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**CONDENSED
LIST OF
TECHNICAL**
Literature

UCC

UNION CARBIDE AND
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IN this booklet are listed a few of the technical publications of current interest issued by various Units of Union Carbide and Carbon Corporation. These publications as well as many others, are available without cost to users of products of the Corporation and to others interested in the use of these products. They are published as a part of Union Carbide and Carbon Corporation's program of assisting consumers and others to make most effective use of the Corporation's products and of pointing out new and valuable opportunities for the application of these products in industry and the home.

If you are interested in receiving any of the printed information listed in this booklet, fill out and mail the coupon on the inside back cover. Carefully list your name, business connection and mailing address and the number of the booklet which you wish to receive and mail it to the address shown.

In addition to these booklets and pamphlets, there is available a great deal of published information on other subjects involving the use of products of the Corporation. If you wish literature on a subject not included in this list, write the subject on the coupon.

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CONDENSED LIST OF TECHNICAL LITERATURE

ACETYLENE

BOOKLET NO. 1

Calcium Carbide and Acetylene

(For Industrial Executives and Engineers)

This is a non-technical book, written for the purpose of giving general information concerning the various phases of calcium carbide and acetylene. It is the fourth revision of the late George Gilbert Pond's book on the same subject. 130 pp. 6 x 9.

See also Booklet No. 6.

AUTOMOTIVE

BOOKLET NO. 2

The Inside Story of the Cooling System

(For the Automobile Service Station and Truck Owner)

This booklet deals with the proper maintenance of automotive cooling systems and therefore treats with a problem that faces all operators and owners of automotive vehicles. 24 pp. 6 x 9.

BOOKLET NO. 3

How to Bronze-Weld Cylinder Blocks

(For the Auto Repair Shop)

Complete directions for the bronze-welding of damaged cast iron automobile cylinder blocks, including information on welding in place, heat control, blowpipe technique, and finishing operations. 12 pp. 6 x 9.

BOOKLET NO. 4

No More Valve Grinding

(For Automotive Engineers and Executives)

Describes how the use of various types of exhaust valve seat inserts have reduced valve grinding and adjustments to a minimum in the latest type trucks and buses. 6 pp. 8½ x 11.

BOOKLET NO. 5

Repairing for Profit

(For the Garage or Auto Repair Shop)

Gives specific instructions for nearly all automotive repair welding operations and includes suggestions for increasing the business of the automotive repair shop. 16 pp. 8½ x 11.

CARBIDE

BOOKLET NO. 6

Things You Should Know About Carbide

(For Users of Carbide Gas in Country Homes)

This booklet describes the manufacture of

calcium carbide, and discusses a number of subjects of great interest to users of Carbide Gas for lighting and cooking. Illustrated. 16 pp. 4 x 9.

See also Booklet No. 1.

CARBON ARC

BOOKLET NO. 7

Eveready Carbon Arc Industrial Units

(For Industrial Executives and Engineers)

Ultra-violet radiation in industry, including description and requirements of units. 6 pp. 8½ x 11.

BOOKLET NO. 8

Ultra-Violet Radiation in Industry

(For Industrial Executives and Engineers)

A discussion of photo-chemical reactions and the equipment for producing them. 4 pp. 8½ x 11.

BOOKLET NO. 9

Photography with the Carbon Arc

(For the Photographic Industry)

How to obtain best results with supersensitive film. 4 pp. 7 x 10.

BOOKLET NO. 10

National Projector Carbons

(For the Motion Picture Projectionist)

Discusses the manufacture of projector carbons, the carbon arc and the application

of projector carbons in various types of projection equipment. 92 pp. $4\frac{1}{4} \times 6\frac{3}{4}$.

See also Booklets Nos. 24, 25, 26, 27, 43 and 61.

CARBON BRUSHES

BOOKLET NO. 11

Bulletin on Operation of Carbon Brushes

(For Electrical Engineers and Plant Executives)

Application of brushes to specific conditions of service and types of electrical machines are enumerated in detail. 20 pp. $8\frac{1}{2} \times 11$.

CHEMICALS

BOOKLET NO. 12

Emulsions

(For the Chemist or Chemical Engineer)

The use of Triethanolamine in the preparation of emulsions and their industrial applications are described in this book. Some of the specific emulsions and their uses are olive oil for wool lubrication, neats-foot oil for leather emulsions, mineral oil for orchard sprays, pine oil for disinfectant emulsions, kerosene for sprays and perfume emulsions, carnauba wax for emulsion polishes, paraffin wax for sizing and waterproofing emulsions, petrolatum for pharmaceutical emulsions, stearic acid for cosmetic emulsions and linseed oil for emulsion paints. 48 pp.

BOOKLET NO. 13

Synthetic Organic Chemicals

(For the Executive, Chemist or Purchasing Agent)

A complete catalog describing each of the chemicals made by Carbide and Carbon Chemicals Corporation, giving the properties, specifications and uses of each. It is of interest primarily to chemists, chemical engineers and advanced students. 80 pp.

BOOKLET NO. 14

Hastelloy - The New Acid Resistant Alloy

(For the Chemical or Mechanical Engineer)

The physical and chemical properties of the acid-resistant alloys Hastelloy A, C and D are outlined in this folder. 4 pp. $8\frac{1}{2} \times 11$.

COOKING AND LIGHTING GASES

BOOKLET NO. 15

Cooking Made Easier

(For the Home beyond the Gas Mains)

This book describes Pyrofax Gas Service for homes located beyond the gas mains. Its purpose is to enable the Pyrofax user to obtain the greatest benefit from Pyrofax in cooking. Time tables for gas cooking are included. 32 pp. $6 \times 8\frac{3}{4}$.

BOOKLET NO. 16

Colt Carbide Gas Guide

(For the Modern Farm Home)

Contained in this booklet is information and

data on the use of Carbide Gas for lighting, cooking and heating and directions for the installation and care of Carbide Gas equipment. Illustrated. 64 pp. 6 x 9.

See also *Booklet No. 6.*

HARD-FACING FOR WEAR RESISTANCE

BOOKLET NO. 17

Haynes Stellite Plow Shares

(For the Welding Shop, Garage or Blacksmith)

This folder describes the procedure for Haynes Stellite a plow share and how the use of a copper plate makes it possible in one operation to shape quickly and easily the nose of a share. 4 pp. 12 x 21.

BOOKLET NO. 18

Haynes Stellite Products in the Oil Fields

(For Petroleum Engineers and Executives
and the Oil Field Welding Shop)

Describes how substantial savings are effected by the application of Haynes Stellite products to oil well drilling tools and the procedure for applying these materials to produce tools of maximum efficiency. 36 pp. 8½ x 11.

BOOKLET NO. 19

Haynes Stellite Wearing Sur- faces

(For Plant Executives and Welding Engineers)

This pamphlet describes the procedure for

Haynes Stellite with the oxy-acetylene process and also lists a number of successful applications, with the recommended grade. 6 pp. 8½ x 11.

BOOKLET NO. 20

How Hard-Facing Saves Money for Contractors

(For the Construction Industry)

Instructions for the application of Haynes Stellite products and descriptions of typical applications are included in this booklet. 16 pp. 8½ x 11.

BOOKLET NO. 21

Hard-Surfacing Valves

(For Power Plant Engineers and Executives)

Describes how considerable economies have been effected in high-temperature steam valve operation by applying Haynes Stellite to gates, seats, rings, disks, etc. 1 p. 8½ x 11.

BOOKLET NO. 22

Hard-Facing with Haynes Stellite Products

(For Industrial Executives, Engineers and
the Welding Shop)

Fully illustrated and practical examples of hundreds of hard-facing applications in twelve major industries are completely covered in this book. Sections are devoted to a description of hard-facing materials

and the procedure for their application to wearing surfaces by both the oxy-acetylene and electric arc processes. 96 pp. 8½ x 11.

BOOKLET NO. 23

Hard-Facing with Hascrome

(For Industrial Executives and Engineers)

Briefly describes the procedure for hard-facing with Hascrome by means of the oxy-acetylene and the electric arc processes. 1 p. 8½ x 11.

See also Booklet No. 4.

LIGHT THERAPY

BOOKLET NO. 24

Radiation Characteristics Eveready Sunshine and Therapeutic Carbons

(For the Medical Profession)

This pamphlet shows, with the aid of diagrams and spectrograms, the kinds of radiation obtained from different light sources. 16 pp. 8½ x 11.

BOOKLET NO. 25

Eveready Professional Model Carbon Arc Lamp

(For the Medical Profession)

This bulletin describes the important features of this valuable addition to the physician's office equipment. 8 pp. 5½ x 8½.

BOOKLET NO. 26

Eveready Carbon Arc Solarium Units

(For the Medical Profession)

The ideal source of artificial sunlight for group irradiation in hospitals and sanatoria is described along with data on the various types of units and carbons. 4 pp. 8½ x 11.

BOOKLET NO. 27

Typical Medical Uses of the Carbon Arc

(For the Medical Profession)

This booklet presents information to enable the physician to administer intelligently light treatment. It provides a reference which the physician can consult as an aid in forming his decision about dosage. 24 pp. 3¼ x 6¼.

LUBRICANTS

BOOKLET NO. 28

Gredag Lubrication

(For Engineers and Industrial Executives)

Discusses the basic principles of lubrication and describes the composition of Gredag and the various grades of this graphite lubricant which are available. 8 pp. 8½ x 11.

BOOKLET NO. 29

Lubrication of Outdoor Equipment

(For Engineers and Industrial Executives)

The best properties of lubricants for out-

door use, including automotive, bearing, cable and chain, gear and plunger lubricants are suggested. 6 pp. 8½ x 11.

BOOKLET NO. 30

Lubrication of Industrial Equipment

(For Plant Executives)

The use of the different grades of Gredag lubricants for average conditions of service on various types of industrial equipment is described. 6 pp. 8½ x 11.

MACHINE TOOLS

BOOKLET NO. 31

Haynes Stellite Metal Cutting Tools

(For Plant Executives and Machinists)

Lists the sizes of Haynes Stellite tool bits, milling cutter blades and welded-tip tools and also recommends average cutting speeds and feeds for turning, facing and boring. 6 pp. 8½ x 11.

MAGAZINES

BOOKLET NO. 32

Oxy-Acetylene Tips

(For Industrial Executives and Engineers)

A monthly magazine which covers the latest methods of oxy-acetylene welding and cutting as applied to various industries. Should be followed by novice and veteran

for valuable ideas and preserved carefully for reference. 9 x 12.

METALLURGICAL

BOOKLET NO. 33

Steels Suitable for Shipbuilding

(For Naval Architects and the Shipbuilding Industry)

A reprint of a paper presented before the Society of Naval Architects and Marine Engineers. 8 pp. 6 x 9.

BOOKLET NO. 34

Stainless Steels and Their Uses

(For Industrial Executives)

Chromium alloy steels are employed in practically every industrial field and this bulletin describes the various stainless steels and many of their uses. 20 pp. 8½ x 11.

BOOKLET NO. 35

Silicon Manganese Alloys for the Deoxidation of Steel

(For the Iron and Steel Industry)

A discussion of the cleansing of steel through the use of silicon manganese alloys in the correct composition. 8 pp. 8½ x 11.

BOOKLET NO. 36

Alloy Steels and Their Uses in the Mining Industry

(For Executives and Engineers)

Some of the most important applications of

alloy steels in this industry are described in this paper. 4 pp. 8½ x 11.

BOOKLET NO. 37

Cromansil Steels

(For Engineers and Industrial Executives)

A bulletin outlining the properties and applications of certain steels containing chromium, manganese and silicon. 12 pp. 8½ x 11.

BOOKLET NO. 38

Simple Tests for Identifying Metals

(For the Mechanic, Welder, and Student)

A convenient chart showing the more commonly used metals and how to identify them. 1 p. 17 x 22.

BOOKLET NO. 39

Briquet Iron Means High Quality Iron

(For the Foundryman and Metallurgist)

Use and advantages of briquetted alloys employed in the manufacture of cast iron. 4 pp. 8½ x 11.

BOOKLET NO. 40

Effect of Vanadium in High Speed Steel

(For Metallurgists and Engineers)

A presentation of the results and conclusions of many tests, showing the beneficial results of using vanadium for high-speed steel. 12 pp. 6 x 9.

BOOKLET NO. 41

The Use of Silicon and Manganese Briquets in the Cupola

(For the Iron and Steel Industry)

Results of tests on production of high grade castings with briquetted alloys. 12 pp. 6 x 9.

BOOKLET NO. 42

Metals and Ferro-Alloys Used in the Manufacture of Steel

(For the Metallurgist)

A discussion of the various ferro-alloys and alloying metals and their effect on the properties of steel. 12 pp. 4 x 7.

See also Booklets Nos. 14 and 59.

MILK IRRADIATION

BOOKLET NO. 43

The Irradiation of Milk

(For the Medical Profession)

The application of the Carbon Arc to the production of Irradiated Vitamin "D" Milk, and a general discussion of the process and product. 4 pp. 8½ x 11.

OXYGEN THERAPY

BOOKLET NO. 44

Recent Trends in Oxygen Therapy

(For the Medical Profession)

Published by The Linde Air Products Com-

pany—Traces the early development of Oxygen Therapy, development of apparatus; excerpts from medical papers; illustrations and complete bibliography. 32 pp. 6 x 9.

BOOKLET NO. 45

*Researches in Oxygen Therapy
Equipment: Some Aspects of the
Mechanical Phases of Oxygen
Therapy Apparatus*

(For the Medical Profession)

By J. I. Banash and G. O. Carter, Consulting Engineers—Reprinted from Anes. & Anal., March-April, 1933. 8 pp. 6 x 9.

BOOKLET NO. 46

Linde Oxygen U. S. P.

(For the Medical Profession)

Discusses the manufacture and distribution of Linde Oxygen U.S.P. for medical purposes and lists the distributing stations from which it is available. 12 pp. 4 x 9.

BOOKLET NO. 47

Oxygen Therapy

(For the Medical Profession)

By Walter M. Boothby, M.D.—reprinted from the Journal of the American Medical Association, December 10, 1932, Vol. 99, pp. 2026-2033 and December 17, 1932, Vol. 99, pp. 2106-2112. 38 pp. 5½ x 8½.

BOOKLET NO. 48

*The Therapeutic Use of Oxygen
in Heart Disease*

(For the Medical Profession)

By Alvan L. Barach, M.D.—A report of a three-year study of the use of oxygen on twenty heart patients of various types. 16 pp. 6 x 9.

BOOKLET NO. 49

*Widening Scope of Oxygen Ther-
apy in the Treatment of Disease*

(For the Medical Profession)

By Alvan L. Barach, M.D.—A review of the various uses to which oxygen has been put, pointing out its advantages and possible applications. 8 pp. 6 x 9.

BOOKLET NO. 50

*Oxygen Therapy in Hospitals,
Equipment and Management of
Service*

(For the Medical Profession)

By William Thalhimier, M.D.—Reprinted from the Bulletin of the Amer. Col. of Surgeons, December, 1932, with a discussion by George W. Crile, M.D. 5 pp. 7½ x 10.

WELDING AND CUTTING

BOOKLET NO. 51

Oxwelded Piping

(For Architects and Engineers)

This booklet is divided into two parts, the first covering a discussion of oxwelded in-

dustrial piping showing economies in construction, repair and maintenance; the second division describing the use of welded piping systems for heating of buildings and residences. Fully illustrated and practical examples of welded piping installations. 18 pp. $7\frac{3}{4} \times 10\frac{1}{2}$.

BOOKLET NO. 52

The Oxygen Lance in Blast Furnace and Steel Plants

(For the Steel Industry)

Gives economical applications of the oxygen lance in the iron and steel industries, showing its advantages in meeting many specific problems in which the lance has demonstrated its value—opening notches, frozen tuyeres, drilling salamanders, breaking up spills, and other typical work. 48 pp. Illustrated. $4\frac{3}{4} \times 7$.

BOOKLET NO. 53

Oxweld Welding Rod

(For Engineers and Plant Executives)

A complete discussion of the importance of welding rod in obtaining good welding results. Each Oxweld Welding Rod is described and its use outlined. 16 pp. 6 x 9.

BOOKLET NO. 54

How to Figure Oxwelding and Cutting Costs

(For the Engineer)

Suggestions for figuring expense of materials and labor. 8 pp. $8\frac{1}{2} \times 11$.

BOOKLET NO. 55

Destructive and Non-Destructive Tests

(For the Engineer)

A critical discussion of methods of testing welds. 8 pp. $8\frac{1}{4} \times 10\frac{3}{4}$.

BOOKLET NO. 56

Oxwelding for General Maintenance

(For Industrial Executives and Factory Managers)

How the oxy-acetylene process is used in efficient plant maintenance programs is outlined. It is of particular value to those interested in the maintenance problem. 16 pp. $8\frac{1}{2} \times 11$.

BOOKLET NO. 57

The Bronze-Welding of Cracked Cast Iron Boiler Sections

(For the Engineer and the Welding Shop)

Describes the result of extensive investigations on this subject which have opened a new field to welding shops and heating contractors. 8 pp. $8\frac{1}{2} \times 11$.

BOOKLET NO. 58

For Every Cutting Need

(For Engineers and Plant Executives)

This booklet outlines the uses of machine flame-cutting—shape cutting, straight line cutting and beveling, pipe cutting and pipe-end preparation. It includes descriptions of various Oxweld oxy-acetylene cutting machines. 16 pp. Illustrated. 6 x 9.

BOOKLET NO. 59

Oxwelding Corrosion-Resisting Steels

(For the Metallurgist and Welding Engineer)

This booklet contains detailed information on the welding of those increasingly popular types of steels called chromium steels, including the various forms of stainless steels. 8 pp. 8½ x 11.

BOOKLET NO. 60

Cutting Cast Iron with the Oxy-Acetylene Blowpipe

(For Engineers and Plant Executives)

Gives practical, well-illustrated examples of specific methods to follow. A booklet of everyday service. 16 pp. 6 x 9.

BOOKLET NO. 61

National Welding Carbon Products

(For Welding Engineers)

Uses of National Welding Carbon Electrodes, Acheson Graphite Welding Electrodes and National Welding Carbon Rods, Plates and Paste are described. 16 pp. 3¾ x 6¼.

See also Booklets Nos. 3, 5, 17, 18, 19, 20, 21, 22, 23, 32 and 38.

THE SECRETARY

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