

HEAVY INDUSTRIES AND PROJECT ENGINEERING SERVICES

Established 1920

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METALNA MARIBOR, P.O.B.: 103

BRANCH OFFICES: Beograd, Rijeka, Sarajevo, Skopje

DIVISIONS:

PRODUCTION PROGRAMME:

Heavy Equipment Plant-Maribor

Gates and hoists for hydraulic projects Penstocks Materials handling equipment

Industrial equipment Steel hatch covers

Heavy Equipment Erection Heavy equipment erection Division-Maribor

Light Structures Plant-Krmeli

Steel building construction Steel bridges

Plant - Senovo

Construction Machinery Building cranes and hoists

Plant - Maribor

Agricultural Machinery Farm sprayers and tractor attachments

Research and development institute. specialised design offices, after-sales service

- 1. THE DJERDAP (IRON GATE) HYDROELECTRIC POWER PLANT on the Danube wasbuilt jointly by Rumania and Yugoslavia. METALNA manufactured and erected 9000 tonnes of water control equipment for the dam and navigation lock. Main part of equipment delivered: three sets of four gates each, size: 27 x 2,6 x 4.1 m, weight: 65 75 tonnes each; seven spillway gates of 25 x 158 m and 300 tonnes each. Other equipment: embedded metal and guides for gates, trashrack cleaning machine, linings and embedded parts for navigation lock.
- 2. Handling 65-tonne stop log for DJERDAP (IRON GATE) Hydel Plant
- 3. The largest dam under construction in the world TARBELA DAM on the Indus in West Pakistan. By the end of 1974 Metalna will have delivered 600 rail-wagon loads worth 7,000.000 dollars for that project. Twenty-eight 10 x 6 m wheel gates, six 14 x 5.5 m gates and sixteen 15 x 19 m radial gates will be installed. Each radial crest gate weighs 180 tonnes, and its hoist 40 tonnes. The gear reducers weigh 5.5 tonnes each, and each drum with gear weighs 11 tonnes. Tarbela Dam is the 87th power generating project fitted with METALNA's equipment.

 Photo: BUTTRESS DAM with 28 wheel gates.
- 4. Trial shop erection of 180-tonne radial crest gate of 15 x 20 m size for auxiliary spillway, TARBELA DAM PROJECT
- 5. Partial view of BUTTRESS DAM
 - 6. Erecting one of the eighteen 47-tonne gates for the buttress dam of Tarbela Dam Project
 - 7. Tarbela Dam Project, West Pakistan
 - 8. Trial shop erection of 180-tonne radial crest gate for TARBELA DAM PROJECT
 - 9. In the manufacture and trial erection of heavy hydraulic gates METALMA uses overhead travelling, portal and mobile cranes of relevant capacities
- 10. Two 60-tonne electromechanical hoists of 200-tonne hoisting capacity each for 180-tonne radial crest gate for spillway for TARBELA DAM PROJECT
- 11. MATATILA DAM in India the 600-metre long dam is provided with 23 gates of 18 x 7 m size
- 12. Manufacture of gates for Matatila Dam in India
- 13. DANUBE-TISA-DANUBE CANAL mitre gate of Kucura navigation lock
- 14. Stop log of 12 x 1.3 m size for DANUBE-TISA-DANUBE CANAL
- 15. 12 x 12 m mitre gate for navigation lock at Novi Sad, DANUBE-TISA-DANUBE CAMAL
- 16. Wheeled stop-logs- for KOKIN BROD Hydel Plant

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- 17. Radial gate for JAJCE I Hydel Plant
- 18. Stop log for 18-metre spillway bay of ZVORNIK Hydel Plant
- 19. Loading and sealing test of draft tube gate for AWASH Hydel Plant, Ethiopia
- 20. 2700 mm dia ring-follower gate for BAJINA BAŠTA Hydel Plant
- 21. 18 x 8 m drum gate for one of the spillway bays in ZVORNIK DAM
- 22. Radial gate with flap for Sumečica dam of SENJ Hydel Plant
- 23. Roller gates for GUJRANWALA Hydel Plant in Pakistan
- 24. Radial gate for MAHABAD Hydel Plant
- 25. Non-return flap valves preventing underground drainage for PERUCICA Hydel Plant
- 26. OZBALT Hydel Plant power and manually operated gate hoist with sprocket chain, 2 x 100-tonne hoisting capacity
- 27. Fixed-dispersion cone valve (HOWELL BUNGER type) for Modrac Dam
- 28. MAHABAD Hydel Plant in Iran installing bottom outlet regulating gate
- 29. SPLIT Hydel Plant Tee of 5000 mm dia penstock
- 30. VUHRED Hydel Plant Electrically operated 12.5 tonne lifting capacity trash rack cleaning machine
- 31. MAHABAD Hydel Plant in Iran 3200/2 x 1600 mm dia penstock
- 32. PERUČICA Hydel Plant penstock 2064 m long, 2200/2100 mm dia
- 33. TIKVEŠ Hydel Plant 4700 mm dia manifold with 2500 mm bifurcates
- 34. Bottom, outlet transition piece for MAHABAD Hydel Plant
- 35. Overhead travelling cranes of 150/10-tonne capacity in SREDHJA DRAVA I Hydroelectric Power House
- 36. 75-tonne capacity gantry crane in HIRAKUD DAM, India
- 37. VUZENICA Hydel Plant on Drava river 2 x 70-tonne capacity crane

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