

Lessons from Austria

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Ever since a young lad, I've been a fan of European cars. That 'look at me everyone, I've got a Ferrari!' just isn't my style. For me, it's always been the understated class, attention to detail and build quality that 's appealed. It's no wonder, that when Hawle produced their 'A' Valve I was immediately impressed and intrigued. How do they get that wedge into the one piece valve body? This question would continue to plague me from the day the Hygrade representative shrugged his shoulders, admitting even he didn't know.

A month or so had gone by when our local Hygrade representative rang and asked "How would you like to go to the factory to see how they make the 'A' Valve?"

"Of course I would", I replied, thinking it was a hypothetical question.

"No really!" he said, "we're inviting a number of water managers from around the country."

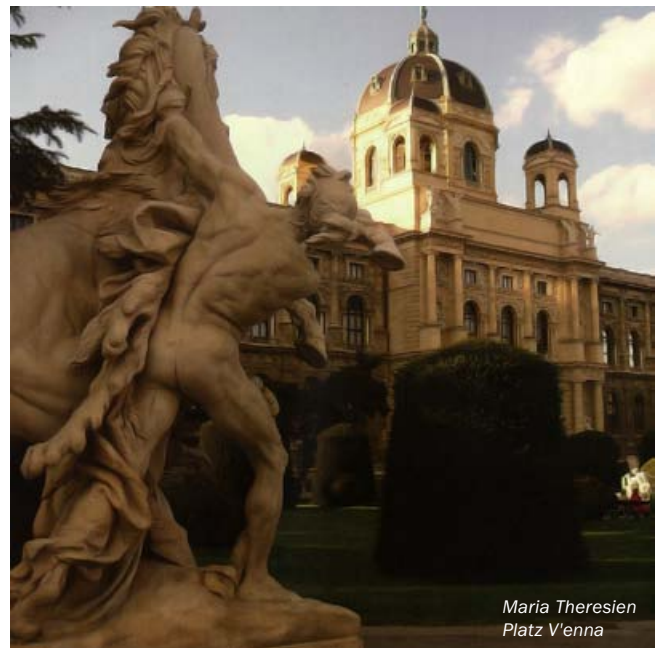
Wow – this guy's serious! How on earth am I going to get this past our CEO, even a gifted \$10 bottle of wine draws attention, let alone a supplier-funded trip to Austria! Fortunately my division manager is an experienced engineer, who's been around long enough to understand the Hynds/Hygrade ethos around training. Having educated engineers is ultimately good for the industry, and of course, business.

This was to be the second year that clients from the water industry would be invited to Austria through a joint Hynds/Hygrade and Hawle initiative. The itinerary would see us visit the Hawle Valve Factory and Agru Polyethylene Factory in Vocklabruck, Vienna Water and the Salzburg Water Museum.

We prepared to depart Auckland on 4 September, the very day Christchurch would be rattled by a magnitude 7.1 earthquake. Initially the fate of our Christchurch counterparts was unknown, but to our relief they were fine, if not somewhat shaken. Fortunately they were able to join us a few days later in Vienna.

We arrived in Vienna to be greeted by Manfred Hiden, Hawle's southern hemisphere sales manager. Manfred would be our host for the rest of the trip. The scenery and architecture were immediately breathtaking, but it's not long before you notice how tidy everything is, and how efficiently everything seems to run. Buses, trains and trams were ferrying multitudes of Viennese around with seemingly more cycling along the many dedicated pathways which cover the city.

The following morning I opened my hotel window and



Maria Theresien Platz Vienna

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started surveying the amazing architecture around me. My eyes were immediately drawn to a monstrous structure hidden behind the buildings. It looked like a giant water reservoir, but seemed too large to actually be one – typical, only an engineer would notice this kind of thing amongst the fabulous Renaissance architecture. Every time I caught a glimpse of this structure it intrigued me. It actually wasn't until I got back home and started checking out on Google Earth where I'd been, that I stumbled across what the structure was. It turns out that it was one of 8 anti-aircraft flak towers constructed during World War II. Three of these towers were built in Vienna alone. Wikipedia informed me these Flakturm Towers were largely accredited for saving Vienna from the heavy bombing raids of the Allied forces, and subsequently saved the city's amazing architecture. For a country that has such an interesting war history, it's clear it's not something they like to advertise.



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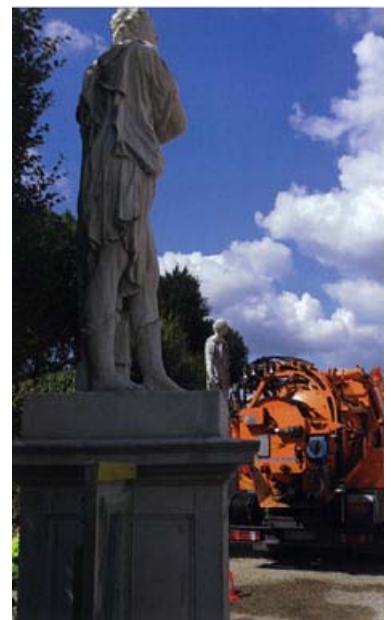
You can't come to a city like this and not look around; fortunately that's exactly what we got to do on the first full day, but funnily enough it wasn't long before most of us started looking at sumps, manhole lids, valve boxes, hydrants – that kind of thing. However the city's history and architecture quickly drew us back in. I was amazed at how well the city functioned – bikes, buses and trams whizzed past (on the wrong side of the road!). The number of times I caught myself looking the wrong way as I was about to step out! Underground car parks dotted the city, resulting in a calm, uncongested feel. The city was also remarkably safe. We entered the subway, some four stories below ground, mid week and near midnight, and there were numerous commuters, including young women freely walking around on their own. And when a train says it's turning up at 12:03am it turns up at 12:03am!

Not long after arriving in Vienna I noticed an absence

of the tell tale chlorine smell in the water. I looked around the hotel room for signs advising not to drink the water, but there weren't any. I just figured these guys were really good at getting their dose levels right. Surely such a large international city would chlorinate their water supply? Given we were about to visit Vienna Water the following morning, my question would soon be answered.

We were introduced to Walter Kling, Deputy Managing Director of Vienna Water, and Director of the 2008 World Water Congress. I asked him about the lack of chlorine, and was greeted with a cheeky grin, “we wouldn't put that stuff in our water!” It turns out you can drink water straight out of the tap just about anywhere in Austria without, the need for chlorine. After two days, it's pretty obvious Austrians like to do things properly. We were given an impressive presentation on the history of Vienna water, prepared by professional film producers, Brains & Pictures. Impressive





Above (left to right) – PE Pipe at Agru Factory; Leigh John & Peter Bahrs inspect an 800mm 1936 Sluice Valve with 150mm By-pass situated outside Vienna Water offices; Gareth Phillips, Greg Manzano, Dylan Stuijt, Walter Kling and Manfred Hiden outside the entrance to a 200+ year old water reservoir, Vienna; Greg Manzano operating a 600mm Hawle Valve; Schoenbrun Palace, Vienna; Facing page (bottom) – Dubai airport under construction; Hawle's range of self restrained fittings on display and under mains pressure

cinematography aside, what the Austrians have done with their water supply is genuinely inspiring. The lengths they've gone to to secure and protect their water quality is nothing short of amazing and is something we could learn from.

In 2003 following a European Commission presentation on behalf of its member states at GATS (General Agreement on Trade in Services) it was obvious Vienna, in addition to the rest of Austria, weren't going to bow to commercial forces, or 'Liberalisation' as they put it. Following an initiative by the Mayor of Vienna in 2004, 18 cities (Vienna, Berlin, London, Paris, Rome, Athens, Amsterdam, Luxembourg, Sofia, Bratislava, Barcelona, Munich, Leipzig, Frankfurt, Stuttgart, Brno, Madrid and Brussels) adopted a resolution on maintaining services of general interest in Europe, rejecting the Liberalisation movement. Many years on, Walter remains a firm believer that they did the right thing, and from what I've witnessed, I couldn't agree

more. The ability for a water company to own and manage an entire water catchment, while maintaining cost effective services, shows an amazing level of dedication and fortitude for its customers, which would be hard to replicate in a privatised market.

We'd be doing ourselves a favour if we allowed the Walter Kling's of this world the opportunity to share their experiences, rather than succumb to the media savvy juggernauts of the international water giants. However, it's ironic that we watched a video worthy of an Oscar Award at Vienna Water. Our afternoon was rounded out by a tour of a 200+ year old water tower, which was just a much a piece of art as it was a water reservoir.

The following day, we hit the Autobahn and headed west – destination Vocklabruck, home of the Hawle Valve Factory and Agru Polyethylene Factory. On the Autobahn I



could have sworn the speed sign said 120km/hr, so why was everyone flying past us when we were only doing a cool 140 in a minibus. I guess old habits die hard. Traffic was smooth. Swales, flood detention ponds, and even windmills (the modern kind, think the Manawatu Gorge) dotted the highway. Green is a very strong theme in this country. I'm amazed how similar Austria is to New Zealand, not only in landscape (except for the more than 1000 year old buildings), but also in mindset, but polished with millennia of growth, conflict, turmoil, enlightenment and how could I ignore Mozart, to reflect upon.

I questioned Manfred on the state of the apparently poor traffic management and site safety practices I saw around the roads and city construction sites. This seemed to be a rare opportunity for New Zealand to rise above the Austrians. The response was a surprising "self responsibility! If you walked in there, you'd be an idiot, as it's pretty obvious it's a construction site." (Some paraphrasing on my part, but you get the message). The duty of self responsibility was another strong feature to come out of my tour. I'm not sure if my counterparts had the same feeling, but it felt like a breath of fresh air, like the whole PC brigade hadn't made it there, or they simply got booted out at the door!

Winter gets pretty cold in Austria, and the life for any kind of infrastructure is pretty hard, and as a result I'm told, quality really matters. Just looking at the workmanship on the above ground hydrants is certainly testament to this. Austrians also claim to be at the technology forefront and not just in the automotive or IT industries. A surprising concept I discovered was that property owners even had their hot water supplied, just like your gas or other services. A special hybrid alloy and polyethylene pipe was in the process of being tested for this purpose. A visit to the Agru factory in Vbcklabruck would shed light on some other technological advances in polyethylene. Of particular

interest was the PE 100-RC pipe they're starting to produce in large volumes. We were assured by the head of design, that the "slow crack growth rate" of this product was so low, that you could lay the pipe without any specialised bedding. He went as far as to show an example which appeared to be in the Swiss Alps where the pipe was laid directly onto bare rocks! There were also some very interesting concrete lining products.

A relatively new product they were promoting was in the Agrusafe range called 'Sure Grip' or 'Ultragrip'. This was a polyethylene sheet lining product that could be set into fresh concrete, or retrofitted to line old reservoirs, pipes, manholes, oval pipes, and protect against aggressive environments or to simply extend the life of a product. Temperature fluctuations were a slight limiting factor, but they also had a solution for that. Just about everyone in our tour group wanted a sample of the 'Sure Grip' product as immediate applications came to mind. Our next stop in Vbcklabruck would be the Hawle Valve Factory where a lunch of crumbed schnitzel and potato salad was waiting. A Hydrant beer tap was a major talking point. As I went to take a photo, an Austrian staff member quickly jumped up and stopped me. What was this? He then refilled the two beer glasses that were sitting below the hydrant to ensure they each had a perfect head. "You can't take a photo of Austrian beer without a perfect head on it," he said with a huge grin.

During the tour of the Hawle Fabrication Plant, it was strictly cameras off. Throughout the tour staff were eager to show us how important QA testing was and how every step had a quality check in place. I was particularly impressed by how Hawle managed to cold press the stainless steel threads of the valve spindles, rather than just cut them out using conventional methods. Soon we approached the room where they vulcanised the rubber onto the wedge of the Hawle 'A' Valve. At last I'd see how they get the wedge into the one piece body. But alas, unfortunately, even these guys didn't know this bit, the actual putting together process took place in another secret location. At least I got to take out my frustration on some vulcanised rubber with a pair of pinchers, and yes the rubber did stick like the proverbial to the steel. The tour was capped off by an impressive display room of self restrained fittings for just about every known pipe material type, and a particularly large valve that we could play within the pressure testing facility.

The final leg of the tour took us to the beautiful city of Salzburg to visit the Water Museum. This city has a remarkable water history dating back to medieval and even roman times. It was explained that during medieval times, a convent engineer (for want of a better name) was executed for not getting the hydraulic head correctly worked out to make a fountain to work for the King. Certainly brings a new perspective to KPI management. To see pipes made of wood, with iron jointing systems was something else. Much of the technology hasn't really changed over the years, and many of the tried and trusted technologies are still being used today. Austria really opened my eyes in terms of dedication to quality, but also to the depth of understanding they have around water management. I will fondly remember my time there, and hope to return again one day. Many thanks to Hynds/Hygrade and Hawle for presenting the opportunity, and a special thanks to Manfred Hiden who looked after us so well.

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Wasserkwerk Der Stadt Wien,
water reservoir, Vienna