6	0.5	6.5	7	3	7	10

Loss of Weight on Firing

Sample No.	Firing Loss Per Cent
R.465	6.7
R.443-4	6.7
R.446	6.2
R.444-5	6.1
R.445-6	6.1

Refractoriness

Sample No.	Softening Point	Fusion Point
R.465	1360°C	1400°C-1420°C
R.443-4	1360°C	1400°C-1420°C
R.466	1410°C	1460°C-1470°C
R.444-5	1340°C	1400°C-1420°C
R.445-6	Not done	Not done

Reference

MANSON, W. S. and JAMES, P. L., 1964.—R.430, R.440-R.448: Clay from Wynyard. *Tech. Rep. Dep. Min. Tas.*, 8, 227-242.