WellSpan
Gettysburg Hospital

Replacing cooling towers for a hospital is not a small task—especially during the hot summer months when space temperatures must be maintained throughout the building. This past summer, James CRAFT & Son was selected to do just that at WellSpan Gettysburg Hospital.

To maintain the cooling capacity required for hospital staff and patients, portable temporary cooling towers were brought in on flatbed trailers and piped into the building. Next, the process of disassembling and removing the old cooling towers and piping from the roof began. Then the area was prepared with new supports and steel framing, followed by the installation of new piping designed and built at CRAFT’s pre-fab shop facility.

One particular challenge to note was the installation of new piping from the roof down through the building to the mechanical room. Cranes were used to lift large sections of pipe high into the air, and then slowly, and precisely, lowered into place.

It was a large task indeed, but one that our team of quality CRAFTsmen were most certainly up to!
Engineering Materials for Strength

Engineering advances continue to make new inroads in the traditional field of construction. According to National Geographic, the advent of synthetic materials has given engineers ever greater leeway, changing certain guiding principles of design. If early builders sought solidarity—the wide base of the pyramids or the keystone at the top of an arch—as a way to balance a structure’s internal forces, modern engineers have instead found safety in motion.

Modern bridges are built to allow for expansion and contraction of materials as temperatures change. Modern skyscrapers rest on layers of rubber and include ball bearings under columns to allow buildings to sway and dissipate the effects of high winds and earthquakes. Newly-engineered materials—often alloys or combinations of metals manipulated at the molecular level—are now designed with strength and flexibility in mind.

“...you don’t have to be pushed. The vision pulls you.”

—Steve Jobs

Shipping Containers Are the Next BIG Thing in Student Housing

The Bjarke Ingels Group (BIG) is a Copenhagen and New York-based group of architects, designers and builders. Although they have in the past been involved in some very large projects, their most recently completed build is on a much smaller scale. The firm used recycled shipping containers to produce a sustainable floating housing prototype for Copenhagen students that it hopes to replicate elsewhere.

The Copenhagen Urban Rigger project (the student housing startup that commissioned the project) comprises nine recycled shipping containers arranged on a floating base in the city’s harbor. There’s a total of 7,319-square-feet of floorspace, split between housing, a common winter garden/courtyard, kayak landing point, bathing platform, BBQ area, and seating.

In addition, the student housing includes a communal roof terrace and a basement level with 12 storage rooms, laundry room, and technical room.

Inside, the container apartments look spacious, light-filled, and really quite attractive. The simple furnishings and use of unfinished wood contrast well with the large floor-to-ceiling windows that enable residents to gaze upon the harbor.

Aside from the environmental benefit of recycling shipping containers, the Urban Rigger project is green in other ways, too. Electricity is produced by a roof-based solar array, while a heat exchanger system uses the seawater it floats on to efficiently heat and cool the interiors.

Monthly rent works out at the equivalent of US$600 and BIG and Urban Rigger aim to refine the prototype and export it to other cities. A 24-unit project is planned for Sweden next, and there’s even the possibility that it could be adapted to serve as housing for refugees.

Random Trivia

1) What was the original name of the carbonated beverage now known as Pepsi?
   a) Kola Nut Fizz  
   b) Brad’s Drink  
   c) Pepp’s Pop  
   d) 123 Soda

2) What is Michael J. Fox’s middle name?
   a) Jonathan  
   b) Donald  
   c) Andrew  
   d) Jerome

3) A baby oyster is called a what?
   a) a pearl  
   b) a spat  
   c) a squirt  
   d) a baby oyster

4) Lachanophobia is the fear of what?
   a) being out of cellphone contact  
   b) reading poetry  
   c) eating vegetables  
   d) being in the middle of the ocean

5) The glue on a single British postage stamp contains how many calories?
   a) 12.4  
   b) 0  
   c) 21  
   d) 5.9

Answers: 1) b; 2) c; 3) b; 4) c; 5) d

—1,227 Quite Interesting Facts
The World’s Highest Bridge Opens Soon

With a height of 1,627 feet, the Sidu River Bridge in Hubei Province, China has held the title of the world’s highest bridge since 2009. But it is set to be taken down a peg by the Beipanjiang Bridge Duge (pictured above), which is being constructed 1,854 feet over the Nizhu River Canyon in Guizhou province, China. Engineers recently completed the structure and the bridge is due to open to traffic within a few months.

Newatlas.com writer, Michael Irving, reports that a bridge’s height is measured as the maximum vertical distance between the ground and the bridge deck and is not to be confused with the world’s tallest bridge, which is measured as the height of the structure itself—a title that belongs to the Millau Viaduct in France, at 1,125 feet.

The Beipanjiang Bridge Duge crosses the same valley as the Guanxing Highway Bridge, which held the title of highest bridge between 2003 and 2005, and the Shuibai Railway Bridge, which remains the world’s highest railway bridge. While its height is its main claim to fame, the new bridge is no slouch in the length department either, spanning 4,400 feet across.

No Time To Lose

Harry’s car broke down on a country road when he was in a hurry to make a train. He started walking and came to a fence around a large field. Walking around the field would take more time than he had, but he spotted a farmer milking a cow.

“Excuse me, sir,” Harry said. “Would you mind if I cut across your field? I’m trying to catch the 4:30 train.”

“Go ahead,” the farmer said affably. “If the bull’s loose, I’ll bet you can even catch the 4:05 train.”

Words That Describe Unique Emotions

Expressing emotions accurately is complicated in any language, but you might be surprised to learn that several languages other than English have very specific words for feelings you haven’t thought much about. Ponder these from The Book of Human Emotions, by Tiffany Watt Smith (Little, Brown & Co.):

- Amae (Japan): Leaning on another person’s good will.
- Awumbuk (Papua New Guinea): A feeling of emptiness after guests depart.
- Depaysement (France): The feeling of being an outsider.
- Kaukokaipuu (Finland): Feeling homesick for a place you’ve never been.
- L’appel du vide (France): The urge to do something dangerous or suicidal.
- Malu (Indonesia): Feeling inferior around people of higher status.
- Torschusspanik (Germany): The feeling that life is passing you by.
Holiday Greetings from James CRAFT & Son

At this joyous time of year, we are grateful for so many things: the opportunity to work with our team of professionals, our many business partners and our valued clients who have made our success possible.

At James CRAFT & Son, we hope you and all of your coworkers, family, and friends have a lovely holiday season filled with joy and meaning. We wish you abundance, happiness, and peace in a new year filled with hope.

Happy holidays!

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