**Zeitschrift:** The Swiss observer: the journal of the Federation of Swiss Societies in

the UK

**Herausgeber:** Federation of Swiss Societies in the United Kingdom

**Band:** - (1964)

**Heft:** 1453

**Artikel:** Switzerland builds her first Large-Scale Thermal Power Station

Autor: [s.n.]

**DOI:** https://doi.org/10.5169/seals-692360

## Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Siehe Rechtliche Hinweise.

## **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. <u>Voir Informations légales.</u>

## Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. See Legal notice.

**Download PDF:** 15.05.2025

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

## SWITZERLAND BUILDS HER FIRST LARGE-SCALE THERMAL POWER STATION

Hitherto Switzerland's reserves of water power have provided the "fuel" from which the country's electricity supplies are generated. In view of the expected increase in consumption, however, towards the end of the 1960's the hydro stations alone will not be able to meet demands during the winter months. In any case the harnessing of Swiss hydro-electric power resources will be completed in ten or at the most fifteen years. Thus the thermal generation of electricity will become a necessity within the fore-seeable future. At the present time there are two possibilities open: either conventional thermal stations or nuclear power stations.

In the long run it will be the nuclear power plant that will have to supplement the hydro stations in Switzerland. The nuclear fuel needed for operation incurs only low transport overheads, and several years' supply can be stored simply and cheaply. But for the time being the production costs of nuclear energy are too high to be able to compete with power generated in conventional thermal or hydraulic stations. Moreover if the reactor is to operate economically, its unit rating must not be too small, and should amount to a few hundred MW at least. In addition its hours of duty must not fall below a certain annual minimum. Any attempt to meet these demands in Switzerland at present could only be made at the expense of the rational exploitation of the available hydro-electric capacity.

Meanwhile the impending supply deficit must be filled, since the rise in Swiss power demands averaged 5.8% over the last few years, which is equivalent to a doubling of consumption in twelve years or so. The best solution seems to lie in the harnessing of the remaining water resources, supplemented by the construction of a few thermal stations of conventional type. The Centrale Thermique de Vouvry S.A. (CTV) of Lausanne is already building a thermal power station in the region where the River Rhône flows into the Lake of Geneva. Participating in this concern are the Energie de l'Ouest-Suisse S.A., Raffinerie du Rhône S.A., the Swiss Federal Railways, Schweizerische Aluminium AG (Alusuisse), Lonza AG and the Société Romande d'Electricité.

This concern recently placed an order with Sulzer Brothers for a Monotube Steam Generator, which will have a maximum steam output of 460 tonnes/h, a service pressure of 190 atm.g. and a temperature of 540°C, with reheating also to 540°C. The fuel oil will be supplied by the neighbouring Raffinerie du Rhône S.A. at Collombey. The turbo-set will have an installed capacity of 150 MW, and it will generate some 400 GWh during about 3,000 hours of service annually. The price per kilowatt-hour will be around 4 to 4.5 Swiss centimes. In the not-too-distant future a second block of similar capacity will be installed.

The problem of air pollution from the boiler exhaust gases was examined very thoroughly. Because it was imperative that any such pollution be avoided in the Rhône plain, which lies at an altitude of some 1,250 ft. above sea level, an underground chimney in the form of a tunnel 4,750 ft. long was considered first, leading the flue gases out to the surface through the mountain-side. In the end, however, it proved more practical to site the whole station at an altitude of 2,700 ft. above sea level.

(By courtesy of Sulzer Technical Review 3/1963.)

£72
FOR GOOD!



The fastest-selling, hardest-working 5 cwt hoist in the world-why?

Because the name is Acrow Demag. Because exacting engineers and wise buyers the world over recognise the technical superiority behind that name. They know that an Acrow Demag hoist will reduce handling costs for longer, more efficiently and more reliably than any other. This is why it sells faster than any other. Install a Demag now and see...! An Acrow Demag hoist can be mounted static, or mobile on rails, and electric travelling motors can be fitted if required. Mountings can be adapted or ingeniously designed to meet almost any Jitting need.

ACROW DEMAG TYPE P

The latest hoists from Acrow, ranging from 5 cwt to 10 tons, and providing the high speed answer to heavier handling problems.

ACROW DEMAG BRIDGE CRANES Of single or double construction, designed and talor made by Acrow at

outstandingly low cost

ACROW (ENGINEERS) LTD
Demag Division South Wharf
London W2 Tel: AMBassador 3456

BRANCHES: BELFAST - BIRMINGHAM - BRISTOL - CHESTERFIELD - GLASCOW - LITDS LIVERPOOL-MANCHESTER - NEWCASTLE'- PENARTH - SAFFRON WALDEN - SOUTHAMPTON