

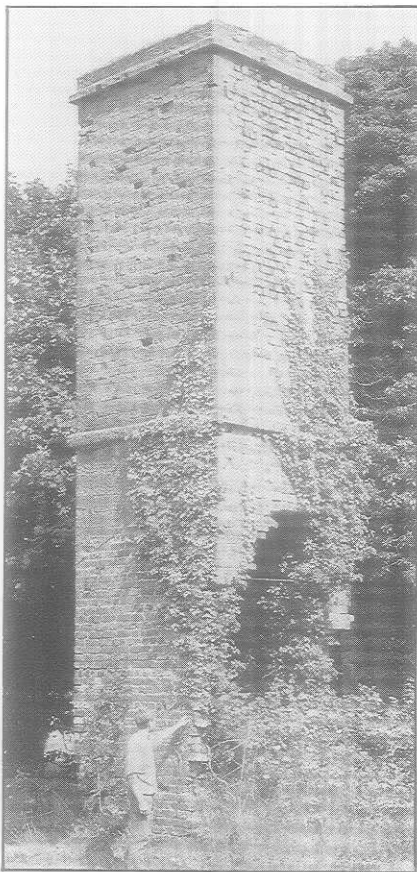


This booklet marks the fiftieth anniversary of the establishment of the cement industry in Ireland. While efforts to make cement had been made between 1883 and 1900 at Drinagh, Co. Wexford and Ringsend in Dublin, none of these survived beyond 1925.

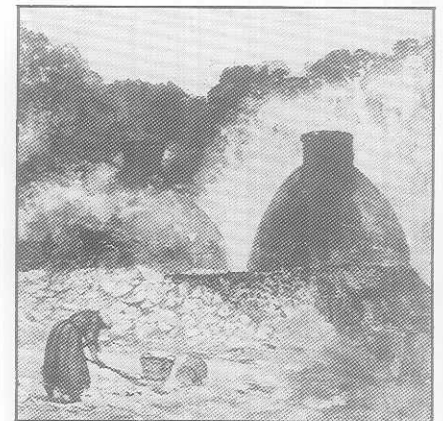
In tracing the history of our present industry we have also taken the opportunity to illustrate a small selection of projects indicating the overall development in construction during the past half century. Projects large and small built with Irish cement which reflect the changing pattern of our lifestyle since 1938 and the key role Irish Cement has played in our national growth and development. The establishment of this industry had a major affect on the lives and fortunes of the people of Drogheda and Limerick.

The story has its roots in the work of Leeds stonemason Joseph Aspden who in 1824 filed the first patent for Portland Cement. He called his product portland cement because of the similarity of the earliest concrete to Portland Stone – a widely used natural stone of the period. From his initial small scale experiments grew a world wide industry producing 1 billion tons annually.

1. Ruins of Ireland's first cement works – Drinagh, County Wexford.
2. 19th century cement manufacture – Wakefield, England.
3. Very early cement testing laboratory, England.



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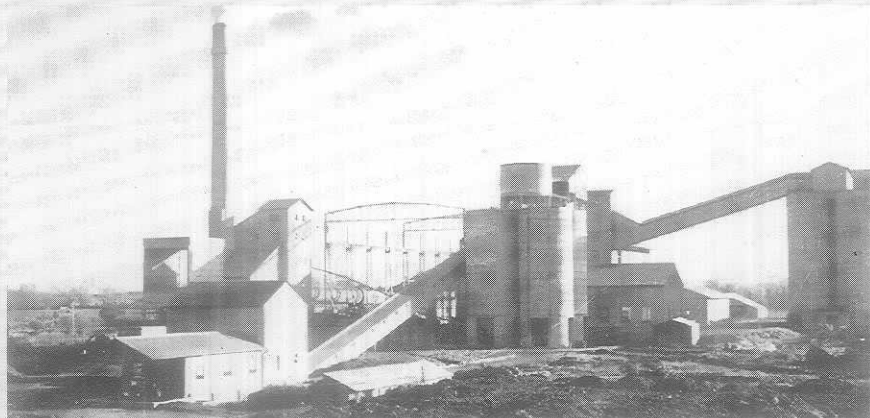


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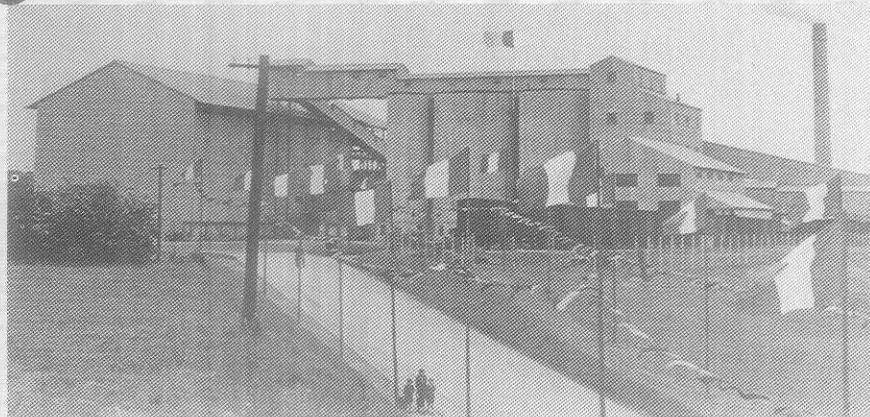


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1. Limerick Works.
2. Official opening day - Drogheda Works.
3. Kiln section arrives at Drogheda Works.
4. West Street, Drogheda.
5. Typical small mass concrete house.
6. Nurses Home, Galway Central Hospital.



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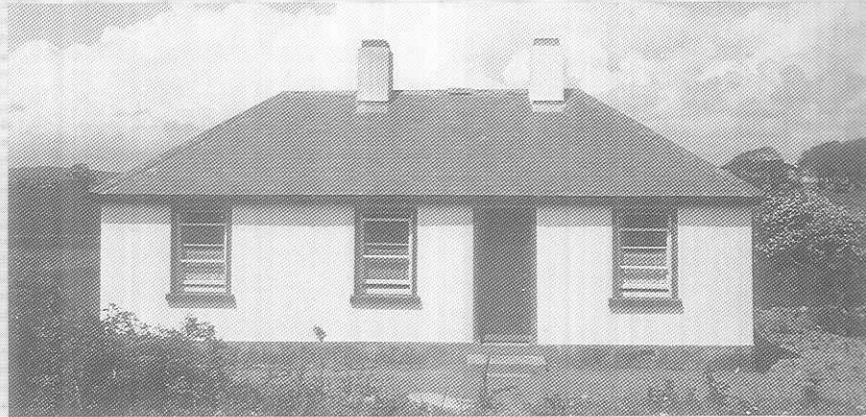
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The 1930's

At the time Hitler was planning the invasion of Austria and the expansion of the German Reich within mainland Europe, Irish business interests, with Government encouragement, were actively planning the establishment of cement production in Ireland. Cement Limited was floated as a public company in May 1936 with an initial issue of ordinary shares and debentures of £750,000.

The construction of the cement plants, one at Drogheda, Co. Louth and the other at Castlemungret near Limerick started immediately. The Drogheda factory had an annual production capacity of 150,000 tons while Limerick output was 75,000 tons. F.L. Smidth of Copenhagen and London provided the necessary design expertise and equipment for the two plants. The plants were brought into operation in the Spring of 1938 with cement deliveries commencing from Limerick on April 11 and from Drogheda on May 9. Sean Lemass, Minister for Industry and Commerce, officially opened both plants on May 23, 1938. Among those present at this historic event were Mr. N.M. Jensen, Chairman, Mr. H.V. Osterberg, Managing Director, Mr. E. Schultz, Manager Drogheda and Mr. E. Meyland-Smith, Manager Limerick.

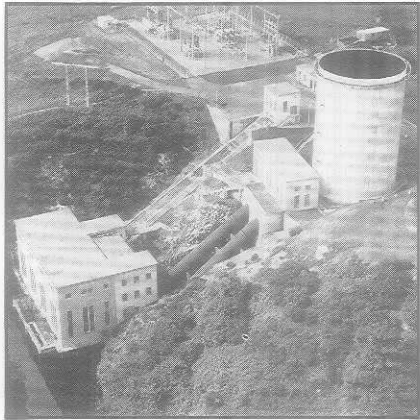
Irish Normal and Rapid Hardening Portland cement packed in 1 cwt paper sacks rapidly replaced imported cement in the major housing programme of the late 30's. The tradition of building houses in mass concrete was at this time giving way to block walling and the first steps in building major new regional hospitals were being taken. Concrete had now become the predominant building material.

Due to the increased demand it was decided in 1939 to double the capacity at Drogheda.

7. E.S.B. generating station, Poulaphouca, County Wicklow.

8. 23rd May 1938 – official opening by Sean Lemass.

9. House at Sandycove, County Dublin.



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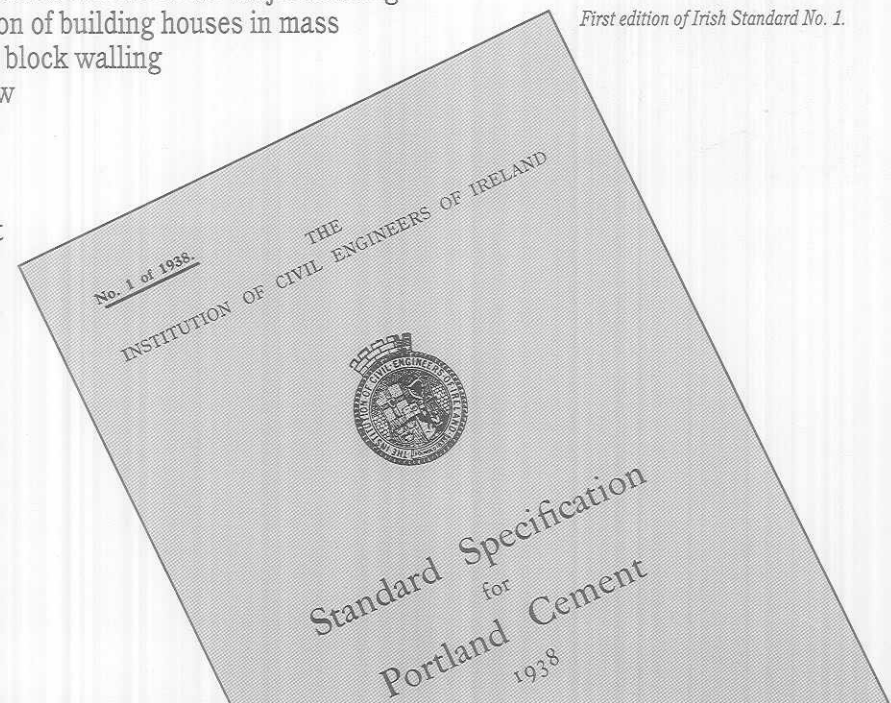


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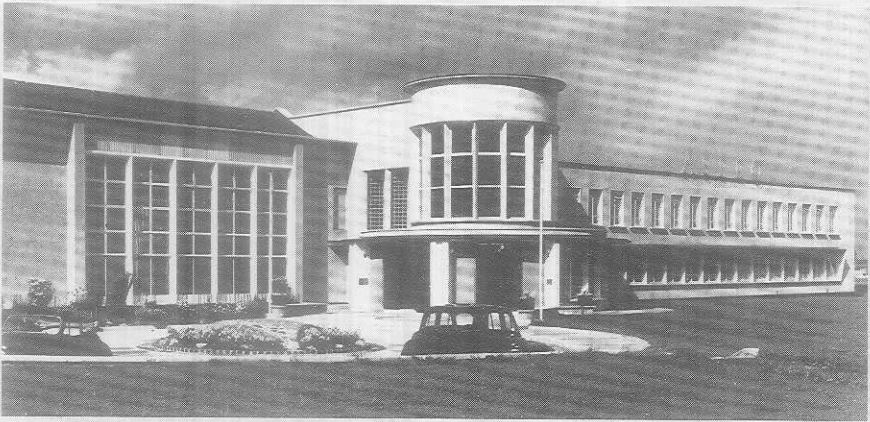
First edition of Irish Standard No. 1.



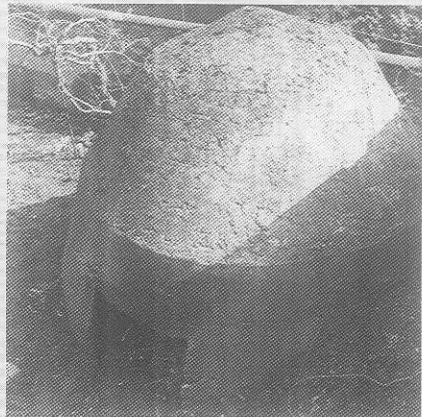
1. C.I.E. bus depot, Donnybrook, Dublin 4.
2. Aspro (Ireland) factory and office, Inchicore, Dublin 8.
3. Terminal Building, Dublin Airport.
4. Drogheda Works.
5. Domestic air raid shelter.



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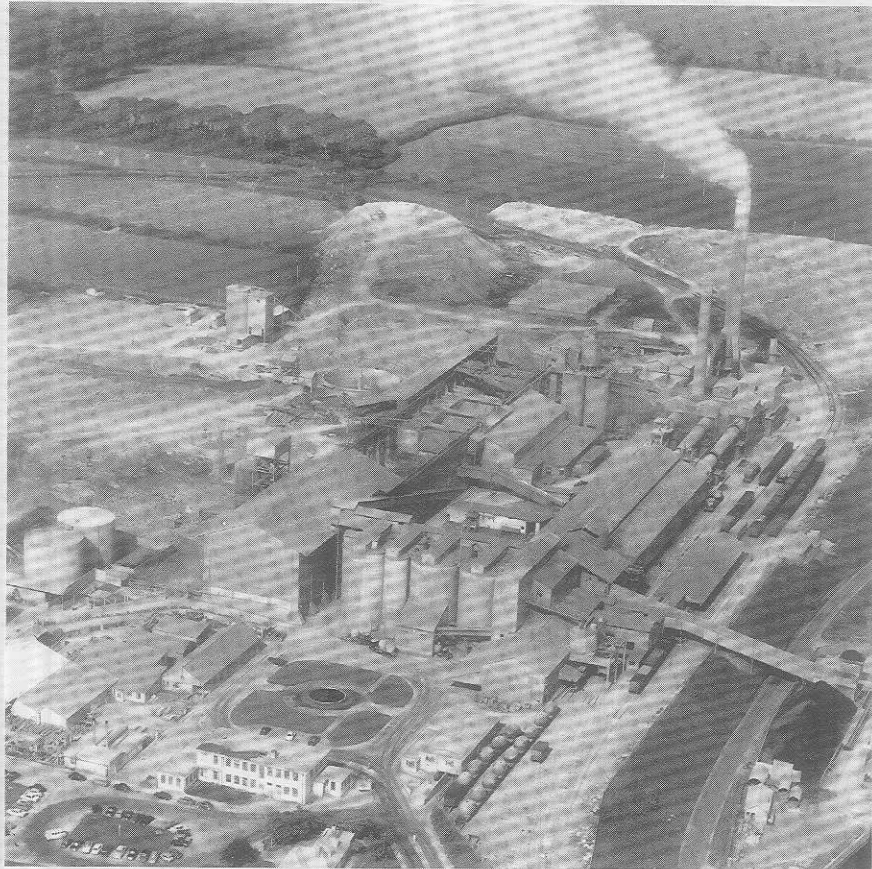
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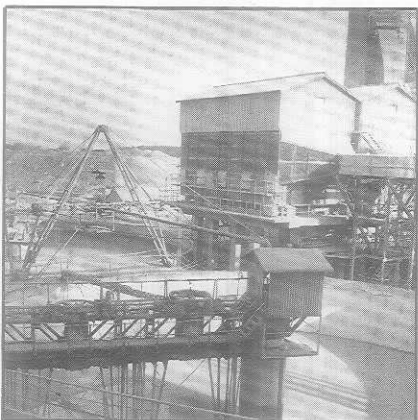
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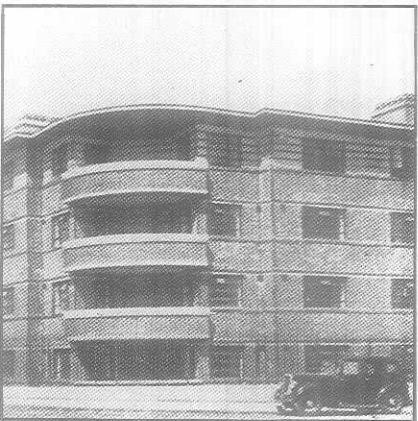
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The 1940's



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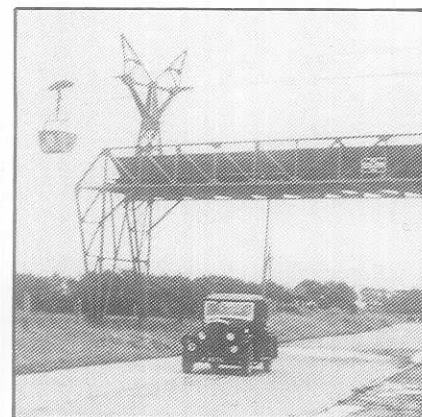


7.

The second unit at Drogheda was brought into operation in January 1941.

The war years were a difficult time, with shortages of fuel and no spare parts. An arrangement, however, was made whereby cement from Drogheda was exported to Northern Ireland and, in return, sufficient coal was supplied to allow some production for the home market in addition to the quantity exported. Home sales fell to about 150,000 tons per year during these years.

With the surrender of the German army to the Allies in 1945, life gradually returned to normal in the latter half of this decade. Demand for cement rapidly recovered as post war construction led to a number of significant developments. The new runway at Dublin Airport with its demand for large volumes of concrete resulted in the first deliveries of cement in bulk in 1946. In the field of concrete, Dubliners were somewhat startled in 1949 by a large flat bottomed truck, complete with a $3\frac{1}{2}$ yd³ mixer bolted firmly in position, travelling slowly through city streets. Readymixed concrete had arrived. This it is believed was the first delivery of readymix in either Great Britain or Ireland.



8.

CEMENT LIMITED, DUBLIN.

DROGHEDA'S FIRST
ANNUAL STAFF DANCE
WILL BE HELD IN THE
WHITWORTH HALL, DROGHEDA,
On FRIDAY, 31st JANUARY, 1941.
Dancing 9 p.m.-3 a.m.
Music by Cyril Gibson and his Six Aristocrats from Royal
Hibernian Hotel, Dublin (personally conducted).
CATERING BY LAWLOR'S, NAAS.
Valuable Spot Prizes. Evening Dress Optional.

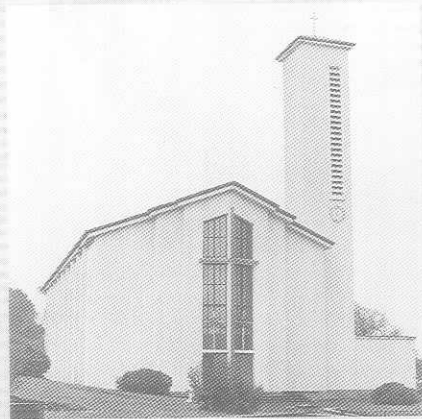
TICKETS (including Supper and Tax). 8/6 Ea

6. Drogheda Works - preliminary stages of manufacture.

7. Dublin Corporation flats, Watling Street, Dublin 8.

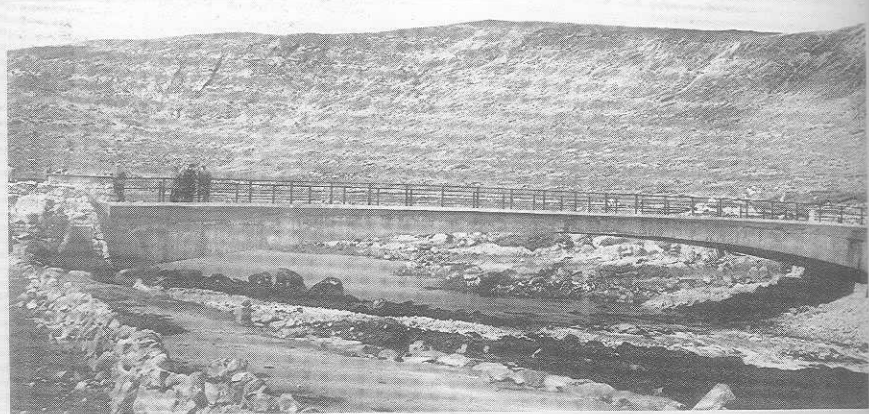
8. Transport of limestone to Drogheda Works.

1. *Our Lady and St. Michael's Church, Ennistymon, County Clare.*



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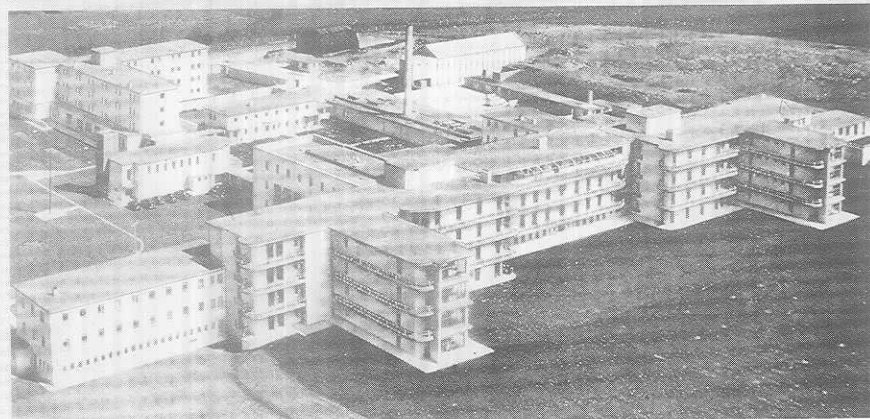
2. *Flannery bridge, Carna, County Galway.
(Ireland's first prestressed concrete bridge)*



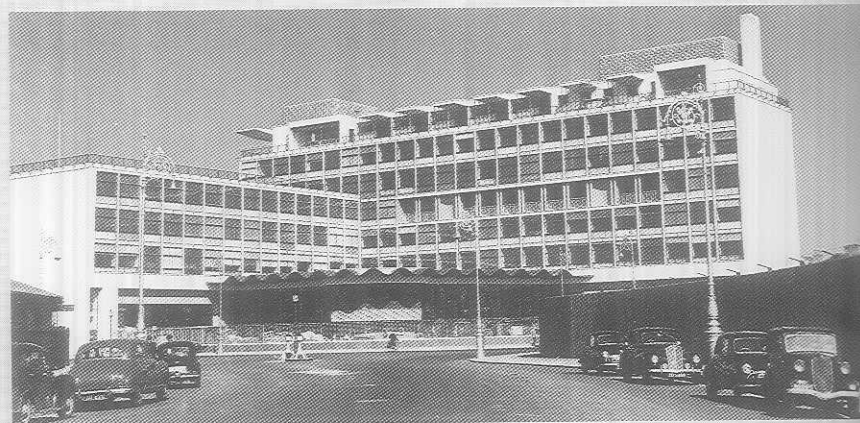
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The 1950's

While it had very little impact on Ireland at the time, the most significant event in this decade was the Treaty establishing the European Economic Community which was signed in Rome on March 25, 1957 by Belgium, France, West Germany, Italy, Luxembourg and the Netherlands. This Treaty resolved to ensure the economic and social progress of these countries by common action to eliminate the barriers which divide Europe.

In the beginning of the decade, demand for cement continued to increase. In 1954 both Works were extended – Drogheda by a third unit of 150,000 tons and Limerick by a second unit of 100,000 tons. Total capacity was now in excess of 600,000 tons.

During the years 1956–58, however, the level of construction activity declined. To utilise the excess capacity, cement and clinker were successfully exported to Northern Ireland, Great Britain and Iceland. The first overseas consultancy assignment was undertaken in 1958 for the cement industry in Iran. Subsequently major technical and mechanical contracts followed in Zambia and Malawi.

The continuing growth in the number of large projects was a feature of the 50's. This led to a significant increase in supply of bulk cement and by the end of the decade almost 18% of output was delivered in pressurised bulk containers. Predictably the tentative earlier experiments with readymixed concrete had grown to an established industry with significant market share in our larger towns and cities.

Overall the decade was marked by increased attention to planning for anticipated growth in our major cities. In structural engineering the potential of concrete was greatly increased by the introduction of prestressing in bridges and other heavily loaded or long span structures.

6. Drogheda Works.

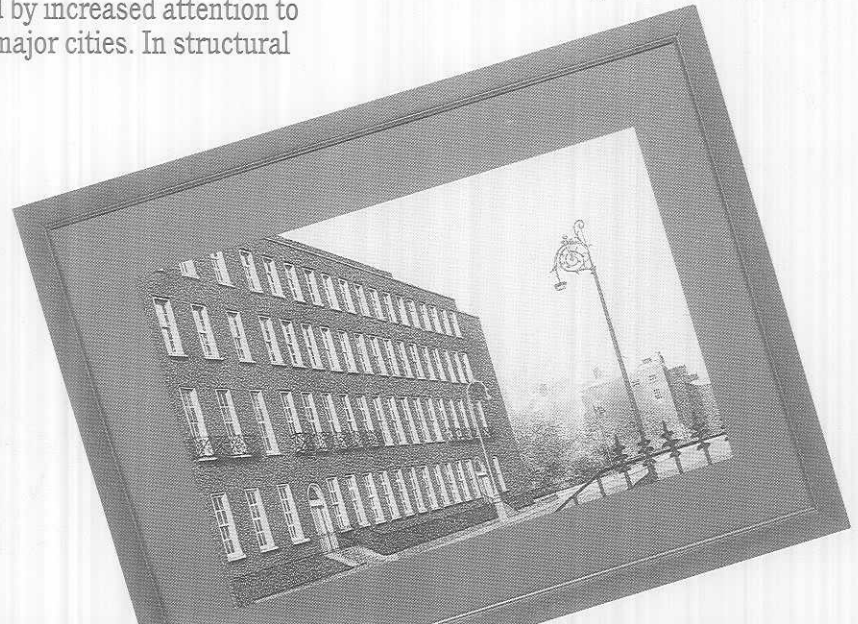
7. Kilns at Drogheda.

8. Early bulk cement vehicle.



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Irish Cement head office, Pembroke Street, Dublin 2.



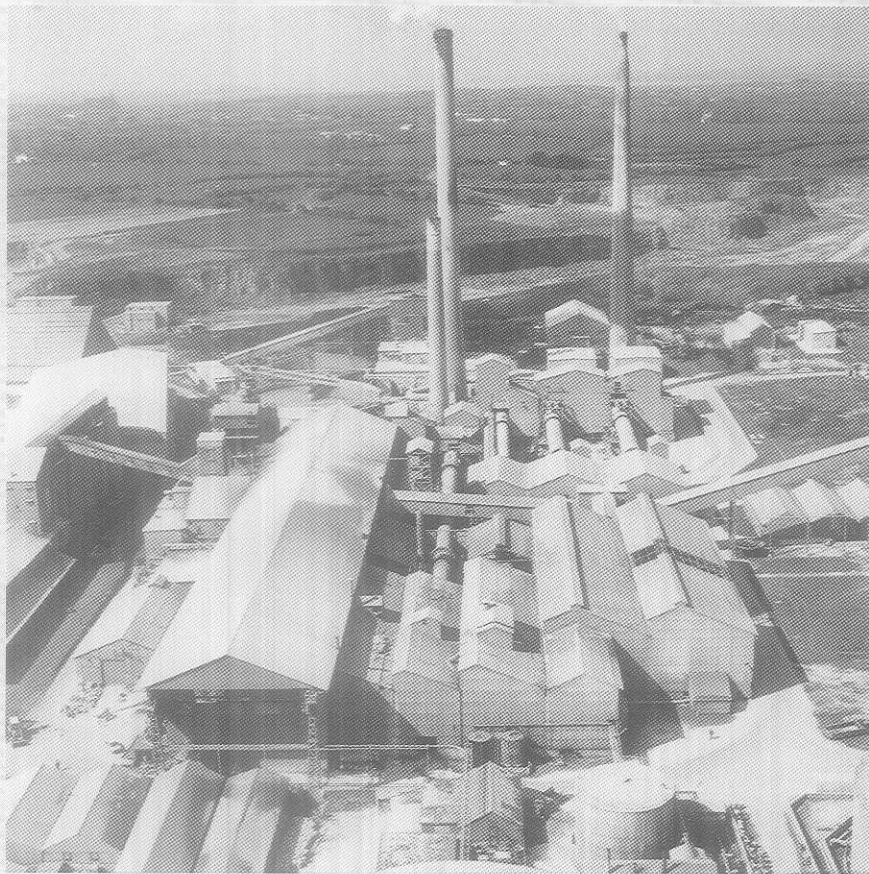
1. Limerick Works.

2. Youghal bridge, County Waterford.

3. Berkeley Library, Trinity College, Dublin 2.

4. Bord Failte offices, Dublin 2.

5. Irish Sugar Company offices, Dublin 2.



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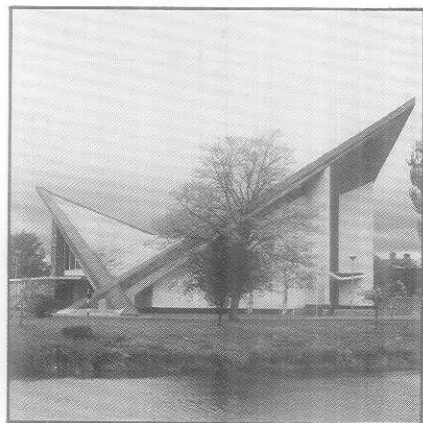
The 1960's

The signing of the Anglo Irish Free Trade Agreement in 1965 removed British import restrictions on Irish goods from July 1, 1966 and removed Irish import restrictions on British manufacturers over a ten year period. This led to a progressive increase in Irish agricultural and industrial exports and prepared the way for Ireland's entry into the EEC.

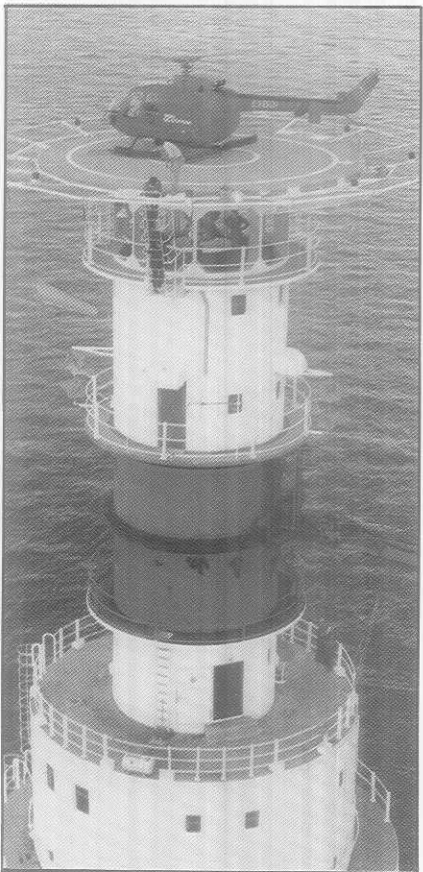
Home demand for cement increased practically year on year. In addition, export markets to Great Britain and Northern Ireland were vigorously pursued, peaking to a record 350,000 tons in 1968. Production capacity to meet these heavy demands was provided by the start up of three units at Limerick in 1961, 1964 and 1965. These additions added 550,000 tons of capacity and brought total production levels to over 1m tons.

Obviously the changes in the marketplace at home prompted major improvements in the distribution network. CIE introduced special liner trains for cement to service bulk depots at Belfast and Cork. In addition, a new bulk storage depot was opened at Cabra in 1965 which allowed improved onward distribution by road in the Dublin region.

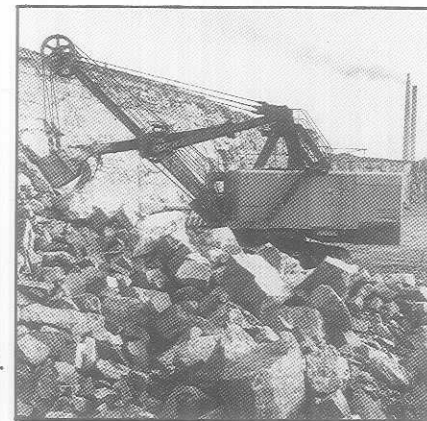
In the construction industry larger projects increased demand for both readymixed concrete and bulk cement. Factories were built in rural areas and precast cladding became a feature of many of the larger office buildings and commercial projects. Overall Irish towns and villages generally developed a brighter image with increased attention to the appearance of buildings.



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Early bulk cement road tanker.



6. *St. Dominic's Church, Athy, County Kildare.*

7. *Kish lighthouse, Dublin Bay.*

8. *Limestone quarrying, Limerick Works.*

1. Irish Management Institute, Sandymount, County Dublin.

2. University College Dublin – Faculty of Agriculture.

3. Central Bank, Dublin 2.

4. Castlepark, Kinsale, County Cork.

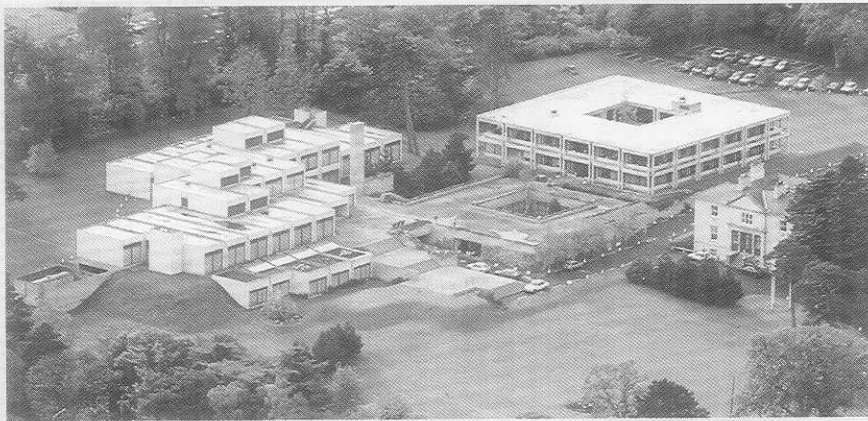
5. Platin Works – kiln interior.

6. Leopardstown racecourse, County Dublin.

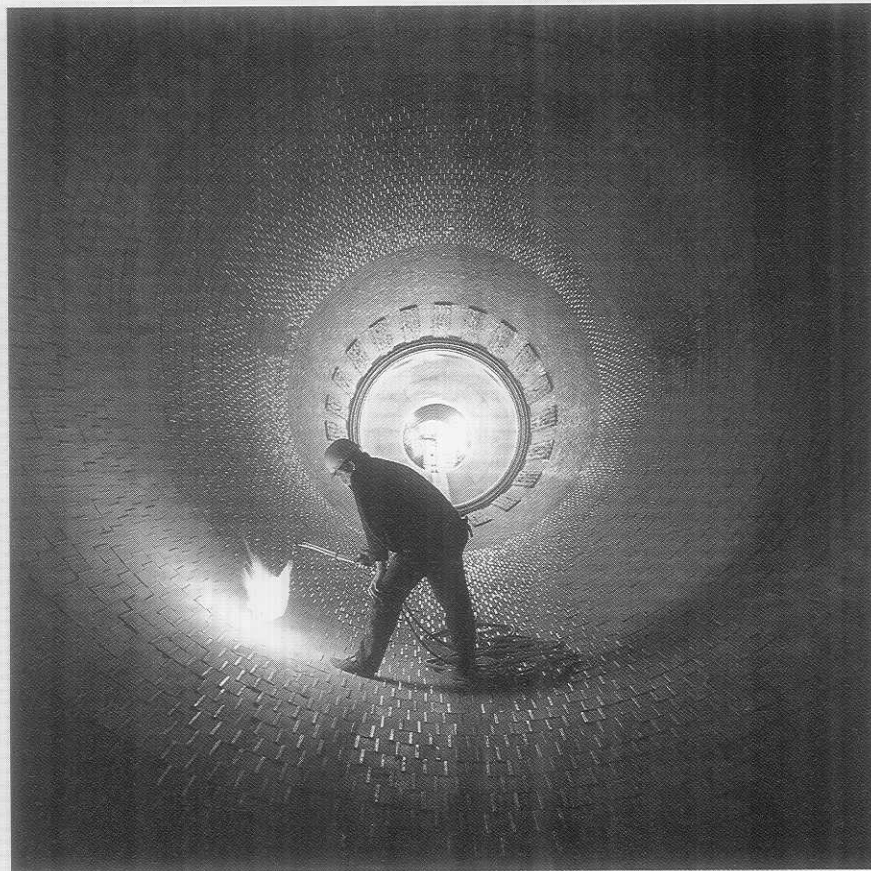
7. St. Michael's Church, Creeslough, County Donegal.

8. University College Dublin – Water Tower.

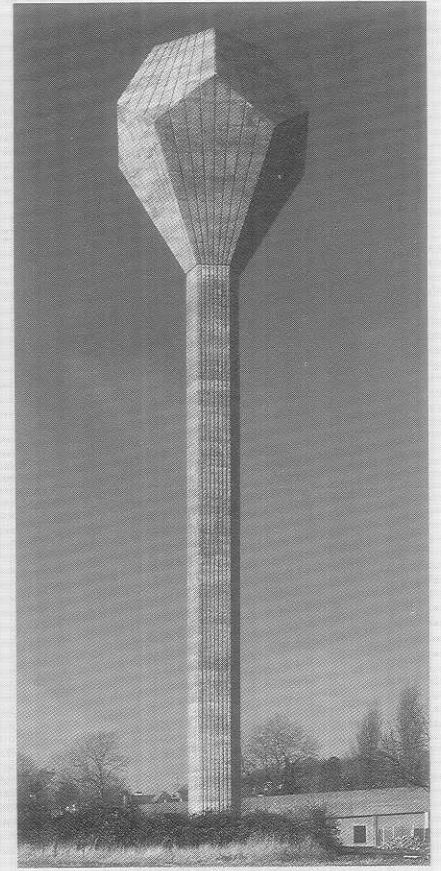
9. "Three Scholars" Tyrellspass, County Westmeath.



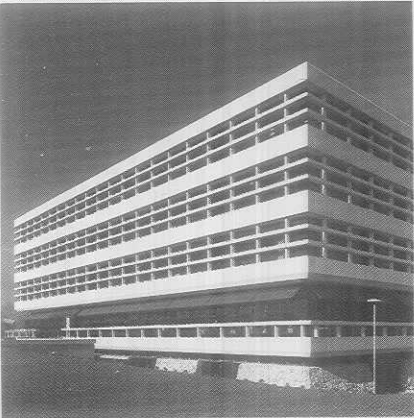
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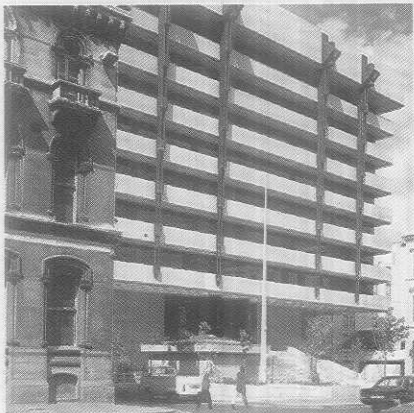
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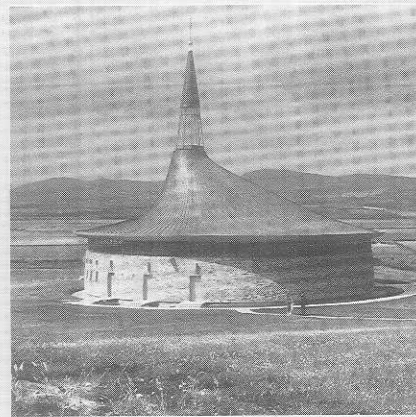
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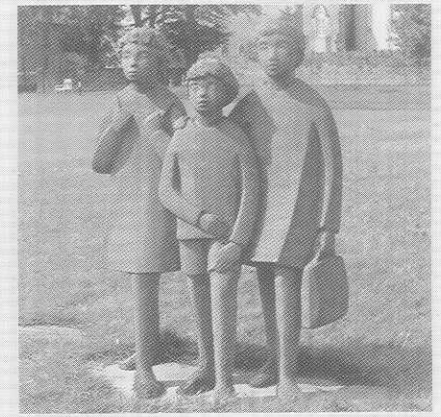
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The 1970's



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Ireland became a member of the European Economic Community in 1973. The United Kingdom and Denmark also joined the Community in that year, bringing the total membership to nine countries. Then in December 1978 Ireland joined the European Monetary System and broke the fifty year old link with Sterling in March 1979.

In 1970 Cement Limited and Roadstone Limited merged to form Cement Roadstone Holdings Ltd. – subsequently renamed CRH plc. The domestic market for cement continued to grow and since further expansion of the Drogheda plant was not considered practical, a completely new Works was constructed at Platin just 2 miles south west of Drogheda in 1972. As this seemed insufficient to meet predicted demand for the years ahead, plans for extending the new Works were put in hand immediately.

This extension was the largest single project ever undertaken by Irish Cement. Completed in 1977 it added a further 1 million tons capacity. As a result, production at the older and relatively inefficient Drogheda Works was gradually phased out. Facilities there were subsequently converted and developed to produce high grade sea water magnesia for export.

Within the construction industry an increased interest in special cements developed over this period. The manufacture of Sulphate Resisting Portland Cement for specific engineering projects and Oilwell Cement for offshore exploration was undertaken.

Finally, the increased demand for cement led to further development in distribution systems. Bagged cement was now despatched on 2 ton pallets to simplify downstream handling by fork lift truck. A countrywide network of local depots for bulk and packed cement allowed more rapid response to short term fluctuations in demand and simplified collection by the customer.

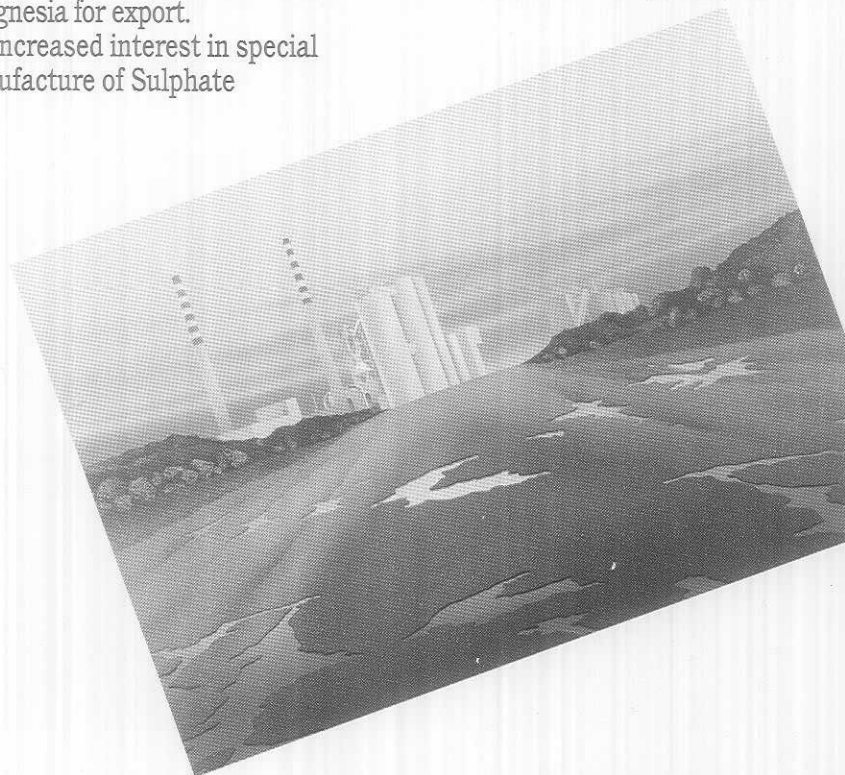
10. Platin Works.

11. Bulk cement liner train.



11.

Platin Works – R. Ballagh painting.



1. *Mountshannon, County Clare.*

2. *Rotary Kilm, Limerick Works.*

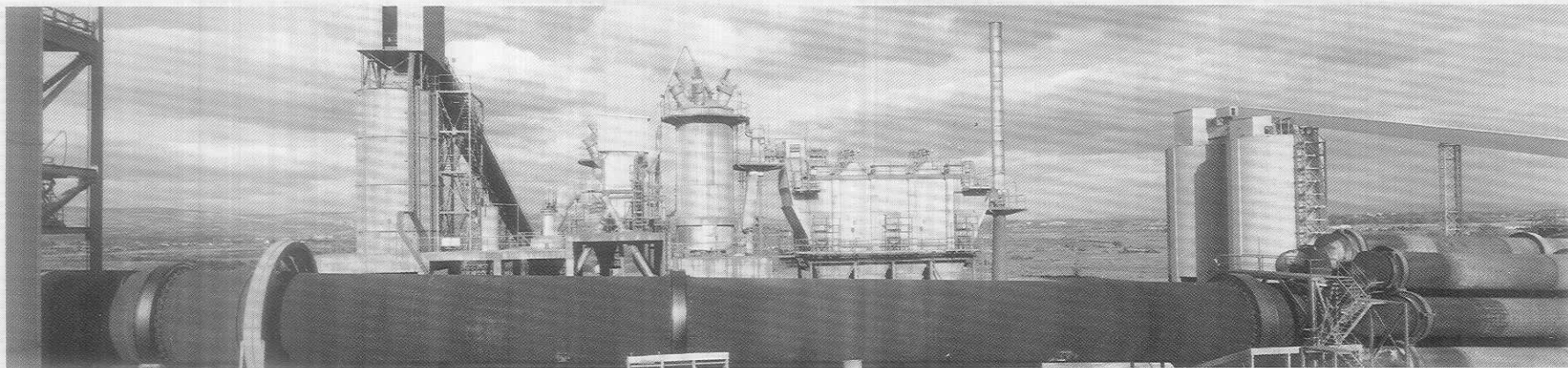
3. *E.S.B. generating station, Moneypoint, County Clare.*

4. *City Hall, College Road, Galway.*

5. *IRFU grounds, Lansdowne Road, Dublin 4.*



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The 1980's

Encouraged by the success of the Platin project and in line with operating at the highest level of efficiency, Irish Cement now embarked on a major modernisation programme at Limerick. Unfortunately the 700,000 tons additional annual capacity which was provided in 1983 came at a time when a serious drop in construction activity had significantly reduced demand for cement. As a result the older kilns at Limerick were taken out of service. While home demand gradually decreased to its present expectation of just over 1 million tons, a resumed export drive resulted in significant sales of cement and clinker abroad.

A feature of construction work completed in the 80's was the increased attention paid to detailing of buildings and a much greater emphasis on the sensitive use of materials in both urban and rural surroundings. In inner city housing enormous strides were made in creating an attractive environment with a human scale. In smaller towns there were numerous highly successful experiments in rebuilding within established boundaries rather than the creation of more and more new housing estates. This resulted in the preservation of the unique quality of Irish towns and streetscapes.

The Single European Act was ratified by Ireland in July 1, 1987. This Act includes the establishment of an internal market in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the EEC Treaty. The target date is December 31, 1992. The opening of trade frontiers will bring many problems but also opportunities. Irish Cement, having modern facilities, high quality consistent product and technical expertise faces the future confident that it will continue to play a key role in the construction industry as it has for the past fifty years.

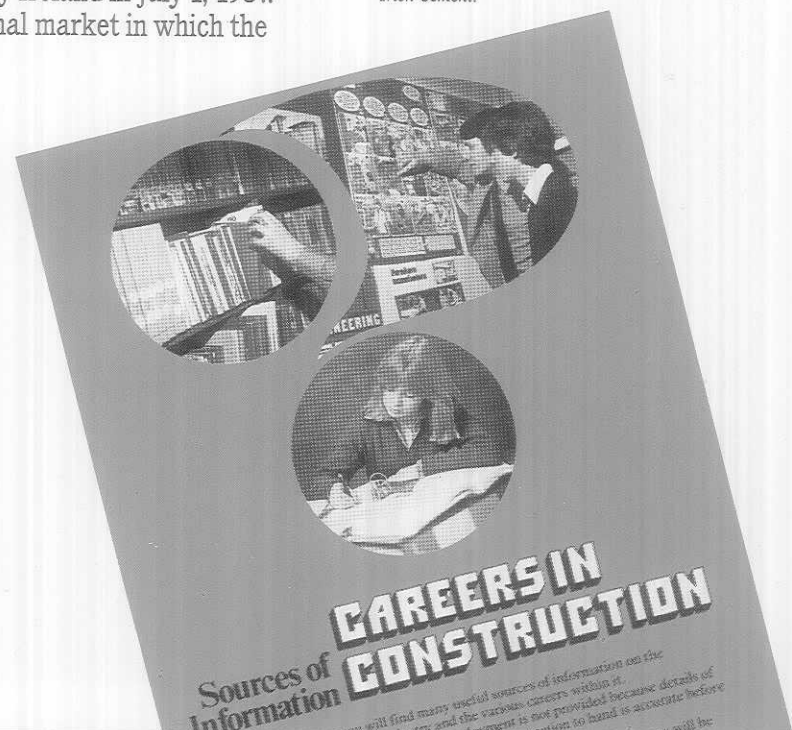
6. Preheater tower, Limerick Works.

7. St. Brendan's Community School, Birr, County Offaly.



7.

A youth education booklet published by Irish Cement.





Platin Works.



Limerick Works.



GROWTH IN PRODUCTION CAPACITY 1938-1988 ('000 tonnes)

YEAR	DROGHEDA	LIMERICK	PLATIN	TOTAL
1938	150	75	—	225
1946	300	75	—	375
1954	450	175	—	625
1961	450	325	—	775
1964	450	525	—	975
1965	450	725	—	1175
1971	450	725	400	1575
1977	450 ⁽²⁾	650 ⁽¹⁾	1400	2050
1978	—	650	1400	2050
1983	—	700 ⁽³⁾	1400	2100

Notes:

- (1) The original small kiln at Limerick was taken out of service on completion of Platin II.
- (2) Production at Drogheda was phased out with the completion of Platin II and the works was closed early in 1978.
- (3) The remaining four older kilns at Limerick were taken out of service on the completion of the 1983 modernisation project.

WORKS DETAILS

LIMERICK

1 dry process kiln with four stage preheater 2100 tonne/day

PLATIN

1 dry process kiln with single stage preheater 1300 tonne/day

1 dry process kiln with four stage preheater 3000 tonne/day

PRODUCT RANGE

SPECIFICATION	PRODUCT
I.S. 1 and BS 12	Normal and Rapid Hardening Portland Cements
BS 4027	Sulphate Resisting Portland Cement
API 10	Oilwell Cement Class G

DISTRIBUTION

Ex works collection of bulk and palletised packed cement. Rail transport to countrywide network of bulk and packed cement depots.

Road distribution from local depots and ex works.

