## Aobaohashi Bridge



- Client Project Site Completion Year Bridge Length Bridge Type Width Arch Span Arch Rise Arch Rib Construction Method
- Miyazaki Prefecture
  Takachiho Town, Miyazaki Prefecture
  1996
  270m
  Concrete Arch Bridge
  10.75m
  180m
  27.5m
  3-4m height
  Truss construction method
  Cable stay rigid frame method
  Journal of Prestressed Concrete No.3 1997

References

The bridge above is a concrete arch bridge built in a deep valley located in Takachiho Gorge, Miyazaki Prefecture. The arch abutment position is chosen by taking the topography of the valley into account. Due to the terrain, the span rise ratio is 6.5:1, which is unusually low. The bridge girder is a two plate girder type, and has a Lohse type structure to match the box cross section of the arch rib. The arch rib was constructed by using a large formwork traveller with a capacity of 1200 t.m and with maximum construction length up to 9m. The arch rib was constructed while forming a truss by using a combination of vertical member and stay cable. Due to the low arch rise, it was difficult to form a truss in the central part of the arch span. To solve this issue, steel pipes and temporary stay cables were installed on the central closure section prior to the concreting process.





Construction by Truss Method



Steel Web Assembly by Stay Cable Method



Steel Pipe Joint Section





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