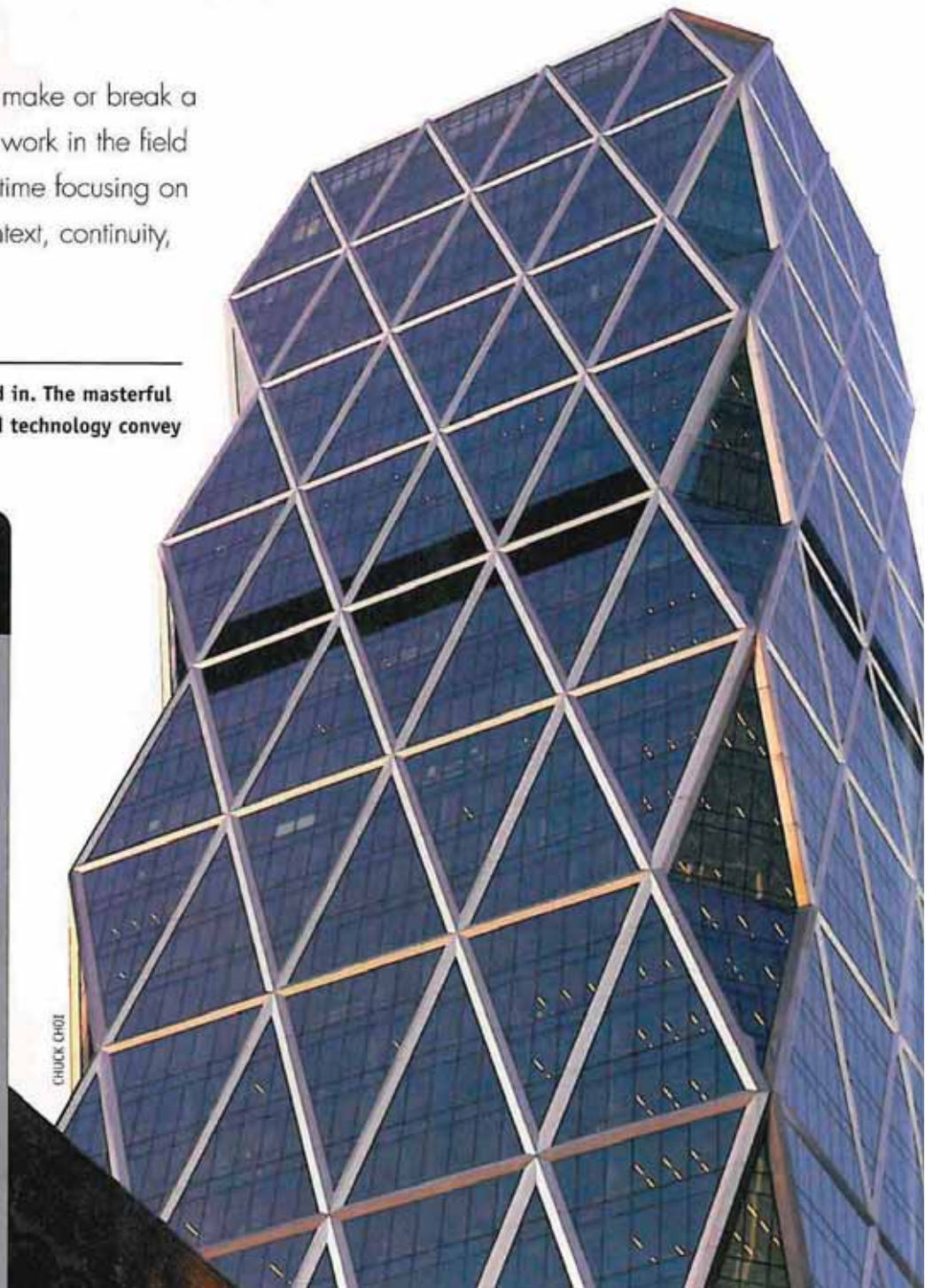
TOWERING Performance

Hearst building integrates high-tech function into world-class architecture

By Maureen Patterson

In publishing, details make or break a product. Those who work in the field spend much of their time focusing on such minutiae as context, continuity, and color.

Hearst Tower soars outside and in. The masterful integration of architecture and technology convey power and elegance.



CHUCK CHOI

HEARST TOWER

BEST OVER $1 MILLION

PROJECT QUICK FACTS
COST: $5 MILLION

AWARD WINNERS:
CMS INNOVATIVE CONSULTANTS
FOSTER + PARTNERS
GENSLER & ASSOCIATES ARCHITECTS
REAL TIME SERVICES
AUDIO COMMAND SYSTEMS

Fitting, therefore, that a landmark project to house a publishing empire would include an emphasis on architectural details.

The 46-story, 856,000-square-foot Hearst Tower is a building lover's eye candy. From the outside, its triangular glass-and-steel diagrid soars above its 1928 neoclassical base. From the inside, its artistry grows from the majestic diagonal escalators and two-story waterfall in the lower floors to the breathtaking views that the upper floors afford.

But the most understated feature of the structure – the sophisticated integration of technology – is quite possibly the most significant. To put it simply, this building works.

OLEG MARCH/CMS

The boardroom includes a custom WallGoldfinger/Gensler table and concealed "drywall" ceiling speakers for conferencing.

"The building has enhanced productivity," says Steven Grune, vice president and publisher of *Country Living*, one of the many magazines housed in Hearst Tower. "It's enhanced an energy level for all the people that actually work in the building and, with the use of technology, it continues to make everybody more productive as well."

The base building – which was commissioned in 1926 by William Randolph Hearst, designed by Joseph Urban and George P. Post & Sons, and completed in 1928 for $2 million – was meant to accommodate a tower on top, though the originators could not have imagined something of this magnitude. The plans were thwarted by the Depression, and the building was given landmark status in 1998.

QUOTE FROM JUDGE

★ "The bottom line is that this project is so exquisitely well done. This is what you hope that all projects aspire to, in terms of the integration of architecture and technology."

Over the years, the Hearst Corporation grew. The diverse communications company now includes magazines such as *Cosmopolitan* and *O, The Oprah Magazine*, entertainment entities such as A&E Networks and ESPN Inc., and Internet businesses. The early part of this century found the company sprawled out in a dozen locations in New York City. The company wanted to unite the groups in one headquarters for better internal communications and business unit interaction. Now, 2,000 employees have been united into one, Lord Norman Foster-designed facility. The tower blends old with new, giving vitality to both.

Given Hearst's emphasis on media and entertainment, the building does not scream at guests to see Hearst products. There is not an army of video screens in the lobby, as one might expect. Nowhere is a ticker with the latest headlines. In fact, at first glance visitors cannot "see" the media of this giant at all. But they can feel the company's presence in the architecture, which conveys a power, a force, if you will, an elegance. And when they venture inward, they experience technological integration at its best.

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Sustainable Performance

Hearst Tower not only performs for its occupants, but it also performs for the environment.

The building was awarded LEED Gold last year. Its diagrid structure saved 2,000 tons of steel, a 20-percent savings over a building of a similar size. Ninety percent of the steel used is recycled. Its curtain wall uses high-performance glass that reduces heat gain and cooling load. Displacement ventilation in its atrium saves energy, and the building uses a high-efficiency HVAC system that uses outside air 75 percent of the year. There's daylighting throughout the facility, and such water-saving features as electronically actuated faucets and rainwater harvesting.

OLEG MARCH/CMS

The 44th floor has a three-section multipurpose room with 6 HD displays, concealed sound system, and automated millwork system.

Standardized Tools

Hearst Tower contains more than 80 conference rooms. All contain NEC 65-inch plasma displays with custom shroud details made by Digital Factory; ClearOne wireless audio conference systems; custom Extron tabletop boxes for power, data, and AV connections; full-fiber transport and off-air HD distribution; Crestron wireless panels, and JBL and TOA ceiling speakers.

The goal, says Michael Schuch, partner at CMS Innovative Consultants, was to run AV that was seamless, user-friendly, and autonomous. "The basic foundation of technology design for AV in the building was to create standardization through these 80 or so rooms," he says.

OLEG MARCH/CMS

This detail shows custom-designed hideaway microphones for a videoconference room.

Standardization works when done right. In many projects, however, it isn't, and end-users are left with technology they don't need or know how to use. Not here. At Hearst Tower, the concept of mock-ups was taken to the nth degree. Everything was mocked up, from the smallest details, and users were given mock-ups for weeks at a time to crash-test them.

For example, a mock-up of the standard conference room contained the Crestron user interface so users could learn to use it. And the custom Extron box was mocked up and put into the conference table so that users could be sure it was what they wanted (the edges of the boxes are square instead of radial, with a different hole in the lid and a different finish), says Schuch. They even were asked for input on the height for mounting the plasmas.

The mock-ups led to cost and design efficiencies. For example, the design team initially thought they'd only use the plasma flat screens in the smaller conference rooms and front projection in the larger rooms because of lighting issues,

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– Brian Schwagerl, vice president of real estate and facilities planning, Hearst Corp.

explains Bob Seitz, senior associate at Gensler, which partnered with Foster + Partners on the interior fitout. The mock-ups showed that the flats screens provided great quality even in the larger rooms. "We were able to eliminate the motorized screens, eliminate the motorized projectors and the projector lifts, and go to a standardized AV package," he says.

Brian Schwagerl, Hearst vice president of real estate and facilities planning, says the mock-ups ensured that the AV was integrated correctly with the architecture and reflected the flavor of the building and company. "That's the remarkable achievement here," he says. "We didn't throw things in just for razzle dazzle. They're in for functionality as well as form. [The building] looks great and it performs spectacularly."

A View on the World

Nowhere is this integration more evident than on the 44th floor, a multipurpose space used for meetings, conferences, and events that has 30-foot floor-to-ceiling windows. Natural light is abundant here, as in the rest of the building, and the views of New York are incredible. Those views posed a set of design challenges that the team had to solve from the start. "It means you have to think very hard at the early stages about the blind systems to be able to incorporate them into the façade system," says Michael Wurzel, project architect at Foster + Partners. "This integrated design, it's not something which you can wait and then do a standard solution afterwards. That wouldn't work." Motorized shades, made by the building's curtain wall manufacturer, PermaSteelisa, move from the bottom up and were built into the diagrid's low-iron glass.

The shades help minimize the effects of light glare against the screens. The 44th floor contains six Stewart Filmscreen HD 120-inch-diagonal screens with NEC rear projection that can be concealed at the push of a button inside custom millwork. The millwork contains shade overhangs to block light. A solar study showed designers how to position the building elements to eliminate glare. Screen views are good no matter where a person sits.

So are acoustics, the most difficult element for flexible spaces, says Schuch. The multipurpose space, which can be configured into three rooms, contains a Beyerdynamic digital wireless conference system made up of 80 microphones, each a transmit and receive system. To control sound, the team designed a unique corrugated aluminum ceiling system with acoustic batts.

A control room on the 44th floor uses Crestron RoomView to control and support all the conference rooms. The software is on other machines in the facility and can be accessed remotely.

Technologies Converge

Throughout the building, designers had to maximize every inch of space. "As you can imagine every inch in Manhattan real estate is very valuable so these things are not just in empty rooms. There are literally screens and screen structures within an eighth, a quarter inch to the next device and motor, which is next to millwork, which is an eighth of an inch away. There's no void here. This is very high-tolerance architecture," Schuch says.

Such tolerances were also true in the building's theater,

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OLEG MARCH/CKS

The broadcast screening room includes a dual HD/ surround sound system.

OLEG MARCH/CNS

Technology in Hearst Tower shows itself when necessary. In the boardroom, here, as well as in the 44th floor multipurpose room, screens are hidden behind automated millwork.

where Alan Bjornsen, principal of Cerami & Associates, and others had to fit a 27-foot-wide front-projection roll-down screen into narrow confines. The manufacturer, Stewart Filmscreen, created a custom screen assembly to move the motors of the screen, and designers chose Macintosh MacPherson Monolith loudspeakers for their narrow width and quality, along with JBL subwoofers and Tannoy surrounds.

The room uses a high-definition Christie Digital Roadie 25K projector and a Vista Spyder 5X3 video processor with RGBHV, SDI, YUV, and S-Video inputs. There's a Sony J-30 multiformat player, a Panasonic DVC-PRO VTR, and an HDTV tuner. A Crestron control system facilitates comprehensive control of all AV functions and allows multiple images to be displayed on and moved around the screen.

The atrium-level theater connects to the Hearst/Argyle broadcast center, a full-function TV studio and control room, on the 36th floor. The center is a control room, edit facility, and uplink facility all in one room with satellite communications on the roof and video truck connectivity at street level. A windowed studio is used for both video and still photography. The control room includes a plasma monitor wall, freestanding consoles by TBC consoles, and some raised flooring. There's an additional glass-enclosed rack room for Middle Atlantic racks and other rack-mounted equipment and technology.

"Video connectivity is included in the magazine test kitchens, select talent offices, and work areas to provide crossover content activities for all media formats," says Stephen Newbold, senior technical director at Gensler. Ascent Media provided systems integration.

A robust fiber backbone rises up through the building along with fiber risers that run vertically in the building. "In essence there's a parallel data riser with a parallel broadcast riser in it," Newbold explains, adding that there's a crossover between risers in the building's technology center that allows video images to be put into the IT network. If a celebrity, say, should walk through the front door of the lobby below, Hearst staff can plug a camera into a wall and transmit the video to the control room, where staff can feed it live to the world or keep it for video production. The building is wireless, so occupants can access the Internet anywhere.

Adds Newbold, "It's a question of leveraging everything you can. You've provided these spaces for things to happen. There should be no reason why you don't capture and exploit and share the content wherever you need to, whether you're broadcasting or uplinking it to a satellite or whether you're just putting it on the IT network to share it with employees or to make it available to remote locations," says Newbold.

IT and AV converge in Hearst Tower. The media transport delivery system is an IT function. So is the control of the automated shades and dimming of various light sources. The IT transmits the signals through the building, and the AV system takes over when the signal reaches the room. "It's a very complete and continuous handshake between the two," Schuch explains.

The IT/AV infrastructure produces the high-tech functionality that makes Hearst Tower work for everyone who walks through its doors. That translates into better results for Hearst people and products. Anyone who watches a game on ESPN or reads an article in *Cosmo* benefits from the Hearst building's towering performance. ●

PRODUCT LIST: HEARST TOWER

NEC	65-inch plasma displays w/custom shroud details by Digital Factory, video projectors, LCD displays
ClearOne	wireless audio conference systems
Extron	tabletop boxes, computer interfaces, system switchers, mixers
Crestron	wireless panels, RoomView, control systems
JBL	ceiling speakers
TOA	ceiling speakers
PermaSteelisa	motorized shades
Stewart Filmscreen	HD 120-inch-diagonal screens w/NEC rear projection, 27-foot-wide front-projection roll-down screen
Beyerdynamic	digital wireless conference system
Macintosh MacPherson	Monolith loudspeakers
JBL	subwoofers
Tannoy	surrounds
Christie Digital	Roadie 25K projector
Vista	Vista Spyder 5X3 video processor
Sony	J-30 multiformat player
Panasonic	DVC-PRO VTR
TBC Consoles	freestanding consoles
Middle Atlantic	racks
Crown	amplifiers
BA	speakers
Tandberg	videoconferencing systems
Van San	custom lecterns
Clock Audio	table microphones