

Cement Production and Use in Italy

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The plunge in Italy's cement production and imports has affected concrete consumption directly. As an example, production of ready-mix concrete, which absorbs as much as 42% of cement consumption, has dropped by around 20% over 1992 and is currently accounting for approximately 45×10^6 m³. Other cement end-users, such as construction firms and prefabricators, have witnessed an analogous decline. The economic crisis has, in fact, slowed down the market for residential and industrial building as well as the road and railway construction sectors.

Such a market downturn cannot leave much vital space to product innovation. In this gloomy scenario, however, some companies have managed to launch ultrafine cements for special applications on the market, and several ready-mix concrete producers, following the increasing interest shown by constructors, have begun producing this type of concrete. Production, however, is somewhat hindered by the current building codes, which do not allow the use of characteristic strengths greater than 55 MPa in static calculations.

The decline in cement consumption does not imply any user indifference to this construction material, which is still a great favorite, as evidenced by its high per capita consumption and its use in most prestigious buildings from an architectural and structural viewpoint, like the mosque in Rome and bridges for the Livorno-Cecina motorway.

New Standards on Cement

Since September 13, 1993, new standards on cement have been in force which adopt the provisions set down by the CEN ENV 197-1 standard. The innovation

received a warm welcome from all construction operators on account of the substantial advantages stemming therefrom; namely:

- continuous quality assurance of cements;
- greater transparency in cement composition;
- a vast range of possible types and strength classes;
- more rational use of raw materials;
- energy saving; and
- the possibility of experimenting with cements which had proven satisfactory in other countries.

The distribution of cement production in Italy is shown in Table 1. Compared with other countries, the large amount of pozzolanic cement is characteristic for Italy.

Prospects

No substantial recovery in construction activities is foreseen for 1994. According to the evaluation data available, a reversed market tendency should not be expected before the second half of 1994. Therefore, improvement and consolidation of production activities for cement and concrete, as well as the introduction of new products, will only be possible in 1995.

TABLE 1. Distribution of production according to types and strength classes of cement

| Type | Class | | | | Total (%) |
|---------------|----------|----------|----------|-------|-----------|
| | 32.5 (%) | 42.5 (%) | 52.5 (%) | ■ (%) | |
| Portland | 27.53 | 28.39 | 3.30 | | 59.22 |
| Pozzolanic | 31.07 | 1.46 | | | 32.53 |
| Blast furnace | 5.81 | 1.31 | | | 7.12 |
| Others | | | | 1.13 | 1.13 |
| Total | 64.41 | 31.16 | 3.30 | 1.13 | 100.0 |

■ Classification is not available.

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