

BAG # 1481

TARGET OF
OPPORTUNITY

GROUP 3

SOLID FUELS

I. BROWN, BOVERI AND CO. LTD.
BADEN, SWITZERLAND

PAPERS ON GAS TURBINES, VELOX
BOILERS AND HEAT PUMPS

BAG 1481

MARDET OF OPPORTUNITY

GROUP 3

CONTENTS

Reel

Item 1 - "The Combustion Gas Turbine: Its History, Development, and Prospects", by Adolf Meyer (1939) 27 pp.

Item 2 - "Now Gas-Turbines That Work" by S. A. Tucker (1939), 4 pp.

Item 3 - "Combustion-Turbines Brown Boveri" (1939) 4 pp. 1558 E - II.9

Item 4 - "Load Tests of a Combustion Gas Turbine Built by etc." by A. Stodola (1940) 5 pp. 1584 E - II.9

Item 5 - "New Ways and Means of Compressing and Heating Blast Air in Ironworks" by W. G. Noack (1944) 7 pp. 1787E - IX. 12

Item 6 - "Der heutige stand der Verbrennungsturbine und ihre wirtschaftlichen Aussichten" (Todays Position of the Combustion Turbine and Its Economic Outlook), by H. Pfenninger (1944) 11 pp.

Item 7 - "Present-Day Possibilities of the Combustion Turbine", by H. Pfenninger (1944) 8 pp. 1825 E II.9

Reel

Item 8 - "The First Gas-Turbine Locomotive"
(1942) 12 pp. 1668E - V. 4

Item 9 - "The Gasturbine Locomotive"
Specifications (July 1945) 14 pp.

Item 10 - "The Rosenkrantzgate steam power-
station of the Oslo Electricity Works, etc."
(1937) 26 pp. 1474E - II. 1

Item 11 - "The Burning of Gas Under Pressure",
by J. G. Contant. (1938) 2 pp.

Item 12 - "A Modern Stand by and Peak-Load
Steam Power Station Built as a Bomb-Proof
Plant", by W. Roth (1939) 11 pp.

Item 13 - "The Brown Boveri Velox Steam
Generator for Land Purposes" (1940) 21
1533E - II. 8

Item 14 - "The Velox Power Plant at the
San Lorenzo Refinery of the Argentine State
Oil Fields", by H. S. Hvistendahl (1940)
7 pp.

Item 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) (1945) 16 pp. 1706 D - II. 8

Item 16 - "Anwendungen des Aufladeverfahrens
nach dem Velox - Prinzip" (Application of the
Supercharging Process by the Velox Principle),
by W. G. Noack (1943) 9 pp.

Item 17 - "The Velox Boilers at the Evans
Bay Power Station, Wellington, New Zealand",
by R. S. Mauder

Item 18 - "Actual Problems in the Production
of Power in Thermal Power Stations", by
Ad. Baumann/ W. Broggi (1939) 8 pp.
1553 E - II. 1

Reer

Item 19 - "Brown Boveri Heat Pumps for Heating and Cooling . . . , You're in a Quandry? "etc." (1943) i pp. 1673E - IX-7

Item 20 - "The Heat Pump as Refrigerating and Heating Machine", by Ad. Baumann and D. Marples (1943) 34 pp. 1747E - XI-7

Item 21 - "Thermische Anlagen für Reserve Ergänzungs - und Heizkraftwerke. Mit besonderer Berücksichtigung der Turbine." (Caloric power plants as emergency, supplementary and combined heating and power plants, with particular regard to turbines), by P. Faber (1945) pp. 69-80 (The article includes half-page abstracts in French and English).

III. ESCHER WYSS ENGINEERING WORKS LTD.
ZURICH, SWITZERLAND

PAPERS ON GAS TURBINES AND
HEAT PUMPS

BAG 1481

TARGET OF OPPORTUNITY

GROUP 3

CONTENTS

Reel

Item 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, 1942/43

Item 2 - "Research on Turbo-machinery"

- (a) Cover and index page.
- (b) "An aerodynamic heat-power plant"
by J. Ackeret and G. Keller, pp.
82 to 85.
- (c) "Publications of research work for
Escher Wyss designs" - Inside back
cover (2 pp.)

Item 3 Die Aerodynamische Turbine im Hüttenwerk"
(The Aerodynamic Turbine in Metallurgical
Plants), by C. Keller and R. Ruegg. (1943)
No. 23012 (d) 7 pp.

Item 4 - "Compte - rendu des essais de la turbine
aérodynamique Escher Wyss AK" (Account
of trials of the aerodynamic turbine
Escher Wyss AK", by Quiby (1945) 29 pp
No. 23021

Ree.

Item 5 - "Performance tests of 2000 kW Closed-Cycle Unit" Power, Aug. 1945 2 pp.

Item 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

Item 7 - "Escher Wyss Kalte - Wärme" (Cold - Heat)

- (a) Cover and index page
- (b) "Die Wärmenpumpe in der Heiztechnik" (Heat Pumps in Heating Technique), by A. Ostertag and A. Kornfehl, pp. 25-40

Item 8 - "Die Aerodynamische Turbine 'Escher Wyss AK' - Anlage" (The "Escher Wyss AK" aerodynamic turbine power plant), by G. 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. SULZER BROS. LTD.
WINTERTHUR. SWITZERLAND
PAPERS ON HEAT ENGINE RESEARCH,
MONOTUBE HIGH-PRESSURE BOILERS,
HEAT PUMPS, AND RADIATION HEATING

CONTENTS

Reel

- Item 1 - "The Supercharging of Two-Stroke Diesel Engines" (1941) 24 pp.
- Item 2 - "New Sulzer designs in the domain of the heat engine" Typed memo., 6 pp.
- Item 3 - "The Sulzer Single-Tube Steam Generator, by A. Stodola (1933) 19 pp. 5415e
- Item 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.
- Item 5 - "The Monotube Boiler in S.S. 'Kertosono'" (1936) 7 pp. 5822E
- Item 6 - "The Sulzer Monotube Steam Generator" Mimeographed memo. and drawing. (1937) 9 pp.
- Item 7 - "100-Atm. Steam Power Plant with Sulzer Monotube Steam Generator and Reciprocating Steam Engines" (1938) 9 pp. No. 5873e.
- Item 8 - "High-pressure Steam Plant with Sulzer Monotube Steam Generators in a Cardboard Factory in England" 4 pp. No. 5921e

Reel

Item 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. 3-8

(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 fur industrielle Warmezentralen" (Planning boiler and accumulator plants for industrial power stations with special reference to back-pressure energy production), by J. Gastpar, pp. 42-59

(g) "Heiskraftanlagen mit Gegendruck-Kolbendampfmaschinen" (Combined heating and power plants with back-pressure piston type steam engines), by H. Nyffenegger. pp. 60-68, 80, 92

Item 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.

Item 11. No. 898129 - A diagram of a high-pressure steam plant with reheater, similar to Fig. 32 (p 52) of Item 9 (g) above.

Reel

Item 12 -(a) Sulzer Hochdruckanlagen mit
Trommellosem Einrohdampfkessel
und Selbsttatiger Regelung"
16 pp. No. 5417 - 1

Item 12 (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.

Item 13 - "Sulzer High-Pressure Steam Plant with
Monotube Steam Generator" No. 5898e 4pp.

Item 14 - "Measurement of the salt-content in
the boiler feed-water of industrial monotube
steam generator plants." 6 pp. No. 308e

Item 15 - "High pressure installations equipped
with Sulzen Monotube Steam Boilers." 3 page typed
memo dated 27 September 1945

Item 16 - "List of Sulzer Mono Tube Steam Genera-
tors in Service or under construction" 4 page
mimeographed list obtained 27 September 1945, but
undated.

Item 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

Reel

- Item 18 "Sulzer. Examples of Work Done by the Boiler, Apparatus and Plate Work Department" 20 pp. No. 5903e
- Item 19 "Sulzer Products" 16 pp. No. 5949e
- Item 20 Technical Review Sulzer No. 1 1945
(a) Cover, frontispiece, contents and forward (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. Marti, pp. 80-88
(d) "The New Sulzer Research Laboratory" pp. 140-152
- Item 21 "Sulzer Strahlungs Heizung System Crittall" (Sulzer Radiation Heating Crittall System) Cover and pp. 1 to 16 incl. (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
- Item 22 "Einige Referenzen über wärmetechnische Anlagen Sulzer - Strahlungsheizungs - Anlagen" (A few references on Sulzer radiation-heating installations) Memos 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.
- Item 23 "Sulzer Zentralheizungen" (Sulzer Control Heating) Collection of small pictures of the building containing central heating plants, air conditioning, district heating and ventilating installations. No. 4644 6 pp.