

WOMEN OF STEEL

The structural steel industry has readily adapted to society's changing gender roles

By Jenifer Golec

The first time Andrea Pelter attended a union contract renewal negotiation she was surprised by what she encountered.



Andrea Pelter, president of Reno Iron Works, refuses to accept awards given solely to females because she feels gender has no place in a business setting.

accept awards given solely to females because she feels gender has no place in a business setting. With women only comprising 2.7 percent of the entire construction trade labor force in 1997 (according to the Women's

Bureau, a division of the U.S. Department of Labor), it might seem hard to ignore gender.

But Pelter isn't alone in her stance on gender issues. Many women in the steel construction industry also feel gender issues should be ignored in the workplace.

"You have to understand that it is irrelevant," said

Hope Furrer, P.E., president of Hope Furrer Associates, a Baltimore-based structural design and consulting firm. "You can't afford to get bogged down by that."

Furrer said she realized years ago that she could never get her job done if she spent time focusing on someone else's problem with gender issues. "You're bound to run into someone who has positioned themselves on gender in this industry," she said.

For Aine Brazil, P.E., principal senior vice president of Thornton-Tomasetti/Engineers in New York City, the only discrimination problems she has experienced have been in the field. Brazil said there is always

the "first hurdle" when she goes to a project site.

"As a woman, early in my career, in the field I had to prove my ability as an engineer every time," Brazil said. However, she points out that the field is the only place she has ever experienced any problems.

The first time Furrer encountered a situation in the field where she felt uncomfortable she formulated a plan. She resolved to always walk the site with either the superintendent or project manager. "It's a practical way to handle it," Furrer said.

Jessie Terry, P.E., bridge department manager at Lonco, Inc., in Denver, said that all engineers have to put up with the coarseness of the field. Terry said that she has never had any problems, and thinks being female might actually give her advantages over her male peers. "Maybe because you don't fit in, it opens doors for you," Terry said. "You have visibility."

Rhonda Cervantes, a structural engineer at L.R. Nelson Consulting Engineers in Las Vegas, agrees that her gender can sometimes be beneficial. "You have an advantage because you have shock value," Cervantes said. "But the disadvantage is you have to prove yourself (more)."

But, she said, the advantages and disadvantages balance out.

For Cindi Lanz (formerly Zahn), AISC Senior Staff Engineer-Structures, the increased visibility has sometimes been a problem. "At almost every meeting I've been to, I'm the only woman," Lanz said, and on rare occasions a gender-related comment will be made.

As the AISC staff person assigned to a specific committee,

It was more than four decades ago and Pelter was 20-years-old. She had been sent to represent her father's company, AISC-Member Reno Iron Works, at a union negotiation. The three union negotiators were swearing, smoking cigars and passing around a bottle of alcohol.

Pelter immediately established a few bargaining rules: No booze, no smoking and no swearing. "Without their booze, smoking and swearing, they were speechless," she said. "I won every point." Pelter, president of the company since 1967, said she wouldn't make those demands at a union meeting today. "That was really pulling a gender act," she said.

In fact, Pelter refuses to

one of Lanz's duties is to take minutes. At one meeting, one of the members mistook her for an actual secretary. "He didn't know I was an engineer."

Lanz, AISC's only female engineer, said she has occasionally experienced some subtle—and not so subtle—discrimination during her career. For example, a co-worker once claimed that the only reason she was hired was because she was a woman. But she manages to take it all in stride.

"You can't change the way people think," Lanz said. "And you have to work with them." Instead she prefers not to make an issue of any of it, saving herself from the unwanted attention it might bring. "If you make an issue of it, its going to bring it to people's minds more," Lanz said. "I think it would make it worse."

When Dean Fritz took over her husband's company after his death in 1986, she knew nothing about running a fabrication company. Fritz, now president of Fritz Structural Steel in Valley Head, Alabama, said she had never worked anywhere at that point. "People know when you've got your back to the wall," she said.

However, she said, there were very helpful people at the company who helped her through the beginning period. Her peers in the industry may have taken a little longer to accept her because of her gender. But she said once they realized she wasn't going to fail, they were more accepting. In fact, next year Fritz will be the president of the Southern Association of Steel Fabricators. "If I thought they put me in as the token woman, I wouldn't have done it," she said.

The first time Judith Stalnaker, at the time a part-time professor, walked into a civil engineering class (in the early 1980s), she was met with a collective gasp. "They didn't know what to think," Stalnaker said. "They had never taken an engineering class from a woman."

The students quickly got over their shock, and Stalnaker, now a professor at University of Colorado-Denver and Associate Dean for Student Affairs for the College of Engineering, said she

has never had problem with any of her students. "It's just not an issue," Stalnaker said. "We're just all people interested in steel design."

For Janice Trautner, the issue of gender has been frequent ever since college. She said she randomly experienced discrimination as an undergraduate — from being the designated "recorder" in her surveying class to being passed over for scholarships.

However, she said the worst experience was during her graduate studies in the mid '80s, because it affected the technical content of her research. Trautner, now a civil engineering professor at the University of Utah, felt the male graduate students were more respected and sought out by the male faculty, despite having less impressive resumes than their female peers. The female students were "an oddity and treated as such."

"Odd balls are conventionally tolerated and often ignored," Trautner said. "I was no exception."

At the time, I did not realize I was being treated differently than the men," she said. "I was too naive. In retrospect, I know I could have had a much better graduate school experience, had I been a man."

Before graduate school, Trautner had spent five years as a design engineer, and said "there wasn't nearly as much

Brazil, P.E., of Thornton-Tomasetti Engineers, says that early in her career she had to prove her ability as an engineer every time she went into the field.



AISC's Cindi Lanz says she is usually the only woman in attendance at a typical technical meeting.



discriminatory behavior in the 'real world.' She credits this to the fact that design firms rely on a team approach and cannot afford prima donnas.

However, she said she routinely experiences discrimination in her present position, and links this to the nature of university life. However, Trautner is quick to point out that these experiences have not deterred her from teaching or working with the steel industry.

"I like the people in the steel industry," Trautner said. "They have been very supportive and encouraging."

Trautner does note that female students only comprise about 10% of her classes.

"I do not have the exact statistics but it is sad to see that the percentage of women students in



Professor Janice Trautner believes that the “real world” is more accepting of female engineers than academia.



Dean Fritz of Fritz Structural Steel is the incoming president of the Southern Association of Steel Fabricators.

enrollment approaching half. However, she said this 50/50 split is not reflected in the profession today.

Stalnaker said that the number of females hasn't increased by much in her classes. At most, females make up 25% of the classes. However, she said the female students don't spend time focusing on their being a minority.

“We don't generally talk about being women,” Stalnaker said. “We talk about our careers and how much we love them.”

my classes is practically the same as when I was an undergraduate student 20 years ago,” Trautner said.

The Engineering Workforce Commission, a part of the American Association of Engineering Societies, released a study in January 1998 on students graduating with engineering degrees.

In 1997, only 21.3% of civil engineering or environmental engineering bachelor's degrees went to women; 23.4% of master's degrees; and 12% of doctoral degrees. The numbers seem to decline in the workforce, however. A recent ASCE membership survey indicates that only 6% of their members are female. This confirms Brazil's observations from her teaching experience at Princeton in the mid-1990s. She reported class sizes with female