Scrap Prices Driving Up the Cost of Steel

By Mike Tylk, Principal, TGRWA, LLC, and former NCSEA President

The steel construction industry is currently in chaos over the escalating price of steel. China has been importing scrap steel from around the world, in quantities high enough to drive up the price of structural steel, rebar, light gage steel framing, pipe, and conduit.

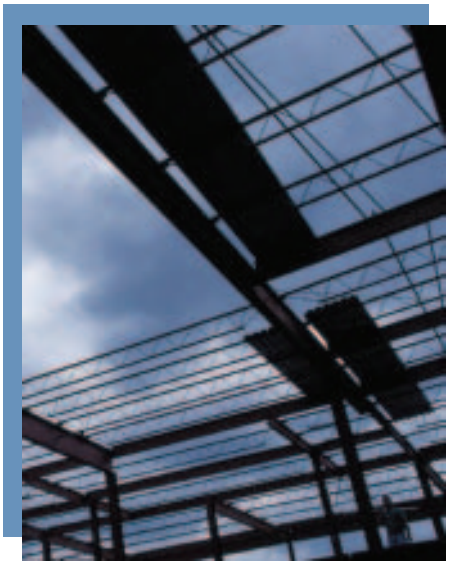
U.S. and other steel mills have responded by imposing a surcharge on steel. For structural steel, the surcharge works as follows:

1. The surcharge is applied to steel being delivered to the customer during the month that the delivery takes place, as opposed to when the steel is ordered.
2. The surcharge for January was $20.00/ton. Notice of this surcharge was not given until the first week in January. The surcharge for February was $49.00 ton. The surcharge for March is $93.00 ton. The base price for structural steel is about $430.00/ton; therefore, $93.00 ton is a 21.65% increase.
3. The surcharges for April, May, June, and so forth, have not been established and probably will not be set until two or three weeks before the first of each month.

Structural steel fabricators, rebar steel fabricators and other contractors buying steel products are forced to guess what the surcharge will be on any job that they are bidding today, yet they will not be taking steel delivery until after March. As one fabricator told me, "If I have to throw the dart, the price will be high enough for me to cover myself."

Steel fabricators that are locked into bids are in trouble already. Owners may be sympathetic to the contractors and work out a deal in advance, offering to pay the surcharge or part of the surcharge on steel products not yet delivered. The alternative may be that the contractor defaults on the contract, causing more problems.

For new work, owners may be asked to assume the risk and agree to pay the surcharge. The owner will then get competitive bids from fabricators for fabricating rather than hedging. Bid documents could be structured so that the surcharge is an allowance paid for by the owner, and not included in the bid price; or, there could be an escalation clause in the contract to cover subsequent price increases.



Basic Education

Does Your School Measure Up?

By: Craig Barnes, Principal, CBI Consulting, Inc., Chairman of NCSEA's Education Committee, and a former NCSEA President

The Education Committee published and distributed a comprehensive article on education for the structural engineer titled: *Education for the Structural Engineer - Basic Course Curriculum and Content*. It appeared in the February issue of STRUCTURE. All U.S. colleges and universities offering courses appropriate for the basic education of a structural engineer received the information, as well as the school survey data. STRUCTURE readers are encouraged to comment on the article and to contribute their educational experience.

The objectives of the Education Committee stem from the following ideals:

1. The Basic Education Curriculum, the Structural Engineering Certification Curriculum, the NCEES academic program, and state licensing boards all acknowledge and require the same curriculum and content.
2. A structure exists to monitor school programs on an annual basis.
3. Volunteers meet regularly with appropriate school representatives to discuss the importance of the basic education curriculum.
4. Stakeholders, such as construction materials groups (steel, masonry, timber, concrete and so forth), engineering companies, professional associations, and professional engineers, are affiliated with the effort, as resources and for marketing purposes.
5. Schools that provide the requisite academic program are heavily promoted.
6. Offshore engineering operations are addressed.

Survey results will be published in the July issue of STRUCTURE. NCSEA intends to use the survey to publish an annual ranking. If your alma mater does not measure up, find out from Craig what you can do to put them on the map. Contact Craig E. Barnes at **cbi1984@aol.com**.

Call For Entries

NCSEA 2004 Excellence in Structural Engineering Awards Program

NCSEA announces the seventh annual Excellence in Structural Engineering Awards Program. Up to three Excellence in Structural Engineering Awards will be presented in each of the following five categories: New Buildings under $10M, $10M to $30M, and over $30M, New Bridges, and Other Structures. In each category, one of the three projects will be chosen as an Outstanding Project.

Entries are due on July 9, and awards will be presented at the Monteleone Hotel on September 25 at the conclusion of the NCSEA Annual Conference in New Orleans, Louisiana. Winning projects will be featured in future issues of STRUCTURE magazine. For awards program rules, eligibility, and entry forms, see the Call For Entries on the NCSEA web site at **www.ncsea.com**.

The Winter Institute

The 2004 NCSEA Winter Institute was held at the Millennium Resort in Scottsdale, Arizona on January 24- 25, 2004. This was the fifth Winter Institute sponsored by NCSEA. Topics for this year's Winter Institute were designing for fire, a comparative analysis of the NFPA 5000 Building Code (the NFPA Code) and the International Building Code (the IBC), the development of Chapter 40 of the NFPA Code, and proper application of the requirements of the special inspection/quality assurance provisions of the IBC and the NFPA Code.

John Ruddy and Joe Marlo, from Structural Affiliates International in Nashville, Tennessee, gave a presentation on Structural Design of Steel, Wood, Concrete and Masonry for Fire. Currently, most structural engineers do not design for fire; however, the World Trade Center Investigation, being conducted by the National Institute of Standards and Technology, may culminate in a recommendation that fire be treated as an applied load to a structure.

Larry Griffis from Walter P. Moore and Associates in Houston, Texas gave a presentation comparing the structural design requirements of the IBC and the NFPA Code. Larry concluded that, while the IBC Code is longer, more detailed and less user friendly than the NFPA Code, it does have simplified seismic provisions. Both codes reference ASCE 7.

Emile Troup, Cnsulting Engineer from Canton, Massachusetts, gave a presentation on the development of Chapter 40 of the NFPA Code, *Quality Assurance During Construction*. Ron Hamburger from Simpson Gumpertz and Heger, Inc. in San Francisco, California spoke on how to comply with the requirements of Chapter 40, providing matrices showing who performs the tests, who reviews the tests, and whether the tests are to be periodic or full time for the various items to be tested.

Kirk Harman from Cagley, Harman and Associates in King of Prussia, Pennsylvania, gave a presentation on complying with the requirements of Chapter 17 of the IBC, *Structural Tests and Special Inspections*. Kirk provided insight on how his firm meets these code requirements and also reviewed the *National Practice Guidelines for Special Inspections*, prepared by the Council of American Structural Engineers.

Participants found the subject matter relevant to their practices and had the following comments: "*Very good seminar.*" "*The best I have attended.*" "*Good subjects and outstanding speakers.*"