

T.O.M. 139

INDEX MICROFILM REEL 139
(ORIGINAL DESIGNATION SF-6)

GENERAL SUBJECT

- i. BROWN, BOVERI AND CO., LTD., BADEN, SWITZERLAND
Papers on gas turbines, Velox boilers and heat pumps.
- II. ESCHER WYSS ENGINEERING WORKS, LTD., ZURICH, SWITZERLAND.
Papers on gas turbines and heat pumps.
- III. SULZER BROS., LTD., WINTERTHUR, SWITZERLAND.
Papers on heat engine research, monotube high-pressure boilers, heat pumps, and radiation heating.

Source of Documents: CIOs, Bryanston Square,
London, England

Bag No. 1481

Filmed by: JIOA

Date: October 12, 1945

I.

1. "The Combustion Gas Turbine: Its History, Development, and Prospects", by Adolf Meyer (1939) 27 pp.
2. "Now Gas Turbines that Work", by S. A. Tucker (1939), 4 pp.
3. "Combustion Turbines Brown Boveri" (1939) 4 pp. 1558 E - II.9.
4. "Load Tests of a Combustion Gas-Turbine Built by etc." by A. Stodola (1940) 5 pp. 1584 E - II.9.
5. "New Ways and Means of Compressing and Heating Blast Air in Ironworks" by W. G. Foack (1944) 7 pp. 1787E - IX. 12.
6. "Der heutige stand der Verbrannunga-turbine und ihre wirtschaftlichen Aussichten" "Today's Posisiton of the Combustion Turbine and Its Economic Outlook", by H. Pfenninger (1944) 11 pp.
7. "Present-Day Possibilities of the Combustion Turbine", by H. Pfenninger (1944) 8 pp. 1825 E - II.9.
8. "The First Gas-Turbine Locomotive" (1942) 12 pp. 1668 E - V.4.
9. "The Gas-Turbine Locomotive" Specifications (July 1945). 14 pp.
10. "The Rosenkrantzgate steam power station of the Oslo Electricity Works, etc." (1937) 26 pp. 1474 E - II.1.
11. "The Burning of Gas Under Pressure", by J. G. Contant. (1938) 2 pp.
12. "A Modern Stand-by and Peak-Load Steam Power Station Built as a Bomb-Proof Plant", by W. Roth (1939) 11 pp.
13. "The Brown Boveri Velox Steam Generator for Land Purposes" (1940) 21 pp. 1533 E - II.8.
14. "The Velox Power Plant at the San Lorenzo Refinery of the Argentine State Oil Fields", by H. S. Kvistendahl (1940) 7 pp.

15. "Ein automatisch anfahrendes Velox - Kraftwerk von 10,000 KW Leistung als Schnellreserve".
"An Automatic Process Velox Power Plant
for 10,000 KW Output as Quick Reserve"
(1943) 16 pp. 1706 D - II.8.
16. "Anwendungen des Aufladeverfahrens nach dem
Velox - Prinzip".
"Application of the Supercharging Process
by the Velox Principle," by W. G. Noack
(1943) 9 pp.
17. "The Velox Boilers at the Evans Bay Power
Station, Wellington, New Zealand," by E. S.
Mauder.
18. "Actual Problems in the Production of Power
in Thermal Power Stations," by Ad. Baumann/
W. Broggi (1939) 8 pp. 1553 E - II.1.

II.

1. "A Century of Turbines" pp. 1 to 4;
"Aerodynamic turbine with closed circuit" by
J. Ackeret and C. Keller, pp. 5 to 19; "The
Aerodynamic Turbine Compared with Steam - and
Gas - Turbines" by C. Keller, pp. 20 to 41
Escher Wyss News Vol. XV/XVI, 1943/44.
2. "Research on Turbo-Machinery."
 - a. Cover and index page.
 - b. "An Aerodynamic Heat-Power Plant," by
J. Ackeret and C. Keller, pp. 82 to 85.
 - c. "Publications of research work for Escher
Wyss Designs." Inside back cover. 2 pp.
3. "Die Aerodynamische Turbine im Hüttenwerk."
"The Aerodynamic Turbine in Metallurgical
Plants," by C. Keller and R. Ruegg. (1943)
No. 23012 (d) 7 pp.
4. "Compte - rendu des essais de la turbine
aerodynamique Escher Wyss AK."
"Account of Trials of the Aerodynamic
Turbine Escher Wyss AK," by Quiby (1945)
29 pp. No. 23021.

5. "Performance tests of 2000 KW Closed - Cycle Unit," Power, Aug. 1945 2 pp.
6. "Escher Wyss Refrigerating Machines - Heat Pumps."
 - a. Cover and index page.
 - b. Heat Pumps, p. 31.
 - c. Heating systems with heat pumps, by A. Ostertag, pp. 32-46.
7. "Escher Wyss Kälte - Wärme." cold - Heat.
 - a. Cover and index page.
 - b. "Die Wärmepumpe in der Heiztechnik." "Heat Pumps in Heating Technique," by A. Ostertag and A. Kornfehl, pp. 25-40.
8. "Die Aerodynamische Turbine 'Escher Wyss AK' - Anlage." The "Escher Wyss AK" aerodynamic turbine power plant, by C. Keller (1945) pp. 81-91. The article includes half-page abstracts in French and English. (In the April-June issue, 1945, of "Electrical Service".)

III.

1. "The Supercharging of Two-Stroke Diesel Engines." (1941) 24 pp.
2. "New Sulzer Designs in the Domain of the Heat Engine." Typed memo., 6 pp.
3. "The Sulzer Single-Tube Steam Generator," by A. Stodola (1933) 19 pp. 5415e.
4. "High Pressure Primary Plant with Sulzer Monotube Steam Generator for the Power Station of the British Colliery." Photostat of typed memo. with drawings. (1936) 5 pp.
5. "The Monotube Boiler in S. S. 'Kertosono'." (1936) 7 pp. 5822e.
6. "The Sulzer Monotube Steam Generator". Mimeographed memo. and drawing. (1937) 9 pp.

7. "100-Atm. Steam Power Plant with Sulzer Monotube Steam Generator and Reciprocating Steam Engines." (1938) 9 pp. No. 5873e.
8. "High-Pressure Steam Plant with Sulzer Monotube Steam Generators in a Cardboard Factory in England." 4 pp. 5921e.
9. "Electrical Service - International Review for Electricity Utilization." April-June issue, 1945.
 - a. Cover page.
 - b. Contents page.

The following articles are in German, followed by half-page abstracts in French and English:

- c. "Wasserkraft und Kohle."
"Water power and Coal." pp. 1-2.
- d. "Das Energieproblem im Lichte neuzeitlicher Forschung."
"Energy as Seen by Modern Science."
by F. Zank. pp. 5-8.
- e. "Der Einsatz von Wasserkraft und Kohle in die Bedarfsdeckung Betrachtungen zur schweizerischen Energiewirtschaftspolitik."
"Meeting the Demand for Energy by means of Water Power and Coal." By B. Bauer. pp. 9-12, 59.
- f. "Planung von Kessel - und Speicheranlagen für industrielle Wärmezentralen."
"Planning Boiler and accumulator Plants for Industrial Power Stations with Special Reference to Back-Pressure Energy Production." By J. Gastpar pp. 42-59.
- g. "Heizkraftanlagen mit Gegendruck-Kolbendampfmaschinen."
"Combined Heating and Power Plants with Back-Pressure Piston Type Steam Engines," by H. Nyffenegger. pp. 60-68, 80, 92.

10. "Carried Out High Pressure Steam Plants." An assembly of photographs and drawings, showing sectional views, plant arrangements, and details of the various features. 47 pp.
11. No. 898129 - A diagram of a high-pressure steam plant with reheater, similar to Fig. 32 (p. 52) of Item 9 (g) above.
12.
 - a. Sulzer Hochdruckanlagen mit Drumlosen Einrochdampfkessel und Selbsttatiger Regelung. 16 pp. No. 5417 - 1.
 - b. Typed English translation of the above, by Sulzer Bros. "High Pressure Plant with Drumless Monotube Steam Generator and Automatic Regulation." No. 5417e-1. 9 pp.
13. "Sulzer High-Pressure Steam Plant with Monotube Steam Generator." No. 5898c. 4 pp.
14. "Measurement of the salt-content in the boiler feed-water of industrial monotube steam generator plants." 6 pp. No. 308e.
15. "High pressure Installations Equipped with Sulzer Monotube Steam Boilers." 3 page typed memo. dated 27 September 1945.
16. "List of Sulzer Mono-Tube Steam Generators in Service or under Construction." 4 page mimeographed list obtained 27 September 1945, but undated.
17. "Technical Review Sulzer", No. 2, 1945.
 - a. Front cover.
 - b. "The Oilfree Reciprocating Compressor as a heat Pump." By O. Walti. pp. 6-10.
 - c. "Centrifugal Pumps in the Heat Pump Plants," by J. Sprecher. pp. 10-15.
 - d. "The Economy of Concentrating Plants with and without Heat Pumps," by W. Wittiner, pp. 15-19.
 - e. "The Past and Future of the Steam Engine," by O. Walti. pp. 20-25.

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18. "Sulzer. Examples of Work Done by the Boiler, Apparatus and Plate Work Department." 20 pp. No. 5903c.
19. "Sulzer Products." 15 pp. No. 5949c.
20. Technical Review Sulzer No. 1, 1945.
 - a. Cover, frontispiece, contents and foreword. 7 pp.
 - b. "Brittleness and Toughness of Metals at High Temperatures," by W. Siegfried, pp. 43-79.
 - c. "The Oscillographic Equipment of the New Physical Laboratory," by W. Harti, pp. 80-88.
 - d. "The New Sulzer Research Laboratory," pp. 140-152.
21. "Sulzer Strahlungs Heizung System Crittall." "Sulzer Radiation Heating Crittall System." Cover and pp. 1 to 16 inc. Note: Pages 17 to 34 showing photographs of building exteriors and interiors, together with 14 loose copies of testimonial letters in German and French, were not microfilmed. No. 6008.
22. "Einige Referenzen über Wärmetechnische Anlagen Sulzer - Strahlungsheizungen - Anlagen." "A few references on Sulzer Radiation-Heating Installations." Names and locations of nearby 100 installations in hospitals, offices, indoor swimming pools, schoolhouses, museums, etc. Includes in each case the length of the heating coil. No. 5740-6008 A-C. 11 pp.
23. "Sulzer Zentralheizungen." "Sulzer Control Heating." Collection of small pictures of the buildings containing central heating plants, air conditioning, district heating and ventilating installations. No. 4644. 6 pp.