



Books

Additional Resources in MSEL

Freyssinet, Finsterwalder and Prestressed Concrete

Superstructures: the world's greatest modern structures/Neal Parkyn
MSEL Call Number Eisenhower Stacks NA680.P277 2004 Quarto

Freyssinet: prestressing and Europe, 1930-1945 Jupp Grote et Bernard Marrey.
MSEL Call Number Eisenhower Stacks TA683.9.G74 2000 QUARTO

Prestressed concrete / N. Rajagopalan.
MSEL Call Number Eisenhower Stacks TA439.R35 2002

Prestressed concrete: a fundamental approach; second edition / Edward G. Nawy.
MSEL Call Number Eisenhower Stacks TA 683.9.N391 1996

Design of prestressed concrete structures.
MSEL Call Number Eisenhower Stacks TA683 .L55 1955

The ferro-concrete style.
MSEL Call Number Libraries Service Center NA4125.O6 1928Q

Prestressed concrete structures.
MSEL Call Number Libraries Service Center TA683 .K65 1952

Tips on finding these and more books on structures in the MSEL.

<http://www.library.jhu.edu/researchhelp/engr/structures/books.html>

Journal Articles

Title: Freyssinet method of arch construction

In: Baltimore Engineer

Volume: v 5 Issue: n 10 Jan 1931 p 4-6

Abstract: Review of traditional practices and their disadvantages; Freyssinet's successful scheme: arch is poured on centers up to crown but instead of keying crown, hydraulic jacks are operated which force apart two halves of arch causing whole rib to lift clear of centers; bridge engineer then drops arch to theoretically correct position, keys it temporarily, awaits time when shrinkage has practically all taken place, reinserts jacks, makes adjustments and performs permanent keying. Before Am. Soc. Civil Engrs.

MSEL Call Number Libraries Service Center TA1.B19

Database: Compendex

Title: Stresses under the Freyssinet method of concrete arch construction

In: Engineering News-Record

Volume: v 105 Issue: n 8: Aug 21 1930 p 291

Abstract: Economics and advantages claimed for Freyssinet method; stresses and possible corrections for three French arches; comparison of stresses caused by two methods of uncentering 322-ft. concrete arch.

MSEL Call Number Gilman Stacks TA1.E63

Database: Compendex

Title: Designing first Freyssinet arch to be built in United States

In: Engineering News-Record

Volume: v 107 n 22 Nov 26 1931p 841-845

Abstract: Design of highway bridge, at mouth of Rogue River in Oregon, consists of seven 230-ft. open-spandrel-type arches; adoption of Freyssinet system of arch decentering by use of crown jacks and subsequent stress adjustment; rib stress by Freyssinet adjustment compared with fixed-arch methods; jack installation at crown.

MSEL Call Number Gilman Stacks TA1.E63

Database: Compendex

Title: Long-span prestressed concrete bridges constructed by Freyssinet system

In: Institution of Civil Engineers -- Proceedings

Volume: v 7 May 1957 p 110-168

Abstract: Considerations which lead to choice of bridge type; advantages of prestressed concrete in terms of quantities and costs; design of cross section and comparisons of existing bridge sections; design of piers, abutments, foundations, concrete hinges and joints; methods of ensuring continuity of cables; methods of construction. (See also - discussion p 169-79; abstract in Surveyor v 116 n 3381 Feb 9 1957 p 130-2)

MSEL Call Number Libraries Service Center TA1.I563

Database: Compendex

Title: Historical Perspective on Prestressed Concrete

In: PCI Journal

Volume: v 49 Issue: n 1 January/February 2004 p 14-30

Abstract: The author, who speaks French and Flemish and spent some of the post-World War II years in Europe studying engineering, presents an essay on the origins and development of prestressed concrete. Three engineers are singled out for having had the most profound influence on the development of prestressed concrete - Eugene Freyssinet, Gustave Magnel, and Ulrich Finsterwalder. Unquestionably, it was the painstaking pioneering work of Freyssinet that convinced the engineering world of the viability of prestressed concrete as a competitive construction material. Throughout Freyssinet's life, there is one theme that keeps recurring time and again, namely, "a simplification of forms and an economy of means." Magnel is noted as a great teacher and for communicating his ideas on prestressing to the English-speaking world. Finsterwalder pioneered the development of the double cantilever method of bridge construction. Several outstanding reinforced and prestressed concrete structures in the Americas and Europe are discussed and illustrated. In retrospect, the author regards the principle of prestressing as the single most important new concept in structural engineering during the last half of the twentieth century.

MSEL Call Number Eisenhower Stacks TA680.P7

Database: Compendex

Tips for finding these articles and more journal articles like these.

<http://www.library.jhu.edu/researchhelp/engr/structures/journalarticles.html>