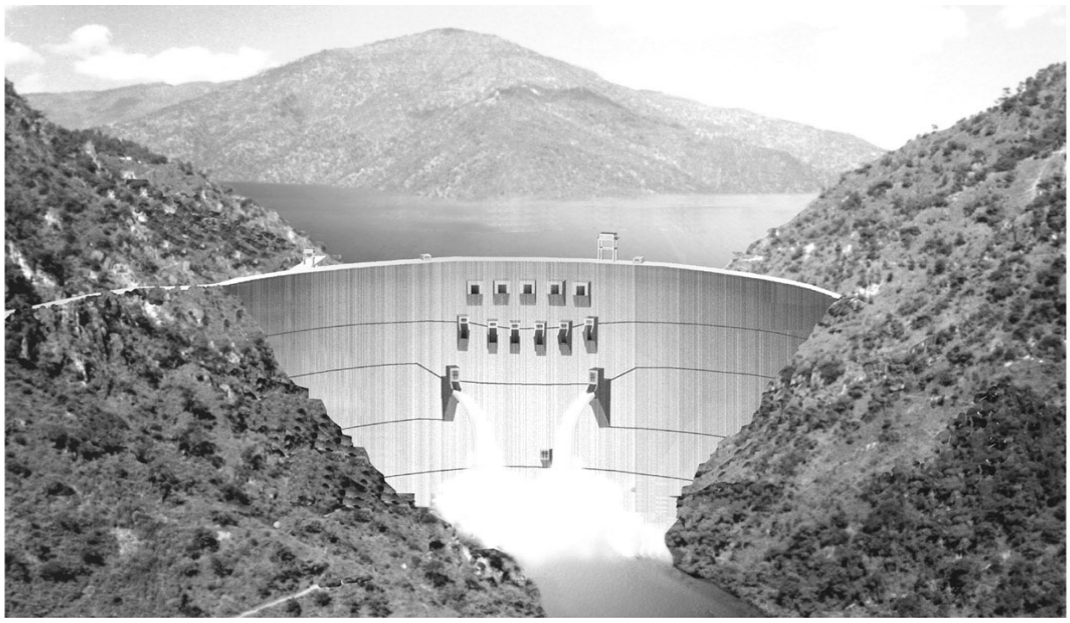
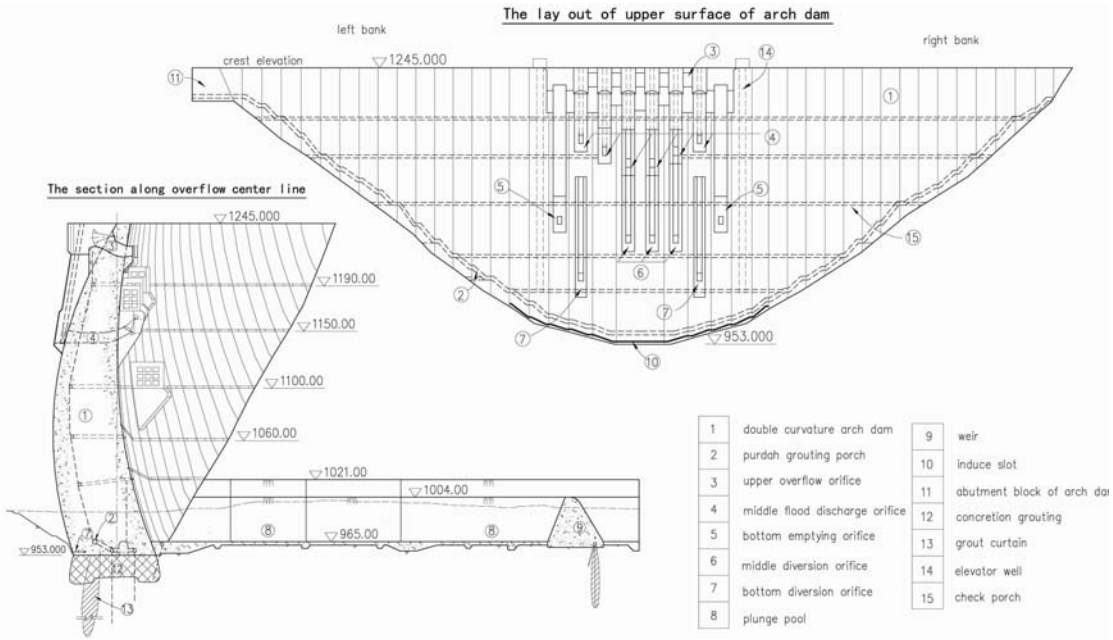
XIAOWAN

BIRD VIEW





XIAOWAN Hydropower Project is composed of a double-curvature arch dam (292 m high and 902 m long in crest), an underground powerhouse on the right bank, and one spillway tunnel on the left bank. The flood discharge structures in dam include five surface spillways, six middle outlets, and two bottom outlets. The maximum flood discharge is 20709 m^3/s. The underground powerhouse is located on the right bank with six turbines; the single installed capacity is 700 MW and the total installed capacity is 4200 MW.

Description	Amount	Description	Amount
Catchment area at dam site	113300 km^2	Spillway tunnel (W × H)	13m×13.5m
Mean annual runoff	38.2×10^9 m^3	Intake elevation of tunnel	1200.00m
Annual average discharge	1210 m^3/s	Annual average energy output	18990 GWh
Total capacity of reservoir	15.043×10^9 m^3	Annual generating hours	4520h
Capacity at dead W.L. of reservoir	4.661×10^9 m^3	Dam type	Concrete double-curvature arch dam
Check flood W.L.	1242.51m	Maximum height	292.00 m
Design flood W.L.	1238.30 m	Dam crest length	902.00 m
Normal W.L.	1240.00 m	Dam crest elevation	1245.00 m
Dead W.L.	1166.00 m	Foundation elevation	953.00 m
Check reservoir inflow/discharge runoff	23600/20709 m^3/s	Intake structure	146×32×105 m
Installed capacity	4200 MW	Earthquake basic intensity /design peak acceleration	Ⅷ/0.308g
Rated head	216.0 m	Penstock diameter	9.0 m（8.5/6.5）
Firm output	1778MW	Dimension of powerhouse (L×W×H)	298.1×30.6×79.18m （underground）