CONTRACTOR.

THE NEWSMAGAZINE OF MECHANICAL CONTRACTING

Reprint from June 1993

ISH retains reputation as Mecca for heating cont'rs

BY JOE FIEDRICH Hydronic heating authority

THE BI-ANNUAL International Sanitation and heating Show, which took place in March in Frankfurt, Germany, is the ultimate in trade shows for our industry. With 1,452,000 sq. ft. of floor space and 1,800 exhibitors, it is by far the largest plumbing and heating show in the world, Attracting 210,000 visitors from around the globe, it is a Mecca for every heating contractor and specifier in the world.

The theme of ISH 1993 was comfort with optimum energy efficiency and minimum flue gas emissions. The belief by North Americans that European high tech and high efficiency heating equipment is driven by fuel prices is a misconception. Heating oil and natural gas cost the same as in the U. S., compared with gasoline or diesel fuel, which are heavily taxed.

What's the real reason behind the high cost and high efficiency equipment? Governments have enacted stringent regulation for efficiency and emission standards. On the other hand, governments also extend substantial tax incentives to building and homeowners to continuously upgrade obsolete heating equipment.

Gas and even oil-fired condensing boilers in every size and shape were at ISH, with seasonal efficiency ratings of up to 106% (in Europe, the higher heating value from condensing is counted as extra).

Oil and gas burners fired openly into the breathing space of the exhibition hall with emissions so low you could (almost) inhale the flue gases. Oil and gas flames were so clean they resembled a flameless radiant burner of a Coleman camp lantern. Boilers are built from metals as exotic as titanium stainless steel, with porcelain enameled combustion chambers and double and triple walled heat exchangers to combat flue gas condensation.

'Boilers have titanium stainless steel or double-wall combustion chambers'

The environment was the clear winner at this show, with clean rivers, oceans and skies painted on the backdrops of the exhibits and brochures. Lower emission levels of NO_x, CO, CO₂, SO₂ and SO₃ were the goal. Manufacturers compared government requirements (measured in milligrams per Kilowatt hour

heating output), often exceeding regulations by 30%-50%.

Pump manufacturers showed ecological concern with "Dynamic Pumping Power Reduction". With some manufacturers producing as many as 15 million pumps a year, this adds up to a lot of electricity. Flow rates and pumping pressure for small circulators and big pumps are optimized through miniaturized and pump integrated controls. The controls reduce electrical consumption, fine-tune the pumping curve with constantly changing heat load conditions, reduce wear and tear on system components and eliminate flow noise problems.

Instantaneous sealed combustion gas-fired wall hung boilers with dhw production are extremely popular in Europe because most people live in apartments and condominiums.

This type of system allows the occupant to have his own heating plant and control his own consumption. All of these models resemble clean-looking white enamel halt-size refrigerators.

Panel radiators in every conceivable design, shape and color offered by a mind boggling amount of manufacturers from all over Europe took up a large portion Hall No. 8. Everything from Italian sectional cast aluminum to flat plate steel and cast iron designs were there. The configurations are endless, as towel warmers, room divid-

ers, railings and sitting benches, to

name a few.

Hall No. 6, one of 10 interconnected buildings, was dedicated to the world of hydronic floor heating and exterior surface heating.

Dozens of systems and component manufacturers demonstrated the actual tubing installation at hourly shows to point out installation advantages of their systems. With 250 million feet of floor heating tubing installed every year in Europe, the floor heating industry has carved out a large niche, and is still growing after 15 years.

I can honestly say, that even after 14 years of ISH and having worked in two of them for a boiler manufacturer (1979 and 1981), it is still an exciting and exhilarating event for me. It should not be missed.

The author is president of Stadler Corp. (tel. 781/275-3122), a Bedford, Mass.-based supplier of hydronic heating equipment