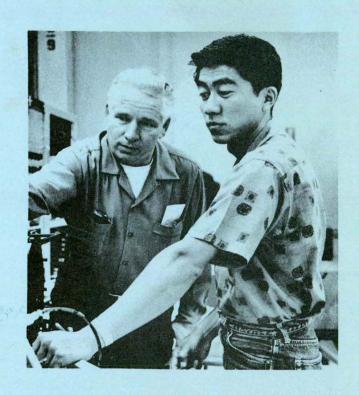
HD 4885 .I8 O67 1967



lowa Emplyment Security Commission
Des Moines, Iowa 50319

OPPORTUNITES APPRENTICESHIP AND SKILLED TRADES IN IOWA





ACKNOWLEDGEMENTS

The author appreciates the contribution made by
the Iowa Manpower Development Council Staff for their
assistance in the collection and organization of data
that appears in this resource book. The Iowa State
Employment S. ity Commission and the Bureau of Apprenticeship and Training have also been helpful in
providing assistance and information for this project.

Java Emplyment Security Commission
Ues Meiros, Jour 50379

OPPORTUNITIES

IN APPRENTICESHIP AND SKILLED TRADES

IN IOWA

APRIL 1967

IOWA MANPOWER DEVELOPMENT COUNCIL

Harold E. Hughes, Governor John M. Ropes, Director

PREFACE

It is the purpose of Opportunities in Apprenticeship and Other Skilled Trades to acquaint individuals with programs in the apprenticeship and building trade field that are registered with the Bureau of Apprenticeship and Training within the State of Iowa. Individuals, who can provide additional information with respect to an apprenticeship program or skilled trade, have been included as contact sources. These individuals will provide additional information relevant to: (1) date, time, and place for making out an application, and (2) number of openings for the particular apprenticeship or skilled trade. As a further source, the employment office or the Bureau of Apprenticeship and Training should prove valuable as sources for additional information. The data for this resource book was obtained from: (1) Occupational Outlook Handbook; (2) Guide to the Use of the General Aptitude Test Battery; (3) Bureau of Apprenticeship and Training, U. S. Department of Labor, 413 Court Street, Des Moines, Iowa

Frank B. Robinson, Jr.
Manpower Specialist
Iowa Manpower Development
Council

CONTENTS

I.	Fair Employment Practices
II.	Explanation of Categories
III.	Apprentice programs and Skilled Trades
	Auto-Body Repair
	Auto Mechanic
	Blacksmiths
	Boilermakers 4
	Bricklayers
	Carpenters
	Cement Finishers
	Decorators and Interior Designers
	Dental Technicians
	Electricians (Construction)
	Electronic Technician (etc.)
	Floor Coverers
	Glaziers
	Industrial Factory Machine Repairmen-
	Maintenance Mechanics
	Lathers
	Machinists (Foundry)
	Mechanical and Structural Draftsmen
	Metallurgist in Iron and Steel Industry
	Millwrights
	Model or Instrument Maker
	Molder

CONTENTS (Continued)

Painters and Paperhangers	•		٠	•	٠			•	•		•		•	•	•		23
Pattern Maker in Foundry		٠				•	•		•						•	•	24
Plasterers	•	•	•	•	•	•	٠								•	•	25
Plumbers and Pipefitters		•		•					•								26
Printing (Pressmen and Ass	is	ta	nt	s)							•		•				27
Pump Maintenance Mechanic	in	P	et	ro	le	um	R	ef	in	in	ıg		•	•			28
Refrigerator and Air-Condi	ti	on	in	g	Fi	tt	er	•							•	•	29
Roofer		•						•				•					30
Sheet-Metal Workers or Tin	sm	it	hs		•	•		•								•	31
Stereotypers and Electroty	pe	rs		٠.		•										•	32
T. V. and Radio Repairmen											•					•	33
Tile Setter, Terrazzo Work	er	a	nd	M	lar	bl	е	Se	tt	er	٠.				•	•	34
Tool and Die Makers				•	. ,									,		•	35
Truck and Bus Mechanics .					•								•	•		•	36
Typographical Compositor																	37

FAIR EMPLOYMENT PRACTICES

Entry opportunities for minority persons into many of the apprentice programs listed herein have been virtually non-existent. It is hoped that those who utilize this information will encourage <u>all</u> individuals who have the interest and aptitude to take advantage of <u>Opportunities in Apprentice and Skilled Trades in Iowa</u>.

The author prevailed upon Commissioner Samuel C. Jackson of the Federal Equal Employment Opportunity Commission, administrators of Title Seven of the 1964 U. S. Civil Rights Act to make some comments relative to the utilization of this source book. Following Commissioner Jackson's comments are portions of Title Twenty-nine, which pertains to non-discrimination in apprenticeship and training and section seven of the Iowa Civil Rights Act which has reference to employment.

"A major component of America's economy, the construction industry accounted for 11 per cent of our gross national product in 1965 (72 billion dollars). Construction activity has a widespread impact on other sectors of the economy, generating employment opportunities both directly and indirectly in many industries. For each million dollars of new construction, 60 workers are employed for one year in industries that produce, sell, and deliver the materials it requires.

By 1975, more than one-half million jobs will be available to skilled workers--an increase of nearly 40 per cent over the number of such jobs in 1965--accounting for nearly half of all employees in the construction industry. At the same time, the number of unskilled jobs will decrease sharply. These optimistic forecasts for growth make it immeasurably important that young men--especially Negro, Indian, and Spanish-speaking youth who are conspicuously absent from most skilled crafts--seek and complete training for the skilled trades following high school graduation.

Old, discriminatory barriers to entry into the crafts are falling. Today's apprentices will be tomorrow's skilled workmen. We must act now to assure that

opportunities are available on an equal basis to those who will help America continue to grow."

Samuel C. Jackson, Commissioner Equal Employment Opportunity Commission Washington, D. C.

Title Twenty-Nine (Section 30.3)

Each apprenticeship program registered with the Bureau of Apprenticeship and Training shall operate on the basis of the following standards:

- (a) The selection of apprentices on the basis of qualifications alone, in accordance with objective standards which permit review after full and fair opportunity for application, unless the selection otherwise made would themselves demonstrate that there is equality of opportunity.
- (b) The taking of whatever steps are necessary, in action upon application lists developed prior to this time, to remove the effects of previous practices under which discriminatory patterns of employment may have resulted.
- (c) Non-discrimination in all places of apprenticeship and employment during apprenticeship after selections are made.

<u> Iowa Civil Rights Act (Section 7)</u>

It shall be an unfair or discriminatory practice for any:

- (a) Person to refuse to hire, accept, register, classify or refer for employment, to discharge any employee or to otherwise discriminate in employment against any applicant for employment or any employee because of the race, creed, color, national origin, or religion of such applicant or employee.
- (b) Labor organization or the employee, agents, or members therefor to refuse to admit to membership any applicant, to expel any member, or to otherwise discriminate against any applicant for membership or any member in the privileges, rights or benefits of such membership because of the race, creed, color, national origin, or religion of such applicant or member.

EXPLANATION OF CATEGORIES

Each apprenticeable occupation and skilled trade that appears in this informational source is described in terms of six categories: (1) usual duties; (2) qualifications; (3) occupational aptitude test pattern; (4) length of apprenticeship; (5) wage; (6) contact person for additional information. An explanation of these categories appears on this and the following page.

<u>Usual Duties</u>. Describes the general responsibilities and duties of the apprentice during training and while under supervision of a journeyman.

Qualifications. Where information was available for this category, age limits and physical prerequisites are included along with the general academic requirements for the apprentice program or skilled trade being discussed.

Occupational Aptitude Pattern (OAP). Occupational norms are shown in terms of a structure consisting of a series of occupational aptitude patterns. Each occupational aptitude pattern consists of the most significant aptitude and the critical scores on these aptitudes established as minimum scores for a group of occupations having a similar aptitude requirement. For example, the OAP for a sheet metal worker is, Spatial Aptitude 16 percentile; Finger Dexterity 31 percentile; Manual Dexterity 23 percentile. A percentile of 16 means that the individual whose test performance rates that score exceeds the performance of 16 percent of the group taking the test. It is suggested, however, that the reader be particularly cautious about generalizing upon the isolated OAP scores which serve as only one indication of an individuals potential abilities.

Length of apprenticeship. Apprenticeship programs range from six months to five years. Many apprentice programs include classroom instructions as well as on-the-job training with performance in the former serving as a good indication of an individual's abilities, aptitude and interest for the apprenticeship or skilled trade.

<u>Wage</u>. The wage represents the going national rate for a qualified journeyman or skilled tradesman. This amount fluctuates from state to state and occasionally within the state, dependent upon the rate established by the Joint Apprenticeship Committee. An apprentice generally receives between 50 and 65 percent of the wage rate for a journeyman to start and this percentage increases during the period of apprenticeship. During the final months of apprenticeship an individual can make up to 95 percent of the going journeyman's wage rate.

Contact Sources. Many of the individuals listed under this category have, or are now serving on individual or Joint Apprenticeship Committees. These individuals are experienced and knowledgeable about their particular trade and should be utilized as a resource for additional information.

E R R A T A

II - Explanation of Categories

Length of Apprenticeship. Apprenticeship Programs range from two to five years.

A P P R E N T I C E P R O G R A M S
A N D S K I L L E D T R A D E S

AUTO-BODY REPAIRMEN

USUAL DUTIES

The apprentice auto-body repairman will receive instruction and on-the-job training for: (1) removing dents in body and fenders; (2) filling bad dents and cracks with solder; (3) installing new fenders, hoods, panels, window glass and windowshields and welding breaks in the body of the car.

QUALIFICATIONS

The auto-body repairman and painter does not necessarily have to possess a high school diploma. A beginner should be in good physical condition and have a good eye-hand coordination. Courses in automobile body repair are offered by a relatively small number of high schools, but vocational schools and private trade schools provide valuable training, as do courses in automobile mechanics.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Percentile	Cutting Score
	ADULT	YOUTH
G (Intelligence)	50	
S (Spatial Aptitude)	50	
M (Manual Dexterity)	31	

HOURLY WAGE RATE

\$ 3.60 - \$ 3.80

LENGTH OF APPRENTICESHIP

Three to four years

CONTACT SOURCES - For additional information

Name	Address	City
Fox, Chase A. Freund, Maynard	109-15th St., N.E. 411 Grand Avenue	Cedar Rapids, Iowa Des Moines, Iowa

CONTACT SOURCES (Continued)

Name

Harlan, E. W. Havens, Kenneth Helms, Tom Johnson, L. E. Kees, E.R. Knopp, Jack P.

McPherson, C. C.

Mirrielers, D. F.

Storsch, L. G. Stringer, Kenneth Watkins, Morris Zabriski, George

Address

1914 E. Euclid
320 Sixth Avenue S.
810 W.River Drive
611 N.2nd Street
1440 Locust
K & P Chevrolet-Olds
Company
Box 1071-Highway 20
East
3633 Falls Ave.Box 142
3423 Brady Street
324 W. 4th Street
100 4th Avenue S.
Zabriski's Garage

City

Des Moines, Iowa Clinton, Iowa Davenport, Iowa Clinton, Iowa Des Moines, Iowa

Monticello, Iowa

Fort Dodge, Iowa

Waterloo, Iowa Davenport, Iowa Davenport, Iowa Clinton, Iowa Fayette, Iowa

AUTOMOBILE MECHANICS

USUAL DUTIES

The apprentice auto-mechanic will, under supervision, perform the following tasks: (1) keep automobiles, small trucks, and buses in good running order; (2) do preventative maintenance, diagnose breakdowns and replace worn out or broken parts; (3) overhauls engines, transmissions, clutches, rear ends and other assemblies.

QUALIFICATIONS

Age: 18 - 35

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The automobile mechanic should have an understanding of automobile construction and operation, like mechanical work and have mechanical aptitude-a driver's license is generally required. This applicant should also have a background in automobile repair, gained from working as a gasoline service station attendant, training in the Armed Forces, or experience repairing automobiles as a hobby is valuable. Courses in automobile repair offered by many high schools, vocational schools and private trade schools are also valuable.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
	Remark/prospC/planeC	ADULT	YOUTH
	(Intelligence)	40	40
S	(Spatial Aptitude)) 23	22
F	(Finger Dexterity)) 11	11

HOURLY WAGE RATE

\$3.40 - \$3.60

LENGTH OF APPRENTICESHIP

Three to four years

Name	Address	City
Fox, Chase A.	109-15th St., N.E.	Cedar Rapids, Iowa
Freund, Maynard	411 Grand Avenue	Des Moines, Iowa

CONTACT SOURCES (Continued)

Name

Harlan, E. W. Havens, Kenneth Helms, Tom Johnson, L. E. Kees, E. R. Knopp, Jack P.

McPherson, C. C.

Mirrielers, D. F.

Storsch, L. G. Stringer, Kenneth Watkins, Morris Zabriski, George

Address

1914 E. Euclid
320 Sixth Avenue S.
810 W. River Drive
611 N.2nd Street
1440 Locust
K & P Chevrolet0lds Company
Box 1071-Highway 20,
East
3633 Falls Ave.Box 142
3423 Brady Street
324 W. 4th Street
100 4th Avenue S.
Zabriski's Garage

City

Des Moines, Iowa Clinton, Iowa Davenport, Iowa Clinton, Iowa Des Moines, Iowa

Monticello, Iowa

Fort Dodge, Iowa

Waterloo, Iowa Davenport, Iowa Davenport, Iowa Clinton, Iowa Fayette, Iowa

BLACKSMITHS

USUAL DUTIES

The apprenticeship blacksmith will work under close supervision of a journeyman blacksmith for the purpose of: (1) making and repairing many different kinds of metal articles and parts, such as forging tongs and other tools, machine frames, automobile parts, and other industrial and agricultural equipment; (2) sharpening hand and machine tools, such as chisels, drills and picks; (3) shaping and joining together glowing hot metal which has been heated in a special type of furnace called a forge.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Vocational school or high school courses in metal working, blueprint reading and mathematics are helpful.

HOURLY WAGE RATE

\$2.50 - \$3.00

LENGTH OF APPRENTICESHIP

Three to four years

CONTACT SOURCES - For additional information

Name
Address
City
Kuhl, M. B.
Clinton Corn Processing Clinton, Iowa
Company

BOILERMAKER

USUAL DUTIES

The apprentice boilermaker will work under close supervision of a journeyman boilermaker for the purpose of specializing in the repairing, lubricating and assembling of boilers, tanks, vats, pressure vessels, heat exchanges and similar vessels made of metal plate, and repairing and erecting boilers and vessels. The layout men are usually employed in manufacturing new boilers and heavy tanks.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Other qualifications are training in mathematics, blueprint reading and shopwork, mechanical aptitude and manual dexterity. A physical examination must be passed.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	utting.	Percentile	Score
	ADULT	YC	UTH
G(Intelligence)	93		
N(Numerical Aptitude) 84		
S(Spatial Aptitude)	84		

HOURLY WAGE RATE

\$4.70 - \$4.90

<u>Name</u>	Address	City
Bloom, G. R. Kuhl, M. B.	1628 W. 4th St. Clinton Corn Pro-	Davenport, Iowa Clinton, Iowa
Myers, Arlo A. Reimer, Edward G.	cessing Co. 1106 Washington St. P. O. Box 4255	Burlington, Iowa Minneapolis, Minn.

BRICKLAYERS

USUAL DUTIES

The apprentice bricklayer will work under close supervision of a journeyman bricklayer for the purpose of: (1) constructing walls, partitions, fireplaces, chimneys and other structures of brick; (2) precasting panels made of brick, cament, tile, stone or marble; (3) installing brick lining for industrial kilns and furnaces.

QUALIFICATIONS

Age: 18 - 24

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
	- X - X - X - X	ADULT	YOUTH
	(Intelligence)	31	27
N	(Numerical Ability)	40	40
M	(Manual Dexterity)	11	11

HOURLY WAGE RATE

\$4.70 - \$4.90

LENGTH OF APPRENTICESHIP

Four Years

<u>Name</u>	Address	City
Alter, Ralph Bane, Orran N., Jr. Baker, Gerald E. Bouher, Lester Farrell, Robert Huff, Kenneth Netcott, Ralph Wells, Thomas H. Wendland, Leo	1808 Grube Street 472 Loma 2906 "C" Ave.NE 2430-7th 1118 Mulberry 1112 S.19th 108 High Street RFD 6 520 - 24th	Burlington, Iowa Waterloo, Iowa Cedar Rapids, Iowa Sioux City, Iowa Des Moines, Iowa Fort Dodge, Iowa Ames, Iowa Ottumwa, Iowa Rock Island, Illinois

CARPENTERS

USUAL DUTIES

The apprentice carpenter will work under close supervision of a journeyman carpenter for the purpose of: (1) erecting the wood framework in building, including subflooring, sheathing, partitions, floor joists, studding and rafters; (2) installing molding, wood paneling, cabinets, window sash, door frames, doors and hardware, as well as build stairs and lay floors; (3) installing heavy timbers used in constructing docks, railroad trestles, and similar installations; (4) building forms to enclose concrete until it sets; (5) erecting scaffolding and temporary buildings on the construction site; (6) installing linoleum, asphalt, tile and similar soft-floor coverings; (7) sawing, fitting and assembling plywood, wallboard and other materials.

QUALIFICATIONS

Age: 17 - 25

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant must also be in good physical condition, have a good sense of balance and not have fear of working on structures high off the ground. Manual dexterity and the ability to solve arithmetic problems quickly and accurately are also important aptitudes.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Perce	ntile Score
	-,	ADULT	YOUTH
	(Numerical ability)	16	15
S	(Spatial aptitude)	31	30
M	(Manual Dexterity)	16	16

HOURLY WAGE RATE

\$4.35 - \$4.55

LENGTH OF APPRENTICESHIP

Four years

CARPENTERS (continued)

CONTACT SOURCES - For additional information

Name

Boe, Anthony Cochran, Burdette Edwards, Earl E. Flynn, Ambrose Jones, G. L. Kaiser, Vincent J. McCracken, K. J. Machande, Art Olson, Erling Schuler, Ted Thompson, Kenneth Tracey, Ray Wendland, Leo Winans, M. A.

Address

321 5th Street
908 8th Street
1266 Wilson Ave.SW
218 10th NW
110½ South Court St.
576 Central Ave.
1827 Boone Street
613 S. Second St.
1815 Des Moines
243 Duryea Street
P. 0. Box 373
1230 S. 28th Street
520 24th Street
303 S. 21st Street

City

Sioux City, Iowa
Des Moines, Iowa
Cedar Rapids, Iowa
Mason City, Iowa
Ottumwa, Iowa
Dubuque, Iowa
Boone, Iowa
Clinton, Iowa
Burlington, Iowa
Waterloo, Iowa
Ames, Iowa
Fort Dodge, Iowa
Rock Island, Illinois
Centerville, Iowa

CEMENT FINISHERS

USUAL DUTIES

The apprentice cement finisher will work under close supervision of a journeyman cement finisher for the purpose of: (1) finishing the exposed concrete surfaces on many types of construction projects-patios, floors, sidewalks, dams, highways and airport runways; (2) pouring of concrete mixture and leveling the surface with a "straight-edge"; (3) working with a "float" and other hand tools to fill depressions and remove high spots and drawing cement to the surface of the mixture in preparation for final finishing operations.

QUALIFICATIONS

Age: 18 - 25

Education: A high school education is not required, but education above grade school level, including mathematics, is needed to understand the classroom instruction. The applicant must be in good physical condition and have manual dexterity, and receive a satisfactory rating by the Joint Apprenticeship Committee.

HOURLY WAGE RATE

\$4.25 - \$4.45

LENGTH OF APPRENTICESHIP

Three years

CONTACT SOURCES - For additional information

<u>Name</u>	Address	City
Erickson, Richard Farrell, Robert E.	1125 Upton 1118 Mulberry	Waterloo, Iowa Des Moines, Iowa

D E C O R A T O R S INTERIOR DESIGNERS

USUAL DUTIES

The apprentice decorators and interior designers will work under close supervision of a journeyman decorator and interior designer for the purpose of: (1) enhancing the attractiveness of homes and other buildings; (2) planning the functional arrangement of interior space and coordinating the selection of furniture, draperies, floor coverings and interior accessories; (3) working on the interiors of residential or commercial structures, including ships and aircrafts; (4) designing stage sets used for motion pictures and television. Interior designers are more concerned than decorators with space planning and other interior design and they often work for clients on large design projects, such as the interior of an entire office building.

QUALIFICATIONS

Education: The minimum educational requirement is completion of either a two or three year course at a recognized art school, or institute specializing in interior decorating and design, or one may pursue a four year college course leading to a Bachelor of Fine Arts Degree with a major in interior design and decoration. Only professionally trained people are accepted for beginning jobs and in most instances, from one to three years of on-the-job training is required before a trainee is considered eligible for advancement to the job of decorator.

HOURLY WAGE RATE

\$2.40 - \$3.37

LENGTH OF APPRENTICESHIP

One to three years

CONTACT SOURCES - For additional information

Name

Address

Blankenship, Chick Clifford, Lyle Hayden, Floyd Newton, Clifford J.

917 - 9th Street 5110 "J" Street, S.W. Cedar Rapids, Iowa 6404 School Street Des Moines, Iowa 2837 E. 4th St.

Sioux City, Iowa Waterloo, Iowa

DENTAL TECHNICIANS

USUAL DUTIES

The apprentice dental technician will work under close supervision of a journeyman dental technician for the purpose of: (1) making artificial dentures, crowns, bridges and other dental and orthodontal appliances; (2) forming models in dental stone from impressions of patient's mouths taken by dentists; (3) making metal castings for dentures, polishing and finishing dentures; (4) constructing metal or porcelain crowns or inlays for partially destroyed teeth, and making appliances to correct such abnormalities as cleft palates.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a staisfactory rating by the Joint Apprenticeship Committee.

HOURLY WAGE RATE

\$2.00 - \$3.75

LENGTH OF APPRENTICESHIP

Three to four years

CONTACT SOURCES - For additional information

<u>Name</u> <u>Address</u> <u>City</u>

Jackson, Albert P. 514 Shops Building Des Moines, Iowa

ELECTRICIANS (CONSTRUCTION)

USUAL DUTIES

The apprentice electrician will work under close supervision of a journeyman electrician for the purpose of:
(1) laying out, assembling, installing and testing electrical fixtures, apparatus, and wiring used in electrical systems on construction projects. These systems are used to provide heat, light, power, air-conditioning, and refrigeration in residences, office buildings, factories, hospitals, schools, etc; (2) installing and connecting electrical machinery, equipment, controls and signal and communications systems.

QUALIFICATIONS

Age: 18 - 24

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Courses in mathematics and physics are desirable and applicants are usually required to take tests to determine their aptitude for the trade.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
	8	\mathbf{ADULT}	YOUTH
N	(Numerical Ability)	31	
S	(Spatial Ability)	100	
	(Finger Dexterity)	85	

HOURLY WAGE RATE

\$4.65 - \$4.85

LENGTH OF APPRENTICESHIP

Four years with 144 hours of related classroom instruction each year.

Name	Address	City
Bachtell, Tom	P. O. Box 283	Burlington, Iowa

ELECTRICIANS (Continued)

Name

Dewald, Glen Hazer, Greg McGinnis, Thomas P. Moen, Al Reeves, Rodney Trave, John Workman, Ralph Yeager, Richard

Address

317 Sixth St. SW 1638 Central Ave. 715 Pacific St. % Dewey Electric 2615 Ingersoll 935 S. E. 14th St. 107 North Moore St. 223 - 18th Street

City

Cedar Rapids, Iowa
Dubuque, Iowa
Sioux City, Iowa
Ventura, Iowa
Des Moines, Iowa
Des Moines, Iowa
Ottumwa, Iowa
Rock Island, Illinois

ELECTRONIC TECHNICIAN (ETC.)

USUAL DUTIES

The apprentice electronic technician will work under close supervision of a journeyman electronic technician for the purpose of: (1) making radios, radar, sonar, telemetering, television and telephones; (2) making industrial and medical measuring, recording, indicating and controlling devices. One might also design navigational equipment, missile and spacecraft guidance and control instruments, electronic computers, and many other types of equipment using vacuum tubes and semi-conductor circuits.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicants should have a sound background in mathematics and science. The majority of programs offered by schools specializing in post-high school technology are two year programs leading to an associate of arts or science degree.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP Cutting Percentile Score

ADULT YOUTH

G(Intelligence) 69
S(Spatial Aptitude) 50
P(Form Perception) 50

HOURLY WAGE RATE

\$3.80 - \$4.40

CONTACT SOURCES - For additional information

Name Address City

Pohl, Clark E. Don's Radios & T. V. Perry, Iowa

FLOOR COVERERS

USUAL DUTIES

The apprentice floor coverer will work under close supervision of a journeyman floor coverer for the purpose of: (1) installing, replacing, and repairing resilient tile, linoleum and other sheet goods, and carpeting on floors in residential, commercial, and industrial buildings; (2) working on wood, concrete, metal and stone floors, both large and small; (3) inspecting to determine whether the floor is ready for the treatment it is going to receive.

QUALIFICATIONS

Age: 17 - 30

Education: High school education is preferred but not required, and the individual must receive a satisfactory rating by the Joint Apprenticeship Committee. Manual abilities are necessary, along with a neat appearance and pleasant business like manner, because the work is performed on the customer's premises.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	Υ(HTUC
G(Intelligence)	40		
N(Numerical Ability)	50		
M(Manual Dexterity)	11		

HOURLY WAGE RATE

\$3.50 - \$4.50

LENGTH OF APPRENTICESHIP - Three to four years

Name	Address	City
Olson, Erling	1815 Des Moines	Burlington, Iowa

GLAZIERS

USUAL DUTIES

The apprentice glazier will work under close supervision of a journeyman glazier for the purpose of: (1) engaging in construction work, cutting, fitting and installing plate glass, ordinary window glass, mirrors, and special items such as leaded glass panels; (2) cutting glass to size or using pre-cut glass.

QUALIFICATIONS

Age: 18

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile Score
	ADULT	YOUTH
G(Intelligence)	40	
S(Spatial Aptitude)	60	
P(Form Perception)	31	

HOURLY WAGE RATE

\$4.10 - \$4.30

LENGTH OF APPRENTICESHIP - Three years

$\underline{\text{Name}}$	Address	City
Holbach, Lewis Miller, W. A.	243 Duryea Street c/oPittsburgh Plate Glass Company	Waterloo, Iowa
*		

INDUSTRIAL FACTORY MACHINE REPAIRMEN - MAINTENANCE MECHANICS

USUAL DUTIES

The apprentice industrial factory machine repairmen and maintenance mechanics will work under close supervision of a journeyman industrial factory machine repairman and maintenance mechanic for the purpose of: (1) keeping machinery and equipment in good operating condition; (2) determining the cause of trouble when breakdowns occur and making necessary repairs; (3) completely or partly disassembling a machine in order to repair and replace defective parts; (4) making necessary mechanical adjustments after the machine is reassembled in order to insure its proper operation; (5) regularly inspecting equipment, oiling and greasing machines and cleaning and repairing parts to prevent trouble which could cause breakdown later.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	itting	Percentile	Score
	ADULT	YC)UTH
G(Intelligence)	16		16
N(Numerical Aptitude)	11]	1
M(Manual Dexterity)	23	2	22

HOURLY WAGE RATE

\$3.00 - \$3.20

LENGTH OF APPRENTICESHIP - Four years

$\underline{\text{Name}}$	Address	City
Ayer, F. M. Bloom, J. R. Kohl, M. B.	Keokuk Public Service Co. 1628 W. 4th Street Clinton Corn Processing	Keokuk, Iowa Davenport, Iowa Clinton, Iowa

LATHERS

USUAL DUTIES

The apprentice lather will work under close supervision of a journeyman lather for the purpose of: Installing the supporting backings on ceilings or walls on which plaster or other materials are applied. These supports are usually metal or large pieces of perforated or unperforated gypsum lath.

QUALIFICATIONS

Age: 16 - 25

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicants must have manual and finger dexterity as well as other qualifications required. Apprentices generally must pass examinations that are given at the end of each six month period.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	11	11
F	(Finger Dexterity)	11	11
M	(Manual Dexterity)	16	16

HOURLY WAGE RATE

\$4.50 - \$4.70

LENGTH OF APPRENTICESHIP

Two years

<u>Name</u>	Address	City
Farrell, Robert E.	1118 Mulberry	Des Moines, Iowa

MACHINISTS (FOUNDRY)

USUAL DUTIES

The apprentice foundry machinist learns to: (1)make castings of iron and steel; (2) produce gray and ductile iron castings in ferrous foundries. Those apprentices who work in a non-ferrous foundry learn to make brass, bronze, aluminum, magnesium and zinc castings.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant should be mechanically inclined and temperamentally suited to do highly accurate work that requires both concentration and physical effort. Courses in mathematics and physics and some knowledge of electronics and hydraulics may be helpful both during and after apprenticeship training.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	50	
S	(Spatial Aptitude)	50	
M	(Manual Dexterity)	31	

HOURLY WAGE RATE

\$ 3.25 - \$ 3.45

LENGTH OF APPRENTICESHIP

Four years

CONTACT SOURCES - For additional information

Name
Address
City
Bunn, George W. John Deere Waterloo
Tractor Works
Waterloo, Iowa

MECHANICAL AND STRUCTURAL DRAFTSMEN

USUAL DUTIES

The apprentice mechanical and structural draftsman will work under close supervision of a journeyman mechanical and structural draftsman for the purpose of: (1) making detailed plans, giving exact dimensions and specifications for objects such as space capsule, electric iron, television sets, radios, etc; (2) translating the ideas, rough sketches, specifications and calculations of engineers, architects and designers into working plans which are used by skilled craftsmen in making a product; (3) calculating the strength, reliability and cost of materials; (4) describing in their drawings and specifications exactly what materials and processes workers are to use on a particular job.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant should have had courses in mathematics and physical science, as well as mechanical drawing and drafting. Those with only high school drafting start out as tracers; those with post-high school technical training can often qualify as junior draftsmen. A draftsman must have the ability to visualize objects in three dimensions and do freechand drawing.

HOURLY WAGE RATE

\$3.25 - \$3.50

LENGTH OF APPRENTICESHIP - Three to four years

Name	Address	City
Hartl, L. J.	Stanley Building	Muscatine, Iowa
Mekemson, G. E.	301 Avenue "H"	Fort Madison, Iowa
Miller, Roy	525 East 18th Street	Cedar Falls, Iowa

M E T A L L U R G I S T IN IRON AND STEEL INDUSTRY

USUAL DUTIES

The apprentice metallurgist will work under close supervision of a journeyman metallurgist for the purpose of: (1) designing constructing and operating of mill machinery and material handling equipment; (2) working in operating units where their jobs include determining of roll size and cutout, rolling pressures and operating speeds; (3) testing and controlling the quality of the steel during its manufacture; (4) developing and improving the industry's products and processess through research.

QUALIFICATIONS

Age: 18

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

HOURLY WAGE RATE

\$3.40 - \$3.60

<u>Name</u>	Address	City
Farrell, Robert Miller, Duane L. Peterson, Clarence Personnel Director	1118 Mulberry 1002 Commercial St. 4131 Adams St. Eagle Iron Works 129 E. Holcomb	Des Moines, Iowa Waterloo, Iowa Sioux City, Iowa Des Moines, Iowa
Reed, William	1501 E. Aurora	Des Moines, Iowa

MILLWRIGHTS

USUAL DUTIES

The apprentice millwright will work under close supervision of a journeyman millwright for the purpose of: (1) moving and installing heavy industrial machinery and other equipment; (2) taking apart and re-assembling equipment in order to move and/or install it; (3) repairing and maintaining industrial machinery and other equipment, such as conveyors, cranes, hoists, scaffolds, pumps and blowers, in addition to moving and installing equipment.

QUALIFICATIONS

Age: 18 - 26

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. High school courses in science, mathematics, mechanical drawing, and machine shop practive are useful and mechanical aptitude is important, along with strength and agility.

OCCUPATIONAL APTITUDE PATTER (OAP)

OAP	Cutting	Percentile Score
	ADULT	YOUTH
G(Intelligence)	16	16
N(Numerical Abilia	ty) ll	12
M(Manual Dexterity	y) 23	22

HOURLY WAGE RATE

\$3.00 -\$3.20

LENGTH OF APPRENTICESHIP - Four years

Name	Address	City
Boland, C. M. Kuhl, M. B.	112 Wilson Ave. SW Clinton Corn Pro- cessing Company	Cedar Rapids, Iowa Clinton, Iowa
Rickabaugh, Paul E. Runneals, Larry G. Wendland, Leo	P. O. Box 750 200 South 12th Ave. 520 - 24th St.	Davenport, Iowa Marshalltown, Iowa Rock Island, Illinois

MODEL OR INSTRUMENT MAKER

USUAL DUTIES

The apprentice model or instrument maker will work under close supervision of a journeyman model or instrument maker for the purpose of: (1) working closely with engineers and scientists in translating designs and ideas into experimental models, special laboratory equipment and custom instruments; (2) modifying existing instruments for special purposes; (3) constructing experimental devices for regulating heat, measuring distances, recording earthquakes, and controlling industrial processes; (4) specializing in installing electric and electronic instrument components; (5) lubricating metal parts by operating machine tools such as lathes and milling machines by using chisels.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant should have further technical schooling in electricity and electronics, courses in algebra, geometry, trigonometry, science and machine shop work; have a strong interest in mechanical subjects, initiative and resourcefulness, ability to develop original solutions, and considerable pride in creative work.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	YC	DUTH
G(Intelligence)	69		
S(Spatial Aptitud	e) 50		
P(Form Perception) 50		

HOURLY WAGE RATE

\$3.40 - \$3.60

LENGTH OF APPRENTICESHIP - Four or Five years

<u>CONTACT SOURCES</u> - For additional information

Name
Address
City

Doris, S. R. 2734 Hickory Grove Rd. Davenport, Iowa
Kuhl, M. B. Clinton Corn Processing Clinton, Iowa
Company

MOLDER

USUAL DUTIES

The apprentice molder will work under close supervision of a journeyman molder for the purpose of: (1) preparing molds made of specially prepared sand, which contains a hollow space in the shape of the item to be made; (2) making the mold by packing and ramming prepared sand around a pattern-a model of the object to be duplicated-in a molding box called a flash; (3) pouring molten metal into the cavity, which when solidified, forms the casting.

QUALIFICATIONS

Education: An eighth grade education usually is the minimum requirement for apprenticeship. Physical standards are fairly high; good vision is necessary and a high degree of manual dexterity is needed.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	50	
S	(Spatial Aptitude)	50	
F	(Finger Dexterity)	31	

HOURLY WAGE RATE

\$2.70 - \$2.90

LENGTH OF APPRENTICESHIP

Four Years

<u>Name</u>	Address	City
Bloom, J. R.	1628 West Fourth St.	Davenport, Iowa

OPTICIANS

USUAL DUTIES

The apprentice optician will work under close supervision of a journeyman optician for the purpose of: (1) making and fitting eyeglasses; (2) grinding and polishing the lenses to meet the specifications of the prescription and assembling in frames; (3) fitting and adjusting glasses to the customer's requirements; (4) fitting contact lenses.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicant should have a knowledge of physics, algebra, geometry and mechanical drawing.

HOURLY WAGE RATE

\$2.25 - \$4.00

LENGTH OF APPRENTICESHIP - Four to Five years

CONTACT SOURCES - For additional information

Name Address City
Hunter, John 322 Third Ave., S.E. Cedar Rapids, Iowa

PAINTERS AND PAPERHANGERS

USUAL DUTIES

The apprentice painter will work under close supervision of a journeyman painter for preparing the surfaces of buildings and other structures and then applying the necessary finish of either paint, varnish, enamel or lacquer.

The apprentice paperhanger will work under supervision in covering room interiors with paper, fabric, vinyls or other materials.

QUALIFICATIONS

Age: 16 - 25

Education: A high school education is not essential but an applicant must have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicant should have manual dexterity and a discerning color sense and should not be allergic to paint fumes or to the other materials used in these trades—such as varnish, turpentine and lacquer.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	50	4-7
	(Verbal Ability)	50	49
S	(Spatial Aptitude)	31	30

HOURLY WAGE RATE

\$ 4.10 - \$ 4.30

LENGTH OF APPRENTICESHIP

Three years

CONTACT SOURCES - For Additional information

Name	Address	City
Blankenship, Chick	917-19th Street	Sioux City, Iowa
Clifford, Lyle	5110 "J" Street SW	Cedar Rapids, Iowa
Hayden, Floyd	6404 School Street	Des Moines, Iowa
Newton, Clifford J.	2837 E. 4th Street	Waterloo, Iowa

PATTERN MAKER IN FOUNDRY

USUAL DUTIES

The apprentice pattern maker will work under close supervision of a journeyman foundry pattern maker for the purpose of: building patterns used in making molds in which foundry castings are formed. He will also work from blueprints prepared by the engineering department.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant must have a high degree of manual dexterity, the ability to visualize objects in three dimensions, and good trade school courses in patternmaking provide useful preparation for the prospective apprentice.

HOURLY WAGE RATE

\$3.25 - \$4.00

LENGTH OF APPRENTICESHIP

Five years

CONTACT SOURCES - For additional information

<u>Name</u>	Address	City
Bunn, George W.	John Deere Tractor Works	Waterloo, Iowa
Kuhl, M. B.	Clinton Corn Pro-	
Shrewsberry, George S.	cessing Co. 32nd & Jackson	Clinton, Iowa Keokuk, Iowa

PLASTERERS

USUAL DUTIES

The apprentice plasterer will work under close supervision of a journeyman plasterer for the purpose of: (1) applying plaster to interior walls and ceilings to form fireresistant and relatively soundproof surfaces, which then may be decorated; (2) applying stucco to exterior walls and form and cast ornamental designs in plaster.

QUALIFICATIONS

Age: 18-25
Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

HOURLY WAGE RATE

\$4.60 - \$4.80

LENGTH OF APPRENTICESHIP

Three to four years

<u>CONTACT SOURCES</u> - For additional information

<u>Name</u>	Address	City
Netcott, Ralph	108 High Street	Ames, Iowa
Wells, Thomas H.	RFD #6	Ottumwa, Iowa

PLUMBERS AND PIPEFITTERS

USUAL DUTIES

The apprentice plumber and pipefitter will work under close supervision of a journeyman plumber and pipefitter for the purpose of: (1) installing pipe systems that carry water, steam, air and other liquids or gases needed for sanitation, industrial production, or other uses; (2) altering and repairing existing pipe systems and installing plumbing fixtures, appliances and heating and refrigerated units.

QUALIFICATIONS

Age: 16 - 25

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicants should have had courses in mathematics, physics and chemistry; they are often required to take aptitude tests to determine whether they have the high degree of mechanical aptitude required in this field.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
	(Intelligence)	23	
N	(Numerical Ability)	16	
M	(Manual Dexterity)	31	

HOURLY WAGE RATE

\$4.70 - \$4.90; \$4.60 - \$4.80

LENGTH OF APPRENTICESHIP

Five years

CONTACT SOURCES - For additional information

<u>Name</u>	Address	City
Budeslich, Joseph Dahl, Robert H. Davis, James Dochterman, Roger Fisher, Patrick J.	116 North Green St. 302 Washington St. 215 E. 22nd Street 1839-16th Ave. SW 1120 South Avenue	Ottumwa, Iowa Burlington, Iowa Dubuque, Iowa Cedar Rapids, Iowa Fort Dodge, Iowa

Contact Sources (Continued)

Name	Address	City
Furnace, William Lowndes, Robert Murphy, William	1211-23rd Street Local #384, 243	Letts, Iowa Sioux City, Iowa
Reufer, Eugene Seymour, Wilton	Duryea Street 609½ W. 4th St. 124 Washington	Waterloo, Iowa Davenport, Iowa Des Moines, Iowa

PRINTING (PRESSMEN AND ASSISTANTS)

USUAL DUTIES

The apprentice printer (pressman and assistant) will work under close supervision of a journeyman printer for the purpose of: (1) printing or setting type by hand and machine, and assembling it with illustrations in page form in preparation for printing newspapers, advertising materials and books; (2) specializing in setting type by hand (hand compositor) or by machine (type-setting machine operator). The apprentice may also receive instruction in preparing and operating lithographic printing presses.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Companies generally choose apprentices from among press assistants and others already employed in a plant. The applicant must have mechanical aptitude and preparation in chemistry and physics with at least one year of each.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP Cutting Percentile Score ADULT

YOUTH

G (Intelligence) V (Verbal Aptitude)

Q(Clerical Perception) 50

HOURLY WAGE RATE

\$4.20 - \$4.40

LENGTH OF APPRENTICESHIP

Commercial Shops-two years for press assistants, four years for pressmen; five years for newspaper establishments.

CONTACT SOURCES - For additional information

Address City Name Billmyer, William S. 2705 Second Avenue Rock Island, Illinois Rock Island, Illinois Holub, Robert #2 Waverly Drive

PUMP MAINTENANCE MECHANIC IN PETROLEUM REFINING INDUSTRY

USUAL DUTIES

The apprentice pump maintenance mechanic in petroleum refining industry will work under close supervision of a journeyman pump maintenance mechanic for the purpose of maintaining and operating power-driven pumps which circulate petroleum products, chemicals and water through units during processing.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee.

HOURLY WAGE RATE

\$ 3.55 - \$ 3.75

CONTACT SOURCES - For additional information

Name
Address
City
Kuhl, M. B.
Clinton Corn Processing
Company
Clinton, Iowa

USUAL DUTIES

The apprentice refrigerator and air-conditioning fitter will work under close supervision of a journeyman refrigerator and air-conditioning fitter for the purpose of: installing, maintaining, disassembling, cleaning, overhauling, assembling and connecting parts of refrigeration or air conditioning systems.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a staisfactory rating by the Joint Apprenticeship Committee. The applicant should be in good physical condition, have mechanical aptitude and interest in electricity and the ability to handle mathematics, physics, electricity and mechanical drawing.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		\mathbf{ADULT}	YOUTH
G	(Intelligence)	93	
N	(Numerical Ability)	84	
S	(Spatial Aptitude)	84	

HOURLY WAGE RATE

Name

\$3.00 - \$4.50

CONTACT SOURCES - For additional information

Docktormen Bogen 1830 16th Avenue CM Coden Benida Terri

City

Address

Dochterman, Roger 1839 - 16th Avenue SW Cedar Rapids, Iowa

ROOFER

USUAL DUTIES

The apprentice roofer will work under close supervision of a journeyman roofer for the purpose of: (1) applying composition roofing and other materials, such as tile and slate, to the roofs of buildings; (2) waterproofing and damp-proofing walls and other building surfaces.

QUALIFICATIONS

Age: 18

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. The applicant should be in good physical condition and have a good sense of balance.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
	(Intelligence)	1+0	
N	(Numerical Aptitude)	50	
M	(Manual Dexterity)	11	

HOURLY WAGE RATE

\$ 4.15 - \$ 4.35

LENGTH OF APPRENTICESHIP

Three years

CONTACT SOURCES - For additional information

Name	Address	City
Koder, Robert L.	1922 Delaware	Des Moines, Iowa
Riley, James	P. 0. Box 521	Burlington, Iowa

USUAL DUTIES

The apprentice sheet-metal workers or tinsmith will work under close supervision of a journeyman sheet-metal worker or journeyman tinsmith for the purpose of: (1) loading, unloading and cleaning metal; (2) cutting metal to size and shaping it for installation; (3) operating brake, shearing rollers, and other machines; (4) soldering and spot welding.

QUALIFICATIONS

Age: 16 - 23

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Applicant should be in good physical condition and have mechanical aptitude.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile Score
	ADULT	YOUTH
G(Intelligence)	40	
S(Spatial Aptitud	.e) 31	
P(Form Perception	23	

Citv

HOURLY WAGE RATE

Name

\$4.50 - \$4.70

<u>LENGTH OF APPRENTICESHIP</u> - Four years

CONTACT SOURCES - For additional information

Address

	Marian Control of the	
Brockway, Martin Hermann, William Hess, Richard Jorgensen, Phil P. Pauley, John E. Ryan, James Weddell, Robert S.	3261 Court Street Box 519	Burlington, Iowa Des Moines, Iowa Clinton, Iowa Sioux City, Iowa Mason City, Iowa Dubuque, Iowa DeWar, Iowa

STEREOTYPERS AND ELECTROTYPERS

USUAL DUTIES

The apprentice stereotyper and electrotyper will work under close supervision of a journeyman stereotyper and electrotyper for the purpose of: (1) making duplicate press plates of metal, rubber, and plastic for letter press printing; (2) making of plates from the metal type forms prepared in the composing room. Electrotyping and stereotyping are necessary because most volume printing requires the use of duplicate printing plates.

QUALIFICATIONS

Age: 18

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Physical examinations and aptitude tests are given and high school courses should include mechanical training and chemistry.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	<u>Y</u> (DUTH
G(Intelligence)	50		17
S(Spatial Aptitude	31		
F(Finger Dexterity	7) 16		

HOURLY WAGE RATE

\$4.10 - \$4.30

LENGTH OF APPRENTICESHIP - Three to four years

<u>CONTACT SOURCES</u> - For additional information

$\underline{\text{Name}}$	Address	City
Bickel, Hilary G.	814 Carroll St.	Keokuk, Iowa
Bishop, John	800 S. Main St.	Burlington, Iowa

T. V. AND RADIO REPAIRMEN

USUAL DUTIES

The apprentice T. V. and radio repairman will work under close supervision of a journeyman T. V. and radio repairman for the purpose of: (1) testing tubes; (2) installing antennas and equipment, adjusting and repairing parts of radios, television receivers, public address systems and other electronic devices.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive satisfactory rating by the Joint Apprenticeship Committee. A good background in mathematics and physics is needed. The applicant must have the ability to manipulate small parts and tools, have good hand-eye coordination, good hearing and eyesight and color vision.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	YC)UTH
N(Numerical Ability	$\frac{1}{31}$	-	
S(Spatial Aptitude)	50		
F(Finger Dexterity)	23		

HOURLY WAGE RATE

\$1.50 - \$2.13

LENGTH OF APPRENTICESHIP - One year

CONTACT SOURCES - For additional information

Name Address City
Vilimek, Ed 2409 University Des Moines, Iowa

TILE SETTER, TERRAZZO WORKER AND MARBLE SETTER

USUAL DUTIES

The apprentice tile setter learns to attach tile on walls, floors or ceilings, according to blueprints or other instructions. He will also, under supervision, learn to lay tile floors by first pouring the concrete subfloor.

The apprentice terrazzo worker learns to lay a mixture of base epox or latex and use an electric-powered grinding machine for polishing the surface

QUALIFICATIONS

Age: 17 - 22

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Good physical condition and manual dexterity are important assets and the applicant should have an eye for quickly determining proper alinements of tile, terrazzo and marble, and have a good sense of color harmony.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	40	
N	(Numerical Ability)	50	
M	(Manual Dexterity)	11	

HOURLY WATE RATE

\$ 4.45 - \$ 4.65

LENGTH OF APPRENTICESHIP

Three years

CONTACT SOURCES - For additional information

Name		Address	City
TILE SETT	ERS		

Baker, Gerald E. 2906 "C" Ave. NE Cedar Rapids, Iowa

CONTACT SOURCES (Tile setters) Continued

Name	Address	City
Bane, Orran H. Jr. Montgomery, Harlan H.	472 Loma Street 434 Commerce Building	Waterloo, Iowa Sioux City, Iowa
MARBLE SETTERS		
Boucher, Lester	2430 7th Street	Sioux City, Iowa
TERRAZZO WORKERS		
Montgomery, Harlan H.	434 Commerce Bldg.	Sioux City, Iowa



TOOL AND DIE MAKERS

USUAL DUTIES

The apprentice tool and die maker will work under close supervision of a journeyman tool and die maker for the purpose of: (1) specializing in jigs and gauges and other measuring devices that are used in manufacturing precision metal parts; (2) constructing metal die forms which are used in stamping and forging operations to shape metal; (3) making metal molds used in die-casting and molding plastics; (4) repairing dies, gauges and jigs.

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. A test may be administered to determine the applicants mechanical aptitude and ability in mathematics. Other qualities for the job are: (1) a good working knowledge of mathematics and physics; (2) considerable mechanical ability and figger dexterity; (3) a liking for painstaking work.

OCCUPATIONAL APTITUDE PATTERN (OAP)

	OAP	Cutting Percentile	Score
		ADULT	YOUTH
G	(Intelligence)	40	
S	(Spatial Aptitude)	61	
P	(Form Perception)	31	

HOURLY WAGE RATE

Name

\$ 4.60 - \$ 4.90

LENGTH OF APPRENTICESHIP

Four or Five years

CONTACT SOURCES - For additional information

Bunn, George W.	John Deere Waterloo	
	Tractor Works	Waterloo, Iowa
Crowe, Robert C.	P. 0. Box 561	Burlington, Iowa

City

Address

Name

Docken, F. L. Doris, S. R. Ehlers, Verne Etten, Robert D. Fahy, Robert F.

Garlick, Max H.
Gilbertson, Knute A.
Herrick, Keith W.
Lading, David

Mekemson, G. E.

Miller, Roy
Parks, Carl B.
Richards, Robert F.
Schlitz, W. J.
Shrewsberry, George S.
Stellman, Steward
Storlie, Lee
Swisher, C. F.
Uchtorff, Alfred E.
VanDellen, Lubbert H.
Warywods, Fred
Williams, Robert

301 Avenue "H"
525 E. 18th Stree
P. O. Box 690
736 Federal
32nd and Jackson
1105 Maple
Deco Products Con
35th & Elm Street
1833 West Street
111 Main Street
101 7th Street
3811 McDonald

Address

Maytag Company 2734 Hickory Grove Rd. 2611 State Street 338 Rock Island M. A. Ford Manufacturing 1545 Rockingham Road Square "D"Company 300 Airport Road P. O. Box 311 Deluxe Products, Division of Walker Manufacturing 301 Avenue "H" 525 E. 18th Street P. O. Box 612 P. O. Box 690 736 Federal 1105 Maple Deco Products Company 35th & Elm Streets 1833 West Street 111 Main Street 101 7th Street 3811 McDonald

City

Newton, Iowa Davenport, Iowa Bettendorf, Iowa Waterloo, Iowa Davenport, Iowa

Cedar Rapids, Iowa Ames, Iowa Muscatine, Iowa

Lake Mills, Iowa
Fort Madison, Iowa
Cedar Falls, Iowa
Dubuque, Iowa
Davenport, Iowa
Davenport, Iowa
Keokuk, Iowa
West Des Moines, Iowa
Decorah, Iowa
Bettendorf, Iowa
Davenport, Iowa
Pella, Iowa
West Des Moines, Iowa
Des Moines, Iowa
Des Moines, Iowa

TRUCK AND BUS MECHANICS

USUAL DUTIES

The apprentice bus and truck mechanic will work under close supervision of a journeyman truck and bus mechanic for the purpose of: (1) keeping trucks and buses in good running condition; (2) keeping large inter-city, medium and small trucks used in local hauling in good running condition; (3) repairing heavy trucks used on construction and mining sites. The bus mechanics maintaining a variety of buses, ranging from small ones used in local transit to large trans-continental buses. In trucks and buses the engines are large transmissions and differentials complex, having air-brakes which are different than in automobiles.

QUALIFICATIONS

Age: 18
Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Where duties include the driving of trucks, applicants shall be 21 years of age and be able to obtain a state chaffeur's license. Practical experience in automobile repair, science, and mathematics are helpful.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	Y(DUTH
G(Intelligence)	40		38
S(Spatial Aptitud	le) 23		22
F(Finger Dexterit	(y) 11		10

HOURLY WAGE RATE

\$2.70 - \$2.90

LENGTH OF APPRENTICESHIP - Six months to one year

<u>CONTACT SOURCES</u> - For additional information

Name
Address
City

Harlan, E. W. c/o Bruce Motor Freight Des Moines, Iowa
1914 E. Euclid

TYPOGRAPHICAL COMPOSITOR

USUAL DUTIES

The apprentice typographical compositor will work under close supervision of a journeyman typographical compositor for the purpose of: (1) setting of type requiring very fine composition, for advertising copy and small jobs where it would be impractical to set the type by machine; (2) The hand compositor reads from the manuscript copy and first sets each line of type in a "composing stock", letter by letter and line by line. He also slides the completed lines of the full stock onto a shallow metal tray called a "gallery".

QUALIFICATIONS

Education: Possess a high school diploma or have met the requirements for a high school equivalency certificate and receive a satisfactory rating by the Joint Apprenticeship Committee. Qualifications which are important are: English - especially spelling and Mathematics, printing and typing courses in vocational or high school; interest in electronics and photography; artistic ability in layouts.

OCCUPATIONAL APTITUDE PATTERN (OAP)

OAP	Cutting	Percentile	Score
	ADULT	<u>Y</u> (DUTH
G(Intelligence)	40		
V(Verbal Aptitude)	31		
Q(Clerical Perceptio	n) 50		

HOURLY WAGE RATE

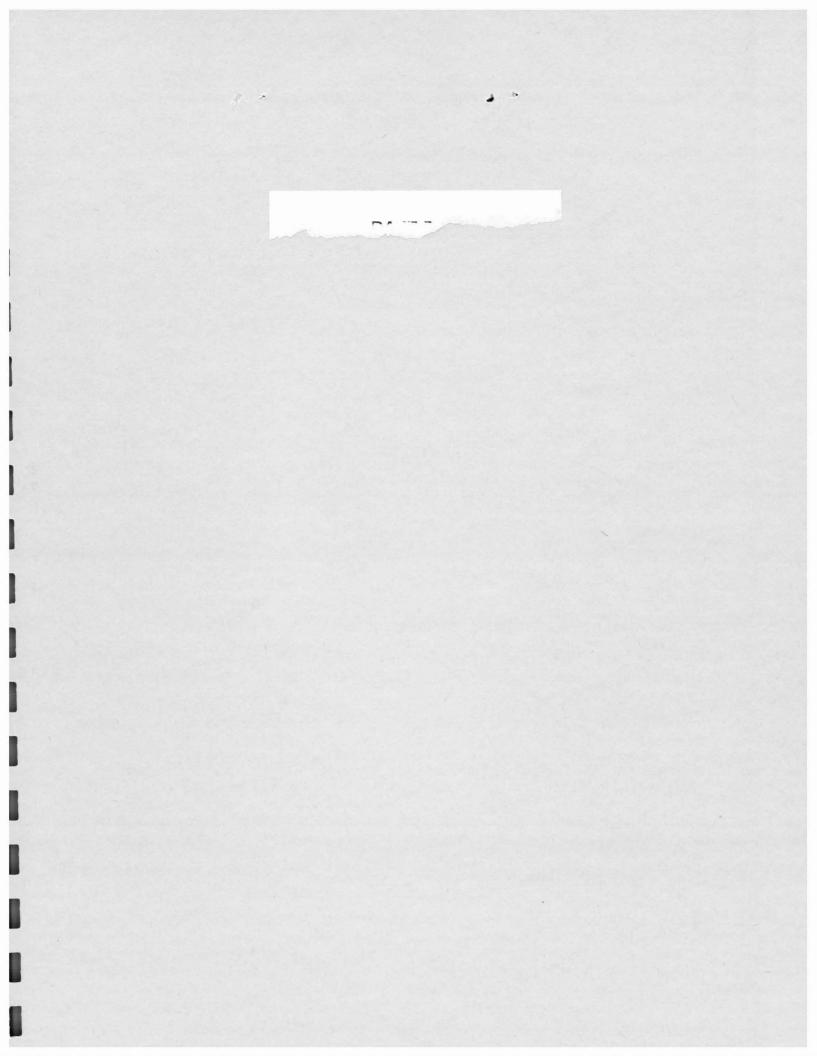
\$3.75 - \$3.95

<u>LENGTH OF APPRENTICESHIP</u> - Six years of progressively advanced training, supplemented by classroom instruction or correspondence courses.

CONTACT SOURCES - For additional information

Name Address City

Billmyer, William S. 1705 Second Avenue Rock Island, Illinois



3 1723 02093 3966