DERİNER DAM
Deriner dam is named after İbrahim DERİNER, who died while serving as the Chief Engineer of its research team.
Deriner Dam is a concrete double-curved arch dam on the Çoruh River 5 km east of Artvin, Turkey.
It will have a 670 MW power house and is the tallest dam in Turkey.
Construction on the dam began in 1998, the reservoir began to fill in February 2012 and the power station was completed by February, 2013.
The dam is being implemented by Turkey’s State Hydraulic Works and constructed by a consortium of Turkish, Russian and Swiss companies.
The main purpose of the dam is hydroelectric power production and additionally flood control.
The deriner dam is a 249 m high, 720 long double-curved arch dam
It has a base width of 60 m and a crest width at the top cantilever of 1 m
<table>
<thead>
<tr>
<th>Baraj</th>
<th>Nehir</th>
<th>Talvegenden yükseklik (m)</th>
<th>Amacı*</th>
<th>Tipi**</th>
<th>Tamamlanma yılı</th>
<th>Gövde hacmi (x1000 m³)</th>
<th>Rezervuar kapasitesi (hm³)</th>
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<tr>
<td>Ermenek</td>
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<td>E</td>
<td></td>
<td>1990</td>
<td>83</td>
<td>91.9</td>
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* E: Enerji  S: Sulama  TK: Taşkın Kontrol
** BK: Beton Kemer  BA: Beton ağırlık  KD: Kaya Dolgu
*** u/c: İnşa Halinde
A total of 3,400,000 m$^3$ of concrete forms the dam’s body which also contains its orifice spillway.
This spillway consists of (82.8 m) x (5.6 m) flap gates that can discharge a maximum of 7,000 m$^3$/s of water
The dam’s other spillway consists of two tunnels, each on opposing banks behind the dam.
The right tunnel is 459 m long and the left is 472 m long. Each tunnel is controlled by a 6.5 m high, 24 m long flap gate.
Each of the these tunnels have the same capacity as both combined can discharge up to 2,250 m$^3$/s of water.
DEEP UNDERGROUND POWER DAM NUMBER 1
1 UNIT is PETLINE PHASE
Of the dam, hydropower produced in our country will meet 6%. 1.4 billion U.S. dollars, which cost 1 billion 970 million m$^3$ of water will be stored in the dam.
370 km from the waters rapidly colliding bottom weir
750 Thousand People to supply the needs of the electricity.
Deep Dam and HEPP Mardin, Trabzon, Eskisehir, or one of our Malatya years has the capacity to supply all the electricity needs
• It will be 2118 gwh of annual energy production of deriner dam. It will pay for itself in about 7 years.

• Deriner dam began water retention in February 2012.

• Deriner dam and hydroelectric power plan has reached 1.4 billion liras.
Spillway tunnel of the power and performance of aerators, 1/20 scalemolls model was examined throught.
In the experiments, tunneled through the spillway flow velocity was found to be very high.
This also increases the risk of cavitation in rough and discontinuous surface.
Therefore aerators are arranged on spillways.
This concrete double-curved arch dam which has a type, a maximum flow rate of 10100 m3/s spillway will release two types of systems are available.
These systems overflow spillways and sluice systems.
The spillway system is disposed symmetrically with respect to the axis of the dam.
This system has been in two tunnels with steep slopes.
- Kübra DEMİR – 259048
- Ülkü CAN – 258028
- Mustafa Caner ILIKÇAY - 257968