SITE VISIT
POWER HOUSE
Siemen’s new headquarters building

BIG 5
SPECIAL PREVIEW
What the industry can look forward to

JUDGMENT TIME
MEP AWARDS
2013 BUILD-UP

BAHRAIN
TOPICAL ISLAND
The Gulf kingdom’s MEP market

Social Engineering

Hassan Sultan from ASHRAE’s Oryx Chapter in Qatar on the mechanics of building a new society branch

ALSO: THE LATEST NEWS FROM THE INDUSTRY’S SUPPLIERS
NOVEMBER 2013 VOLUME 8 ISSUE 11

CONTENTS

04 NEWS
HLS wins $109.7m Al Habtoor City contract with Drake & Scull

08 NEWS UPDATE
Jeddah introduces new rules on computer-generated design

16 COMMENT
Oscar Wendel considers personality mix in organisations

20 ANALYSIS
A look at the future value of built assets in the GCC’s hotspots

68 PRODUCT FOCUS
Check out the latest MEP related products in the market

72 THE LAST WORD
Eaton’s Frank Ackland on the art of acquisition

MEP AWARDS 2013
All the judges and nominees for this year’s gongs revealed.

BIG INTERVIEW
Former president of ASHRAE’s Oryx Chapter in Qatar, Hassan Sultan, explains how he and his colleagues built a success story from scratch.

BAHRAIN FOCUS
What does the little island in the Gulf have to offer the regional industry?

BIG 5
Event organiser and show exhibitors show off what they have in store.

SITE VISIT
Michael Fahy gets on site at Siemens’ headquarters building in Abu Dhabi’s Masdar City and finds a suitably sustainable home for a giant of the industry.
THE BIG INTERVIEW

SOCIAL Engineering

Hassan Sultan, former president of ASHRAE’s Qatar Oryx chapter, on his role in bringing the country’s mechanical engineers together and how the society is helping to shape the built environment of the burgeoning Gulf state

If ever an institution reflected the lightning growth of Qatar’s construction industry and the process of internationalisation which has attended it, the Oryx chapter of the American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) is surely it. Officially founded in 2008, the Qatari branch of the venerable sustainability-focused U.S. mechanical engineering body has grown from a modest collective of 46 at its inception to a heaving mass of more than 300 just five years later.

Present at the chapter’s birth and a driving force behind its rapid maturation, former president and MZ Consultant’s head of mechanical department Hassan Sultan says the Oryx branch was a logical consequence of Qatar’s hyper-evolving construction industry and the cosmopolitan demographic drawn to it.

“ASHRAE started in the region a long time ago in Lebanon,” says Sultan. “But when engineers moved from there to the Gulf Cooperation Countries (GCC), such as Qatar, many had the idea to start up ASHRAE chapters in these countries. However, it was not only Lebanese engineers with this idea, but engineers from the U.S., Europe and elsewhere who were members of ASHRAE in their home countries. As more of these people came to the GCC in the 90s, chapters started to be established in some of the GCC states in the years after.”

Sultan, who originally hails from Lebanon and who arrived in Qatar in 2003, was one such expatriate engineer keen to see ASHRAE’s footprint extended further in the Middle East. He, along with a selection of colleagues from the Qatari mechanical engineering fraternity, was well aware of the benefits an ASHRAE chapter could bring to the country’s nascent construction industry.

“We knew the importance of having an ASHRAE chapter in Qatar and how it would benefit from its individual members and their companies, and other societies,” Sultan says. “We knew that ASHRAE would provide us with a website and access to its standards, guidelines and publications, as well as provide us with technical conferences and seminars. It would also assist us with any query or any technical question.”

2008
Year ASHRAE Oryx Chapter was founded
Positive discussions between Sultan and his colleagues very quickly turned into decisive action with a steering committee set up to plan for the chapter’s establishment, of which Sultan was the vice president. Eventually, in January 2008, the ASHRAE Oryx Chapter came into being and set about building its influence in Qatar’s mechanical engineering community.

Not long after the chapter was up and running, Sultan was cajoled into becoming president by his ASHRAE brethren in 2010. “I did not look for it,” he says, “and I did not decide to do it [on my own], but everyone was asking me and pushing me to do it.”

Having accepted the position, one of Sultan’s first acts in his new role was to bring the chapter into the twenty-first century with the creation of a website – one which has gone on to win an award from ASHRAE for the best regional site among 28 chapters. This proactive approach to digital media was furthered with the publication of a regular chapter newsletter, also aimed at keeping members engaged and involved in the chapter’s development. Yet another initiative of Sultan’s saw the maximisation of the chapter’s activity up to and beyond ASHRAE’s basic recommendations for each of its 186 branches.

Together these moves helped build the momentum which has seen the chapter thrive in recent years and become a genuine society of engineers. Orchestrated by the committee’s which meets once every two weeks to plan events, the chapter now sees members meeting for technical seminars every month, as well as attending regular workshops.

Among its many achievements in its short existence, Sultan says the Oryx chapter has managed to host 15 distinguished lecturers from the region and the U.S. over the last two years – around 12 or 13 more than ASHRAE’s recommended minimum amount for a branch. The chapter also represents around 30% of the entire region’s contribution to ASHRAE’s promotion, a statistic for which it has twice received the society’s annual

I could not do everything by myself and I did not have to do everything by myself.”

ASHRAE was founded in 1894 at a meeting of engineers in New York City, holding its first annual get-together the following year and continuing this tradition ever since.

Until 1954 it was known as the American Society of Heating and Ventilating Engineers (ASHVE), but that year changed its name to the American Society of Heating and Air Conditioning Engineers (ASHRAE). It took on its current designation in 1959 following a merger with the American Society of Refrigeration Engineers (ASRE).

Apart from the publication of its internationally-recognised series of standards, ASHRAE’s also publishes a four-volume resource for heating, ventilation, air conditioning and refrigeration (HVAC&R). One of these four volumes is updated each year.

In 2006, ASHRAE adopted sustainability as the core theme for the organisation’s Strategic Plan. As part of this, the institution decided to renovate its headquarters building to become LEED Platinum-rated in honour of these values.
Everybody saw that I was working with a team and that there was seven or eight active ASHRAE members working together, like a dynamo, for the same cause.”

award for work in this area. Furthermore, its innate social impulse has led it to look to wider Qatari society and establish relationships with such bodies as Qatar Foundation. KAH- RAMAA, Qatar University, and Qatar Green Building Council – propelling it into the Qatari construction industry’s circles of power and influence.

Such successes were almost certainly behind the sustained support Sultan received in his position as president from 2010 to 2012, given the usual length of an ASHRAE president’s term is one year without re-election. He is, however, quick to highlight the contribution of others in the transformation of the chapter from a small but eager platoon of mechanical engineers to a marching battalion which is one of the region’s biggest ASHRAE success stories.

“I could not do everything by myself and I did not have to do everything by myself,” says Sultan. “It was done by a team. I had to
Qatar promised to build air conditioned stadia in its winning bid to host the 2022 FIFA World Cup and, Sultan says, ASHRAE may well play a role if these projects are built.

have assistance and this is what made the difference. Everybody saw that I was working with a team and that there was seven or eight active ASHRAE members working together, like a dynamo, for the same cause."

While the achievements of the chapter’s team in themselves are hugely impressive, Sultan says that they deserve even greater credit given the peculiarities involved in setting up such a society in Qatar. "We are a group that is made up of different nationalities and cultures from all across the world," he explains. "It is a mixture of different people working together with different languages and different personalities. Everyone has got their own background and experience, and this is of course different from chapters in Spain, for example, or the U.S. To put all of these people together, working together as a team in order to achieve the necessary goals is not easy."

"Another issue which makes a difference between here and America or Europe is that, here in the Gulf, everyone comes [to the region] to work and the working hours per day are excessive," he continues. "Everyone is in the office till eight o’clock or sometimes..."
Although still nine years away, the 2022 FIFA World Cup in Qatar is already a topic of hot debate throughout the world.

In its winning bid for a summer tournament, Qatar promised to build air conditioned stadia to ensure both players and spectators stay cool during the games. While a move to a winter World Cup is being mooted, and would make the necessity for air conditioned stadia redundant, the possibility remains that Qatar would have to deliver on its promise. So, being the local authority on all things HVAC&R, what role might the Qatari Oryx Chapter play in such a scenario?

“ASHRAE would play a role, for sure,” says Sultan. “We will be onboard. Whether it is through consultants or quality approval, they will refer to ASHRAE.”

“Hosting the World Cup in summer in 2022 will be a challenge,” he adds. “But solutions have already been offered to provide air conditioned stadia. It is not a simple issue and will be expensive but, if it is required, it will be done.”

With such projects in mind, the Oryx chapter is organising the first ever international conference on energy and indoor environment for hot-climate countries, which will take place in Qatar in February 2014. Sultan, who is the organising committee chair, says that the conference will cover a wide selection of topics tackling issues such as those raised by the prospective 2022 World Cup stadia projects.

Sultan takes the microphone during one of the chapter’s meetings which take place on a regular basis.

“\\“\: We have a commitment to serve humanity, history and nature in our work. We are serving that commitment and we are all very committed.”

\\“\: Maybe we are serving ASHRAE much better than people in these other countries. We are encouraged to do it, we are happy to do it, we enjoy doing it.”

nine o’ clock, so we have less time to serve ASHRAE compared to somebody in a country where the working hours are fewer. But, let me tell you, maybe we are serving ASHRAE much better than people in chapters from these other countries. We are encouraged to do it, we are happy to do it, we enjoy doing it.”

Such passion and zeal from Sultan and his chapter has undoubtedly been central to Oryx’s seemingly inexorable rise over the last five years, and it aims to continue this ascent as Qatar rebuilds itself at a pace perhaps unparalleled around the world. In such a ferociously developing environment, where quickness may sometimes take precedence over quality, the chapter’s role as paragon of HVAC&R virtue will be crucial to ensuring the health and safety of those occupying Qatar’s future buildings. “ASHRAE is about continuous education [of engineers],” says Sultan. “The quality of workmanship [in Qatar] is improving, but it still needs a lot of work.”

In the years ahead for ASHRAE, Sultan sees the organisation becoming global rather than just American, given that 25 to 30% of members are from outside the U.S., with the percentage growing. However, he can’t foresee such a change affecting his, his colleagues or their society’s highest calling. “We have a commitment,” he says, “to serve humanity, history and nature in our work. We are serving that commitment and we are all very committed.”

300+
Number of members in Oryx Chapter