

## .. Introduce HDEC



中国电建  
POWERCHINA

华东勘测设计研究院有限公司

HUADONG ENGINEERING CORPORATION LIMITED

# 1 Introduce HDEC

POWERCHINA HUADONG ENGINEERING CORPORATION LIMITED ( HDEC) is an affiliate to PowerChina, a World Top 500. It is a state-certified Class-A provider of comprehensive engineering services. The Large Dam Safety Supervision Center of the National Energy Administration is also hosted by HDEC.

中国电建华东勘测设计研究院有限公司（简称“华东院”）国家大型综合性甲级勘测设计研究单位，隶属于世界500强企业中国电力建设集团。国家能源局直属事业单位大坝安全监察中心也设在华东院。



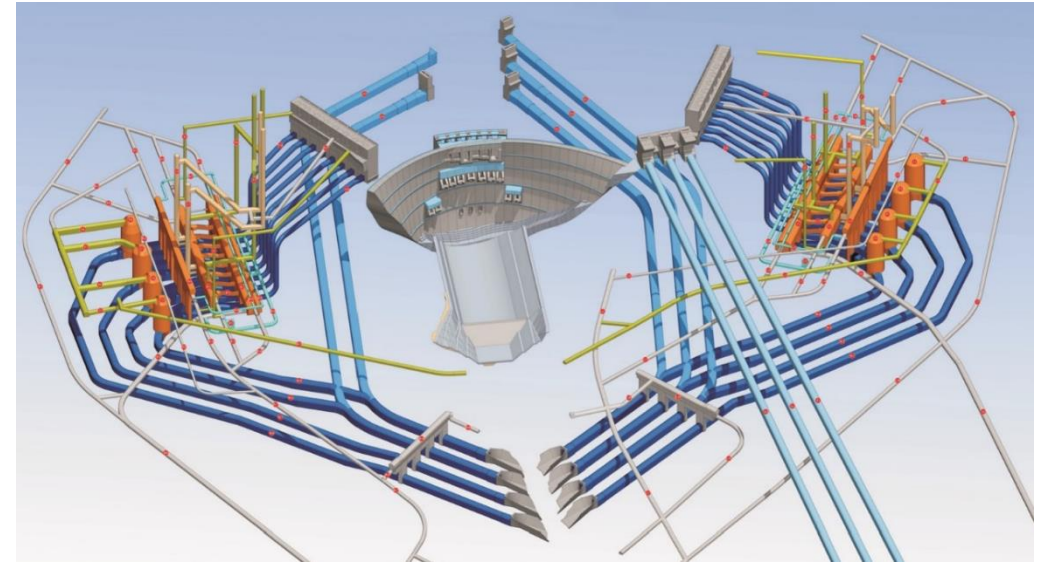
## 2 typical Projects - Baihetan Hydropower Station



Let's introduce some typical projects of HDEC

**Baihetan Hydropower Station**, which located downstream of the Jinsha river, is the world's second largest hydropower station (after the three gorges project). huge engineering and comprehensive technical difficulties rarely seen in the engineering realm, and involve more than ten scientific categories and numerous majors.

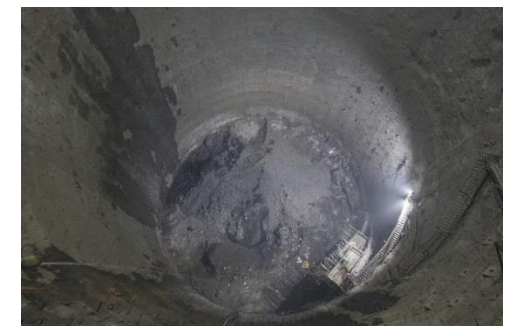
Baihetan has the world's largest underground caverns complex for hydropower works, including main buildings like water diversion tunnels, power house, surge chambers, and drainage tunnels., with a total length of 250km.



Underground Caverns of Baihetan



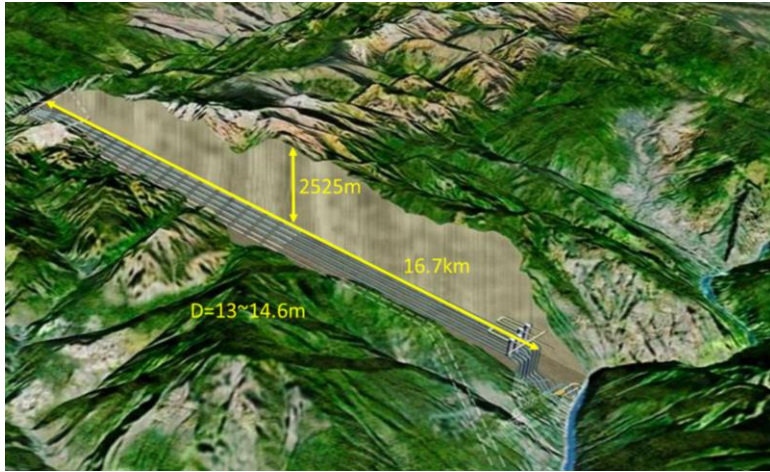
Power House  
438×34×88 m(L×W×H)



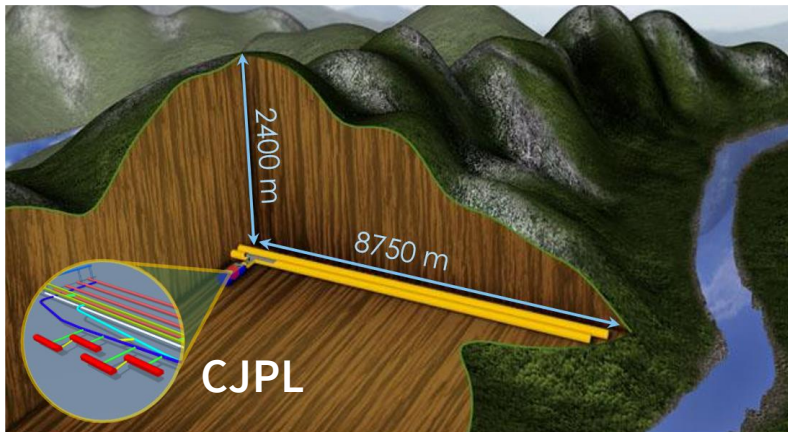
Tailrace Surge Chamber  
Φ48.m , H100m

# 3 typical Projects – JinPing II Hydropower Station & China Jin-Ping Underground Laboratory

## JinPing II Headrace Tunnels & Traffic Tunnels



## CJPL( China Jin-Ping underground Laboratory)



**Jinping II** is completed with 4 headrace tunnels and 2 traffic tunnels, 17.6km each, with total length is about 105km & max vertical **depth of 2,500m**.

**CJPL (China Jin-Ping underground Laboratory)**, is located in JinPing II Hydropower Station , 2,400 meters beneath the rock overburden. As one of the deepest underground labs in the world, where Chinese researchers hope to play a leading role in the search for dark matter .