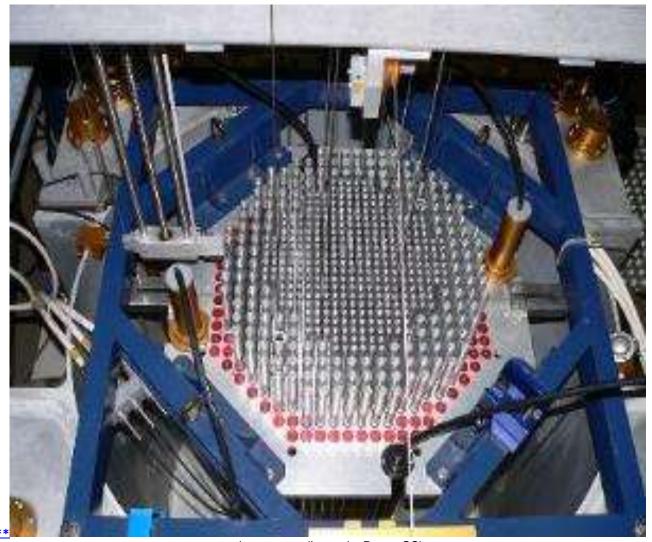
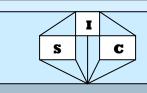


#### **Our Future Awaits**



nuclear reactor. (Image by Rama, CC)

# New Technology Marvels Photo Gallery



#### New Tech Photo Gallery

#### Welcome

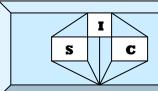
Welcome to the World of Science

### Welcome

A Resource for All Science Information

# ISC Science Information Project Is a joint project of participating Individuals and Organizations for the sole purpose of enabling rapid access to The World's Knowledge In Science, Technology and Engineering

The Project provides direct links to view science data from NASA, NOAA, DOE, EPA, DEP, DOI, NPS, USDA, ED, USGS, NIH, SI Research Centers, et al., in the governmental sector, from universities, colleges and laboratories, from technical societies around the world (AGI, AGU, GSA, NESTA, etc.), and from sceince, engineering and technical information available thru our international partners and the independent research and testing organizations.



**Title** 

# International Science Center New Technology Photo Gallery

#### New Technology Marvels Photo Gallery

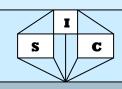
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http://www.youtube.com/watch?v=jQ-aWFYT\_SU&feature=related 4.27 m http://www.youtube.com/watch?v=gRZzIhEuEHw&feature=related Germany 4.22 m http://www.youtube.com/watch?v=mx207UXtGxg&feature=related 6.41 m

\*



# ISC New Tech Photo Gallery

#### **Welcome**

World's
First
Advanced
Floating
Gas
Refinery

35,000 Tons

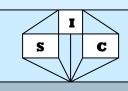
Welcome to the World of Science

#### **World's First Advance Floating Gas Refinery**



The World's First Advance Floating Gas Refinery took 7 years from concept stage to engineering completion and further 2 years for construction. This giant refinery weighs 35,000 T and 100,000 T with the carrying vessel (Blue Marlin of Dockwise BV). Refinery was constructed in Spain and presently operating for one of the gas fields in Artic Circle. Dec. 4, 2008 <a href="http://qualityjunkyard.com/2008/12/04/worlds-first-advance-floating-gas-refinery/">http://qualityjunkyard.com/2008/12/04/worlds-first-advance-floating-gas-refinery/</a>

http://culturewav.es/public\_thought/30073



ISC
New Tech
Photo
Gallery

#### **Welcome**

World's Largest Ship

Almost 1 Mile Long

25 Stories <u>High</u>

Holds 50,000 Residents

#### World's Largest Ship Planned "Freedom"



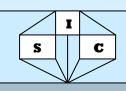
Freedom will be large enough to bring on more than 50,000 residents, 15,000 employees, 20,000 day guests. Taller than the highest buildings in most American cities and topped with a <u>runway that can handle jets</u>. Features incredible new multiple propeller concept. <u>Designed to withstand Tsunamis</u>.

Photo Credits to: <a href="http://qualityjunkyard.com/2009/03/22/city-at-sea-plans-for-the-worlds-largest-ship/">http://qualityjunkyard.com/2009/03/22/city-at-sea-plans-for-the-worlds-largest-ship/</a>

#### **Engineering The Impossible - Freedom Ship**

http://video.google.com/videoplay?docid=8962310630082930010 28.19 m Views nicely in small screen.

3,000,000 Tons max. speed 10 knots



# ISC New Tech Photo Gallery

#### **Welcome**

World's Largest <u>Ship</u>

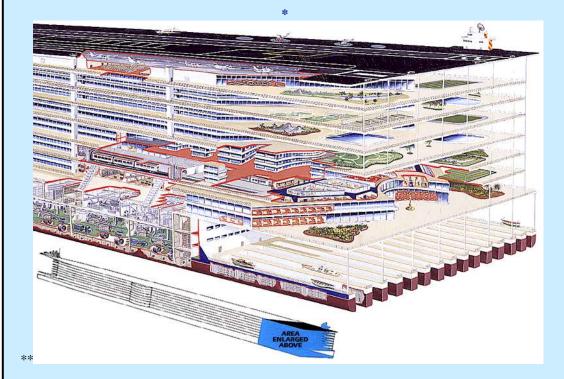
Almost 1 Mile Long

25 Stories <u>High</u>

Carries 115,000 People

Welcome to the World of **Science** 

# Superstructure World's Largest Ship - Freedom



It's dimensions are so colossal that it will have to be assembled at sea. Once it's built, Freedom will circle the earth every two years.

The ship will be capable of carrying as many as 115,000 people

Her "citizens" will leave their 15-ft. by 80-ft. ocean-view apartments and board their private jets or yachts for jaunts to shore.

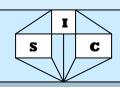
The tradional keel is missing because Freedom is constructed of 520 airtight steel cells. Each will measure 80 ft. tall. Depending upon its location, each will be 50 to 100 ft. wide and 50 to 120 ft. long.

Freedom's captain will be able to simply sketch the ship's route on a touch-screen and the \$6 billion ship would find its own way.

Credits to: http://qualityjunkyard.com/2009/03/22/city-at-sea-plans-for-the-worlds-largest-ship/

#### **Unique Concept Video**

http://www.youtube.com/watch?v=b YEWGoCcn0 0.58 m



# ISC New Tech Photo Gallery

Wärtsilä-Sulzer RTA96-C

Biggest Engine in the World

95,000 <u>HP</u>

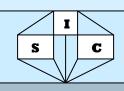
Welcome to the World of Science



Wärtsilä-Sulzer RTA96-C the biggest engine in the world 2300 Tons 76 ft. long 44 ft. wide 95.000 HP 24 knots ship speed www.youtube.com/watch?v=jXHvY-zY9hA 2.47 m

If the Seven Wonders of the World were updated for the 21 st century, the Wartsila-Sulzer RTA96-C turbocharged two-stroke diesel engine would be a contender.

http://gcaptain.com/emma-maersk-engine/



# ISC New Tech Photo Gallery

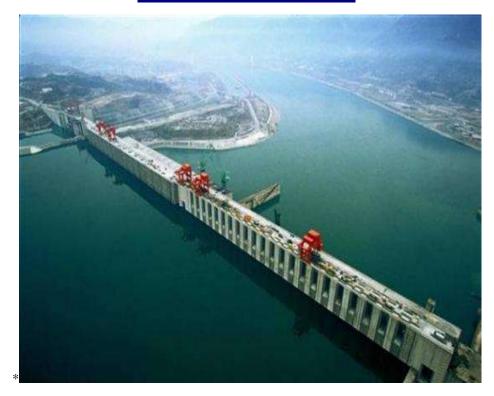
#### **Welcome**

Three Gorges <u>Dam</u>

World's Largest Hydro-Electric Power Plant

Welcome to the World of **Science** 

#### **Three Gorges Dam**

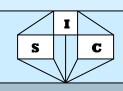


three gorges dam IbUoR 7071

Taking shape of the <u>largest hydroelectric power plant in the world</u> and that too by a long shot, the <u>Three Gorges Dam in China</u> is not just spectacular to watch but enormous in magnitude. Generating 22.5 GW of power it will supply energy amounting to 4% of China's national needs. Creating a reservoir as large as <u>Lake Superior</u>, this dam will be good as a grand marvel of modern engineering by becoming the <u>world's largest concrete structure</u>!

Credit to: <a href="http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/">http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/</a>

http://www.youtube.com/watch?v=a6ioHuJOm3I



# ISC New Tech Photo Gallery

#### <u>Welcome</u>

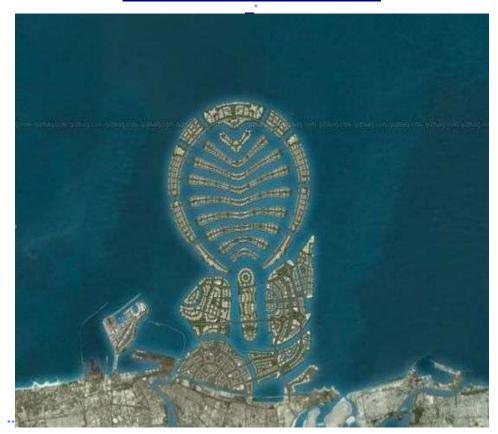
#### Palm Deira of Dubai

World's Largest Man- made <u>Island</u>

> 46.35 Million Square <u>Meters</u>

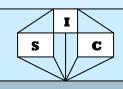
Welcome to the World of **Science** 

#### Palm Deira of Dubai



Palm Deira is the latest of <u>Dubai's trilogy of man-made islands</u>. This island will occupy all of 46.35 million square meters of land reclaimed from the <u>Persian Gulf</u> to make the <u>Palm Deira</u> the <u>largest man-made island in the entire world</u>. All set to be finished by the year 2013, the island will further alter the <u>landscape of effervescent Dubai!!</u> Credit to: <a href="http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/">http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/</a>

 $\frac{http://www.dailymotion.com/video/x1ww8d\_dubai-palm-jumeirah\_tech}{10.20~m}$ 



# ISC New Tech Photo Gallery

**Welcome** 

#### Birds Nest

World's Largest Steel Structure

2008 Olympic <u>Games</u>

Welcome to the World of **Science** 

#### **Birds Nest**

#### **2008 Olympic Games**



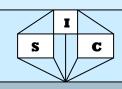
birds nest h8Pf2 7071 2008

The <u>Bird's Nest in the heart of Beijing</u> needs little introduction to anyone, and it is one structure that has now become synonymous with the <u>Olympic Games</u>.

Apart from its grand, yet unique design, the stadium is the world's largest steel structure. No other man-made structure used up as much steel as the Olympic Stadium, with its intricate yet hypnotic design. That surely sets it apart in terms of being a one of a kind venue in the sporting world.

Credit to: <a href="http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/">http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/</a>

<u>Beijing Bird's Nest Amazing Construction</u>
<a href="http://www.youtube.com/watch?v=OQWliQx5T48">http://www.youtube.com/watch?v=OQWliQx5T48</a>
5.07 m
<a href="http://www.youtube.com/watch?v=JsDY1Ha83M8">http://www.youtube.com/watch?v=JsDY1Ha83M8</a>
13.06 m



ISC
New Tech
Photo
Gallery

**Welcome** 

Burj-Al Arab <u>Hotel</u>

World's
Tallest
Operating
Hotel

Welcome to the World of **Science** 

#### **Burj-Al-Arab Hotel**



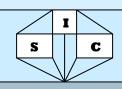
burj al arab LCgZF 7071

#### Tallest operational hotel in the world.

By now almost everyone knows about the <u>Burj-Al-Arab</u>, and if you have not heard of it or seen its picture till now, then welcome back to earth. The hotel <u>stands at a height of 321 meters</u> and is the <u>tallest operational hotel in the world</u>.

While the Rosa Tower is set to soon take away that crown, it still will not diminish the <u>unique aura of the Burj</u>, with its unique shape and its own artificial island. This is one hotel where you can live it up in a grand style! Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/

http://www.youtube.com/watch?v=cKOOFQ-OTmM 8.32 m



ISC
New Tech
Photo
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**Welcome** 

Kingda Ka Roller <u>Coaster</u>

Tallest fun ride in the world.

Welcome to the World of **Science** 

#### Kingda Ka Roller Coaster



kingdaka ride kczfx 7071

#### Tallest fun ride in the world.

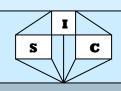
At a height of 456 feet, the Kingda Ka Roller Coaster is the tallest fun ride in the world. Located in the Six Flags Theme Park in New Jersey, the ride will take you into a different world and even before you know it, you will be plunging back towards earth at a speed of 128 mph. This heart-stopping and mind-numbing ride is not just the tallest in the world but also the most exhilarating. This is a modern marvel that is just for fun and adrenaline, and that makes it our personal favorite!!

Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/

http://www.sixflags.com/greatadventure/rides/kingdaka.aspx 0.20 sec.

What a Ride!.

4



# ISC New Tech Photo Gallery

#### **Welcome**

Viaduc de Millau <u>Bridge</u>

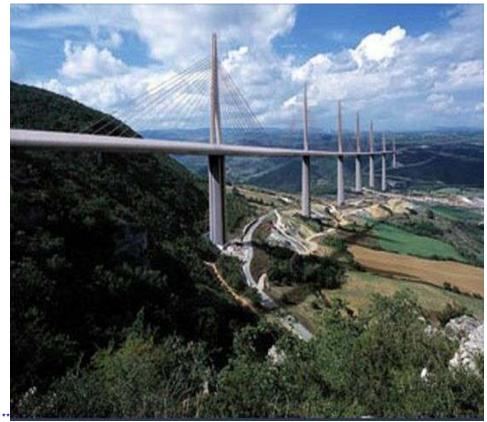
World's
Tallest
Suspension
Bridge

1,132 feet

343 meters

Welcome to the World of **Science** 

#### Viaduc de Millau Bridge

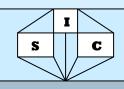


 $worlds \ tallest \ suspension \ bridge \ j5LNs \ 7071$ 

Clouds often form underneath it.

#### The Bridge above the Clouds - France

Stretching higher than the Eiffel Tower, the Viaduc de Millau Bridge is a marvel of art and architecture that caught the eye of even flamboyant French President Jacques Chirac. Stretching across southern France's Tarn River Gorge, it is 1.6 miles (2.6 kilometers) long and soaring to 1,132 feet (343 meters) at its highest point, it is the tallest bridge in the world. Built by the firm that also built the Eiffel Tower, its spectacular presence bowls over one and all! Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/http://www.jitourism.com/the-highest-and-most-beautiful-bridge-in-the-world-le-viaduc-de-millau-of-bridge-with-the-construction-of-the-most-amazing/



#### ISC New Tech Photo Gallery

**Welcome** 

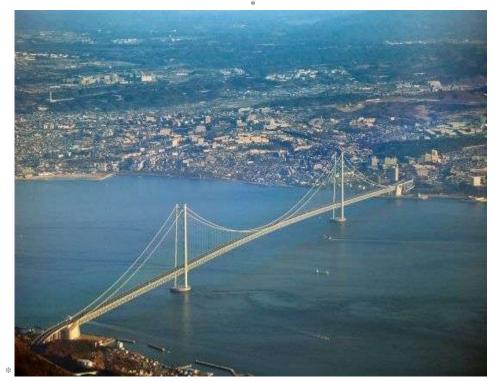
#### Akashi Kaikyo Bridge

Longest
Suspension
Bridge
in the
World.

4 Miles

Welcome to the World of Science

#### Kashi Kaikyo Suspension Bridge Japan

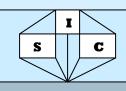


akashi bridge longest suspension bridge UMErX 7071

#### Longest suspension bridge in the world.

The Akashi Kaikyo Suspension Bridge is the <u>longest suspension bridge in the world</u> and is a spectacular visual delight. It apparently took <u>2 million workers 10 years</u> to construct the bridge, <u>181,000 tons of steel</u> and <u>1.4 million cubic meters of concrete.</u> The <u>four-mile bridge</u> links the <u>island of Awaji</u> and the mainland <u>city of Kobe</u>. This is probably one man-made marvel that even the Japanese are proud about and look at in awe! Credit to: <a href="http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/">http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/</a>

<u>http://natgeotv.com/ca/big-bigger-biggest/videos/the-akashi-kaikyo-bridge</u> 1.58 m Incredible Nat Geo <u>bridge comparison around the world.</u>



ISC
New Tech
Photo
Gallery

**Welcome** 

Hangzhou Bay Bridge

Road Bridge in the World.

**36 Km** 

Welcome to the World of Science

#### Hangzhou Bay Bridge China



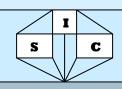
largest road bridge Af5SZ 7071

#### Longest road bridge in the world.

There is something about bridges that we just cannot get enough of. It is just the scientific knowledge and the engineering skill involved in building them that makes them stand out as <u>technical pieces of art</u>. The Hangzhou Bay Bridge is the <u>longest road bridge in the world</u> and another Chinese marvel that made it to our list. <u>The £840 million Bridge</u>, measuring <u>36km</u>, spans Hangzhou Bay to link China's financial hub and the port city of Ningbo to the south. The fact that it is <u>anchored in waters that are 60 meters deep in places</u> and yet is so solid and spectacular makes it a feat of accomplishment indeed!

Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/

http://www.bbc.co.uk/news/world-asia-pacific-13976281 1.03 m



ISC New Tech Photo Gallery

**Welcome** 

CERN LHC.

Largest
Particle
Accelertor
in the
World.

Welcome to the World of Science

#### **CERN LHC**

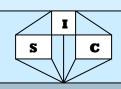


hc idbYQ 7071

<u>CERN's Large Hadron Collider</u> gives us the ability to change our understanding of the world around us and give us the reasons of our own existence, <u>CERN's LHC</u> is for now the most spectacular and important technological marvel modern science has created. The <u>particle accelerator</u> is now in operation, and the <u>large construction 17 miles in circumference</u> will surely make the coming two decades the most exciting for modern physicists. It's truly amazing creation that could answer the questions about the creation and existence of this universe itself!

Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/

http://www.youtube.com/watch?v=s9XotvwgnaY 5.43 m



ISC
New Tech
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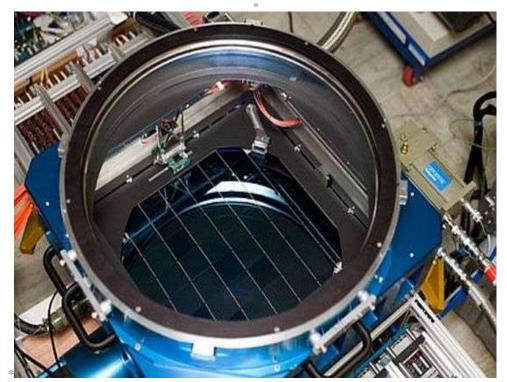
**Welcome** 

PAN
STARRS
-1

Largest
Digital
Camera
in the
World.

Welcome to the World of Science

#### Pan STARRS-1



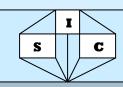
Worlds largest digital camera mudCH 7071

Built at Manoa's Institute for Astronomy in Honolulu at the University of Hawaii, the largest digital camera has been installed on the Pan STARRS-1 telescope on Haleskala, Maui. This digital wonder along with the telescope will form one of the most powerful observatories on the planet and will monitor the cosmos constantly. Credit to: http://www.gizmowatch.com/entry/20-marvels-of-modern-engineering/

#### Supermassive Black Hole Caught Shredding a Star

Caught by NASA's Galaxy Evolution Explorer and Pan STARRS-1

http://www.nasa.gov/mission\_pages/galex/galex20120502.html



#### New Tech. <u>Matrix</u>

# Auto Factory of the Future

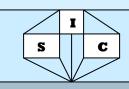
Welcome to the World of Science

# Factories of the Future VW Factory in Downtown Dresden



You may assist in building your own car in this factory!

http://www.youtube.com/embed/nd5WGLWNllA?rel=0



#### New Tech. <u>Matrix</u>

# Inflatable Bridges

#### Welcome to the World of Science

#### **Inflatable Bridges**

**University of Maine and Maine DOT** 











#### Replacing Our Nation's Decaying Bridge Infrastructure

**Step 1: UNPACK IT** 

Workers unroll a 32-foot-long croon fiber tube, inflate it with an air pump, and set it on a frame that bends it into an arch.

Step 2: SET UP

Builders set each 70-pound arch into place by hand and then screw corrugated sheets of fiber-reinforced polymer resin across the top of the arches. These sheets transfer the weight of the cars and trucks to the arches.

**Step 3: FILL the Arches** Workers fill the hole in the top of the arches with concrete.

Step 4: PAVE IT Several days later, the bridge is covered with sand and paved. The entire process, including the demolition of the old bridge, takes just 11 working days. <a href="http://www.compositesworld.com/articles/bridge-cost-cut-with-inflatable-arches">http://www.compositesworld.com/articles/bridge-cost-cut-with-inflatable-arches</a> <a href="http://www2.umaine.edu/aewc/images/stories/web\_uploads/pop\_sci.pdf">http://www2.umaine.edu/aewc/images/stories/web\_uploads/pop\_sci.pdf</a>

#### Bridge-in-a-Backpack



**AEWC** 

**Advanced Structures & Composite Center** 

http://www.nesmea.uconn.edu/pdf/09\_frp\_arches-dagher.pdf

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