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ABSTRACT

The United States Training and Employment Service General Aptitude Test Battery (GATB), first published in 1947, has been included in a continuing program of research to validate the tests against success in many different occupations. The GATB consists of 12 tests which measure nine aptitudes: General Learning Ability; Verbal Aptitude; Numerical Aptitude; Spatial Aptitude; Form Perception; Clerical Perception; Motor Coordination; Finger Dexterity; and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, and a standard deviation of 20. Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, when combined, predict job performance. Cutting scores are set only for those aptitudes which aid in predicting the performance of the job duties of the experimental sample. The GATB norms described are appropriate only for jobs with content similar to that shown in the job description presented in this report. A description of the validation sample is included.

{AG}

May 1967

United States Employment Service Test Research Report

S-122 S-122

ED 061327

TM 001 455

Development of USES Aptitude Test Battery

for

Cannery Worker

(can. & preserv.) 529.886

Cutter, Hand

(can. & preserv.) 529.887

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U.S. DEPARTMENT OF LABOR

MANPOWER ADMINISTRATION

BUREAU OF EMPLOYMENT SECURITY

Washington, D.C., 20210

Technical Report on Development of USES Aptitude Test Battery
For

Cannery Worker (can. & preserv.) 529.886

Cutter, Hand (can. & preserv.) 529.887

S-122

**U. S. Employment Service
in Cooperation with
California, Pennsylvania, Washington, and
Wisconsin State Employment Services**

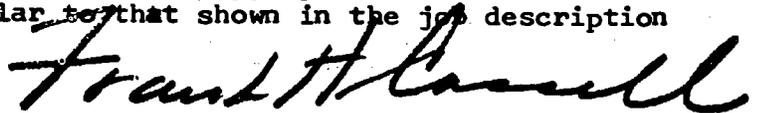
May 1967

FOREWORD

The United States Employment Service General Aptitude Test Battery (GATB) was first published in 1947. Since that time the GATB has been included in a continuing program of research to validate the tests against success in many different occupations. Because of its extensive research base the GATB has come to be recognized as the best validated multiple aptitude test battery in existence for use in vocational guidance.

The GATB consists of 12 tests which measure 9 aptitudes: General Learning Ability, Verbal Aptitude, Numerical Aptitude, Spatial Aptitude, Form Perception, Clerical Perception, Motor Coordination, Finger Dexterity, and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, with a standard deviation of 20.

Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, in combination, predict job performance. For any given occupation, cutting scores are set only for those aptitudes which contribute to the prediction of performance of the job duties of the experimental sample. It is important to recognize that another job might have the same job title but the job content might not be similar. The GATB norms described in this report are appropriate for use only for jobs with content similar to that shown in the job description included in this report.



Frank H. Cassell, Director
U. S. Employment Service

GATB Study #2171C, 2102,
2103, 2143C, 2158 and
2582

DEVELOPMENT OF USES APTITUDE TEST BATTERY

For

Cannery Worker (can. & preserv.) 529.886

Cutter, Hand (can. & preserv.) 529.887

S-122

This report describes research undertaken for the purpose of validating and cross-validating General Aptitude Test Battery (GATB) norms for the occupations in the canning and preserving industry listed above. The following norms were established:

| GATB Aptitudes | Minimum Acceptable GATB, B-1002 Scores |
|------------------------|---|
| K - Motor Coordination | 85 |
| F - Finger Dexterity | 75 |
| M - Manual Dexterity | 80 |

RESEARCH SUMMARY - VALIDATION SAMPLE

Validation Sample 1:

141 female workers employed as Sorters in Wisconsin.

Validation Sample 2:

82 female workers employed as Trimmers in Wisconsin.

Validation Sample 3:

53 female workers employed as Cutters, Hand in Pennsylvania.

Validation Sample 4:

51 female workers employed as Cutters, Hand in Pennsylvania.

Validation Sample 5:

50 female workers employed as Cannery Workers, Cutters, Hand; Sorters; and Trimmers in California.

Criterion:

Supervisory ratings for samples 1, 2, 4, and 5. Production records for sample 3.

Design:

Concurrent (test and criterion data were collected at approximately the same time).

Minimum aptitude requirements were determined on the basis of a job analysis and statistical analyses of aptitude mean scores, standard deviations, and selective efficiencies.

Concurrent Validity:

Phi Coefficient = .35 ($P/2 < .0005$)

Effectiveness of Norms:

Only 73% of the non-test-selected workers used for this study were good workers; if the workers had been test-selected with the S-122 norms, 86% would have been good workers. 27% of the non-test-selected workers used for this study were poor workers; if the workers had been test-selected with the S-122 norms, only 14% would have been poor workers. The effectiveness of the norms is shown graphically in Table 1:

TABLE 1

Effectiveness of Norms

| | Without Tests | With Tests |
|--------------|---------------|------------|
| Good Workers | 73% | 86% |
| Poor Workers | 27% | 14% |

VALIDATION SAMPLE DESCRIPTION

Size:

N=377

Occupational Status:

Employed workers

Work Setting:

Workers were employed at several canning companies in Wisconsin, Pennsylvania, and California.

Employer Selection Requirements:

Age: No requirement (18-45 range preferred for sample 5).

Education: Ability to read, write, and speak English.

Experience: No requirement.

Tests: Vision tests used for sample 5.

Other: Work application or personal interview.

Principal Activities:

The work performed by each worker in the occupations is comparable to that described in the job descriptions on the Fact Sheet.

Minimum Experience:

All workers had completed the on-the-job training periods necessary to become proficient in the occupations.

TABLE 2A

Means (M), Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations (Corrected for Broad Categories) with the Criterion (c^r) for Age, Education, and Experience N = 141

Sample 1
Sorter, 529.886

| | M | SD | Range | c^r |
|----------------------|------|------|-------|-------|
| Age (years) | 41.5 | 12.2 | 17-59 | .014 |
| Education (years) | 9.0 | 2.3 | 5-16 | .132 |
| Experience (seasons) | 3.7 | 3.6 | 1-23 | -.071 |

TABLE 2B

Means (M), Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations (Corrected for Broad Categories) with the Criterion (c^r) for Age, Education, and Experience N = 82

Sample 2
Trimmer, 529.886

| | M | SD | Range | c^r |
|----------------------|------|------|-------|-------|
| Age (years) | 42.9 | 11.9 | 16-59 | -.059 |
| Education (years) | 9.0 | 2.3 | 5-14 | .007 |
| Experience (seasons) | 3.3 | 2.4 | 1-10 | .085 |

TABLE 2C

Means (M), Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations (Corrected for Broad Categories) with the Criterion (c^r) for Age, Education, and Experience N = 53

Sample 3
Cutter, Hand, 529.887

| | M | SD | Range | c^r |
|---------------------|------|------|--------|-------|
| Age (years) | 31.5 | 8.1 | 19- 50 | -.192 |
| Education (years) | 8.7 | 1.8 | 6- 12 | -.123 |
| Experience (months) | 65.8 | 39.8 | 4-144 | .238 |

TABLE 2D

Means (M), Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations (Corrected for Broad Categories) with the Criterion (c^r) for Age, Education, and Experience N = 51

Sample 4
Cutter, Hand, 529.887

| | M | SD | Range | c^r |
|---------------------|------|------|--------|-------|
| Age (years) | 36.8 | 8.9 | 18- 50 | .032 |
| Education (years) | 9.1 | 1.7 | 6- 13 | .186 |
| Experience (months) | 43.6 | 40.6 | 1-192 | .168 |

TABLE 2E

Means (M), Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education, and Experience N = 50

Sample 5
Cannery Worker, 529.886
Cutter, Hand, 529.887
Sorter, 529.886
Trimmer, 529.886

| | M | SD | Range | r |
|---------------------|------|------|--------|-------|
| Age (years) | 34.1 | 6.4 | 20- 45 | -.128 |
| Education (years) | 9.8 | 2.1 | 6- 16 | -.021 |
| Experience (months) | 38.0 | 29.8 | 2-108 | .332* |

* Significant at the .05 level

TABLE 2F

Means (M), Standard Deviations (SD), and Ranges for Age and Education N = 377

Combined Sample ¹

| | M | SD | Range |
|-------------------|------|------|-------|
| Age (years) | 38.8 | 11.4 | 16-59 |
| Education (years) | 9.1 | 2.2 | 5-16 |

EXPERIMENTAL TEST BATTERY

All the tests of the GATB, B-1002A, were administered to each sample during the period April 1955 to January 1957.

CRITERION

The criterion consisted of supervisory ratings in broad categories made by the plant supervisor or personnel manager for samples 1, 2, and 4. Production records were the criterion for Sample 3, and rank order ratings by two supervisors were the criterion for Sample 5.

Criterion Dichotomy:

The criterion distribution was dichotomized into high and low groups by placing 27% of the sample in the low group to correspond with the percentage of workers considered to be doing marginal or unsatisfactory work. Workers in the high criterion group were designated as "good workers" and those in the low group as "poor workers."

APTITUDES CONSIDERED FOR INCLUSION IN THE NORMS

Aptitudes were selected for tryout in the norms on the basis of a qualitative analysis of job duties involved and statistical analyses of test and criterion data. Tables 3, 4, and 5 (A-F) show the results of the qualitative and statistical analyses.

¹No experience data is shown because Samples 1 and 2 reported experience in terms of seasons rather than months.

TABLE 3 (A-F)

Qualitative Analysis
A-B Sorter and Trimmer (Samples 1 & 2)

| Aptitude | Rationale |
|------------------------|--|
| P - Form Perception | Required in recognizing defective ears of corn and in cutting out the defective parts; also required in detecting discolored and blemished peas and foreign matter. |
| K - Motor Coordination | Required in placing tips of corn rapidly into slot of trimming machine and in picking up as many discolored and blemished peas and foreign matter as quickly as possible as they pass by on a belt line. |
| M - Manual Dexterity | Required in placing ears of corn in trimming machine, in cutting out defective parts with a knife, and in picking out foreign matter and discolored and blemished peas. |

C-D Cutter, Hand (Samples 3 & 4)

| Aptitude | Rationale |
|------------------------|---|
| K - Motor Coordination | Required for cutting tops and bottoms and removing inner skin from onions. |
| F - Finger Dexterity | Required for picking up vegetables for inspection, breaking tips from stringless beans and cutting out decayed or spotted parts of vegetables. |
| M - Manual Dexterity | Required for placing buckets and pans on conveyor belt, sliding pans containing vegetables from conveyor belt, and removing empty buckets from overhead conveyor. |

E. Cannery Worker; Cutter, Hand; Sorter;
and Trimmer (Sample 5)

| Aptitude | Rationale |
|-------------------------------|---|
| K - Motor Coordination | Required for working rapidly with both hands simultaneously in trimming, sorting, packing, and check weighing vegetables and fruit. |
| N - Manual Dexterity | Required for grasping, turning, moving, and placing vegetables and fruit, and in trimming, sorting, packing, and weighing. |

TABLE 4 (A-F)

Means (M), Standard Deviations (SD), and Pearson Product-Moment Correlations with the Criterion (r) or (c^r)² for the Aptitudes of the GATB

A. Sorter N = 141 (Sample 1)

| Aptitude | Mean | SD | c ^r |
|------------------------------|------|------|----------------|
| G - General Learning Ability | 89.0 | 18.6 | .176* |
| V - Verbal Aptitude | 90.6 | 17.8 | .187* |
| N - Numerical Aptitude | 87.0 | 20.6 | .215* |
| S - Spatial Aptitude | 91.1 | 19.5 | .184* |
| P - Form Perception | 88.4 | 23.0 | .177* |
| Q - Clerical Perception | 94.3 | 16.5 | .224** |
| K - Motor Coordination | 97.0 | 15.9 | .500** |
| F - Finger Dexterity | 93.5 | 21.8 | .286** |
| M - Manual Dexterity | 97.0 | 21.8 | .449** |

B. Trimmer N = 82 (Sample 2)

| Aptitude | Mean | SD | c ^r |
|------------------------------|------|------|----------------|
| G - General Learning Ability | 84.6 | 17.0 | .062 |
| V - Verbal Aptitude | 87.3 | 17.1 | .138 |
| N - Numerical Aptitude | 83.0 | 18.8 | .058 |
| S - Spatial Aptitude | 86.2 | 16.0 | .054 |
| P - Form Perception | 83.0 | 20.0 | .157 |
| Q - Clerical Perception | 90.4 | 14.3 | .254* |
| K - Motor Coordination | 93.0 | 16.5 | .464** |
| F - Finger Dexterity | 90.5 | 21.6 | .204 |
| M - Manual Dexterity | 90.8 | 20.2 | .469** |

*Significant at the .05 level
**Significant at the .01 level

C. Cutter, Hand, N = 53 (Sample 3)

| Aptitude | Mean | SD | c ^r |
|------------------------------|------|------|----------------|
| G - General Learning Ability | 86.6 | 12.9 | -.011 |
| V - Verbal Aptitude | 85.5 | 11.5 | .056 |
| N - Numerical Aptitude | 90.5 | 16.2 | .158 |
| S - Spatial Aptitude | 82.5 | 13.0 | -.093 |
| P - Form Perception | 89.1 | 18.0 | .200 |
| Q - Clerical Perception | 95.3 | 14.1 | .156 |
| K - Motor Coordination | 90.9 | 14.6 | .215 |
| F - Finger Dexterity | 92.5 | 20.5 | .404** |
| M - Manual Dexterity | 97.0 | 19.0 | .366** |

D. Cutter, Hand, N = 51 (Sample 4)

| Aptitude | Mean | SD | c ^r |
|------------------------------|-------|------|----------------|
| G - General Learning Ability | 82.5 | 18.6 | .151 |
| V - Verbal Aptitude | 85.8 | 15.9 | .083 |
| N - Numerical Aptitude | 82.9 | 22.3 | .259 |
| S - Spatial Aptitude | 80.8 | 17.3 | .008 |
| P - Form Perception | 83.9 | 20.6 | .263 |
| Q - Clerical Perception | 91.1 | 15.7 | .189 |
| K - Motor Coordination | 95.6 | 18.6 | .566** |
| F - Finger Dexterity | 94.4 | 22.0 | .086 |
| M - Manual Dexterity | 109.6 | 21.8 | .525** |

E. Cannery Worker; Cutter, Hand; Sorter; and
Trimmer N = 50 (Sample 5)

| Aptitude | Mean | SD | c ^r |
|------------------------------|-------|------|----------------|
| G - General Learning Ability | 85.1 | 13.2 | .054 |
| V - Verbal Aptitude | 87.8 | 11.9 | .081 |
| N - Numerical Aptitude | 81.5 | 15.4 | -.018 |
| S - Spatial Aptitude | 88.3 | 13.6 | .056 |
| P - Form Perception | 93.0 | 17.7 | -.134 |
| Q - Clerical Perception | 90.5 | 14.0 | .101 |
| K - Motor Coordination | 109.1 | 19.2 | .468** |
| F - Finger Dexterity | 103.6 | 20.3 | .289* |
| M - Manual Dexterity | 117.6 | 20.3 | .394** |

F. Combined Sample N = 377

| Aptitude | Mean | SD |
|------------------------------|-------|------|
| G - General Learning Ability | 86.3 | 17.1 |
| V - Verbal Aptitude | 88.1 | 16.0 |
| N - Numerical Aptitude | 85.4 | 19.5 |
| S - Spatial Aptitude | 87.1 | 17.4 |
| P - Form Perception | 87.3 | 21.0 |
| Q - Clerical Perception | 92.7 | 15.4 |
| K - Motor Coordination | 96.7 | 17.6 |
| F - Finger Dexterity | 94.1 | 21.8 |
| M - Manual Dexterity | 100.1 | 22.6 |

*Significant at the .05 level

**Significant at the .01 level

TABLE 5

Summary of Qualitative and Quantitative Data

A. Sorter (Sample 1)

| Type of Evidence | Aptitudes | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|
| | G | V | N | S | P | Q | K | F | M |
| Job Analysis Data | | | | | | | | | |
| <u>Important</u> | | | | | X | | X | | X |
| Irrelevant | | | | | | | | | |
| Relatively High Mean | | | | | | X | X | | X |
| Relatively Low Standard Dev. | | | | | | | | | |
| Significant Correlation with Criterion | X | X | X | X | X | X | X | X | X |
| Aptitudes to be Considered for Trial Norms | G | V | N | S | P | Q | K | F | M |

B. Trimmer (Sample 2)

| Type of Evidence | Aptitudes | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|
| | G | V | N | S | P | Q | K | F | M |
| Job Analysis Data | | | | | | | | | |
| <u>Important</u> | | | | | X | | X | | X |
| Irrelevant | | | | | | | | | |
| Relatively High Mean | | | | | | X | X | X | X |
| Relatively Low Standard Dev. | | | | | | X | | | |
| Significant Correlation with Criterion | | | | | | X | X | | X |
| Aptitudes to be Considered for Trial Norms | | | | | | Q | K | | M |

C. Cutter, Hand (Sample 3)

| Type of Evidence | Aptitudes | | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|--|
| | G | V | N | S | P | Q | K | F | M | |
| Job Analysis Data | | | | | | | | | | |
| <u>Important</u> | | | | | | | X | X | X | |
| Irrelevant | | | | | | | | | | |
| Relatively High Mean | | | | | | X | | X | X | |
| Relatively Low Standard Dev. | X | X | | X | | X | X | | | |
| Significant Correlation with Criterion | | | | | | | | X | X | |
| Aptitudes to be Considered for Trial/Norms | | | | | | Q | K | F | M | |

D. Cutter, Hand (Sample 4)

| Type of Evidence | Aptitudes | | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|--|
| | G | V | N | S | P | Q | K | F | M | |
| Job Analysis Data | | | | | | | | | | |
| <u>Important</u> | | | | | | | X | X | X | |
| Irrelevant | | | | | | | | | | |
| Relatively High Mean | | | | | | | X | X | X | |
| Relatively Low Standard Dev. | | | | | | | | | | |
| Significant Correlation with Criterion | | | | | | | X | | X | |
| Aptitudes to be Considered for Trial Norms | | | | | | | K | F | M | |

E. Cannery Worker; Cutter, Hand; Sorter
and Trimmer (Sample 5)

| Type of Evidence | Aptitudes | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|
| | G | V | N | S | P | Q | K | F | M |
| Job Analysis Data | | | | | | | | | |
| <u>Important</u> | | | | | | | X | | X |
| Irrelevant | | | | | | | | | |
| Relatively High Mean | | | | | | | X | X | X |
| Relatively Low Standard Dev. | X | X | | X | | X | | | |
| Significant Correlation with Criterion | | | | | | | X | X | X |
| Aptitudes to be Considered for Trial Norms | | | | | | | K | F | M |

DERIVATION AND VALIDITY OF NORMS

Final norms were derived on the basis of a comparison of the degree to which trial norms consisting of various combinations of aptitudes K, F, and M (Aptitudes considered relevant in at least four of the samples) at trial cutting scores were able to differentiate between the 73% of the sample considered good workers and the 27% of the sample considered poor workers for the five samples. Trial cutting scores at five point intervals approximately one standard deviation below the mean are tried because this will eliminate about 1/3 of the sample with three-aptitude norms. For two-aptitude trial norms, minimum cutting scores slightly higher than one standard deviation below the mean will eliminate about 1/3 of the sample; for four-aptitude trial norms, cutting scores slightly lower than one standard deviation below the mean will eliminate about 1/3 of the sample. The Phi Coefficient was used as a basis for comparing trial norms. Norms of K-85, F-75, and M-80 provided the highest degree of differentiation for the various jobs in the combined sample. The validity of these norms is shown in Table 6 and is indicated by a Phi Coefficient of .35 (statistically significant at the .0005 level).

TABLE 6

Concurrent Validity of Test Norms (Combined Sample)
K-85, F-75, M-80

| | Non-Qualifying Test Scores | Qualifying Test Scores | Total |
|--------------|-------------------------------|---------------------------|-------|
| Good Workers | 82 | 192 | 274 |
| Poor Workers | 71 | 32 | 103 |
| Total | 153 | 224 | 377 |

Phi Coefficient (ϕ) = .35
Significance Level = $P/2 < .0005$

Chi Square (X^2) = 47.2

DETERMINATION OF OCCUPATIONAL APTITUDE PATTERN

The data for this study met the requirements for incorporating the occupations studied into OAP-35 which is shown in Section II of the Manual for the General Aptitude Test Battery. OAP-35 has the following minimum aptitude scores: K-85, F-80, and M-80.

GATB Study #2582

S-122

Trimmer (can. & preserv.) 529.886

Check Study #1 Research Summary

Sample: 81 female workers employed by the Birds Eye Division of General Foods Corporation in Walla Walla, Washington in 1964.

TABLE 7

Means, Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education, Experience, and the Aptitudes of the GATB; N=33 -- Cross-Validation Sample #1

| | Mean | SD | Range | r |
|------------------------------|-------|------|--------|-------|
| Age (years) | 46.8 | 11.7 | 24-65 | .032 |
| Education (years) | 10.3 | 1.9 | 7-14 | -.094 |
| Experience (mos.) | 101.5 | 32.2 | 48-180 | .344 |
| G - General Learning Ability | 94.5 | 18.4 | 64-135 | -.050 |
| V - Verbal Aptitude | 96.7 | 19.5 | 61-135 | -.135 |
| N - Numerical Aptitude | 91.5 | 17.6 | 53-128 | .016 |
| S - Spatial Aptitude | 93.1 | 18.8 | 61-140 | .012 |
| P - Form Perception | 92.9 | 17.7 | 65-126 | .067 |
| Q - Clerical Perception | 95.1 | 16.9 | 63-134 | -.192 |
| K - Motor Coordination | 96.9 | 15.0 | 70-130 | .016 |
| F - Finger Dexterity | 95.4 | 18.6 | 53-135 | -.056 |
| M - Manual Dexterity | 105.9 | 20.0 | 43-143 | .129 |

Criterion:

Supervisory ratings

Design:

Concurrent (test and criterion data were collected at approximately the same time).

Principal Activities:

The job duties for each worker are shown in the Appendix and are comparable to those of the validation sample.

Concurrent Validity:

Phi Coefficient = .37 (P/2 < .025)

Effectiveness of Norms:

Only 67% of the non-test-selected workers used for this study were good workers; if the workers had been test-selected with the S-122 norms, 78% would have been good workers. 33% of the non-test-selected workers used for this study were poor workers; if the workers had been test-selected with the S-122 norms, only 22% would have been poor workers. The effectiveness of the norms when applied to this independent sample is shown graphically in Table 8.

TABLE 8

Effectiveness of Norms

| | Without Tests | With Tests |
|--------------|---------------|------------|
| Good Workers | 67% | 78% |
| Poor Workers | 33% | 22% |

TABLE 9

Concurrent Validity of Test Norms
(K-85, F-75, M-80)
Check Study Sample #1 (Washington)

| | Nonqualifying Test Scores | Qualifying Test Scores | Total |
|--------------|------------------------------|---------------------------|-------|
| Good Workers | 4 | 18 | 22 |
| Poor Workers | 6 | 5 | 11 |
| Total | 10 | 23 | 33 |

Phi Coefficient (ϕ) = .37
Significance Level = $P/2 < .025$

Chi Square (X^2) = 4.6

May 1967

FACT SHEET
(VALIDATION SAMPLE)

Sample 1

Job Title: Sorter (can. & preserv.) 529.886

Job Summary: Inspects peas for impurities prior to canning. Sits on a stool near moving conveyor belt and visually inspects peas as they pass by. Manually spreads and examines peas; removes and discards discolored, blemished or immature peas and any foreign matter.

Sample 2

Job Title: Trimmer (can. & preserv.) 529.886

Job Summary: Trims imperfect tips and defects from ears of corn by hand or by feeding ears into an automatic trimming machine. Picks defective ear from conveyor and pushes tip into trimming machine to depth necessary to trim tip properly. Uses hand knife to cut out defects. Tosses trimmed ears onto conveyor which goes to the corn-cutting machines, and drops rejected ears on another conveyor.

Samples 3 and 4

Job Title: Cutter, Hand (can. & preserv.) 529.887

Job Summary: Cuts or slices vegetables such as onions, beans, and mushrooms into pieces to prepare them for canning and/or preserving. Removes portions of vegetables so that they meet required standards for canning, by using a paring knife to remove tops and bottoms from onions and cut stems from mushrooms. Visually inspects vegetables and cuts off decayed or spotted parts. Performs other tasks as required.

Work Performed: Performs one or more of the operations described below to prepare vegetables for canning and/or preserving.

Takes onion from pan with (gloved) left hand. Cuts top and bottom from onion, using paring knife held in right hand. Places onion in bucket and returns tops and bottoms to pan. Places full bucket and pan on conveyor belt.

Visually inspects vegetables from which skins or outer surfaces have been removed by machine, for decayed or spotted parts as the vegetables move on a conveyor belt. Picks up decayed or spotted vegetables with (gloved) left hand. Cuts out all decayed or spotted parts, using paring knife held in right hand. Breaks tips from stringless beans if machine has failed to cut them. Removes inner skin from onions by pressing between thumb and index finger. Replaces vegetables on conveyor belt.

Picks up several mushrooms in one hand (number depending on size) and, using small paring knife in other hand, cuts mushrooms into pieces, trims out spotty or dirty parts of mushrooms; cuts off thin tips of stems and then cuts stems off close to button. Throws stems and buttons into proper receptacles and then throws selected buttons on a conveyor belt which carries them to proper inspection and packing centers.

Sample 5

Job Titles: Cannery Worker, 529.886
Cutter, Hand, 529.887
Sorter, 529.886
Trimmer, 529.886

Job Summary: Performs any or all of the following tasks preparatory to the freezing of various vegetables and fruits. Trims vegetables by taking them from a conveyor belt, inspecting them for quality and cutting off excess stems and stalks. Sorts vegetables and fruit by removing off-color or defective produce from conveyor. Discards waste in chute. Picks up grade A vegetables from conveyor and packs in cartons. Weighs carton and sets carton on conveyor.

Work Performed: Working rapidly with both hands, trims excess leaves and stalks from vegetables on conveyor belt. Discards waste in chute tosses trimmed pieces onto conveyor. Prepares peaches for freezing. Picks pre-peeled peach from conveyor belt; halves peach by pressing and rotating it against stationary knife; removes pit, quickly lays peach halves on conveyor and drops pit into box. Sorts peaches or vegetables by quickly segregating and removing off-color or defective peaches or vegetables and waste from conveyor belt. Discards waste in waste chute. Packs vegetables by taking cartons from supply on conveyor and rapidly picking grade A vegetables from conveyor belt to pack them in cartons. Discards off-color vegetables and returns full cartons to conveyor. Checks weight of packed cartons. Takes packed carton from conveyor belt; sets carton on scales at side of conveyor. Observes pointer on scales and adds or removes vegetables as necessary for carton to reach specified weight. Bends back one side of lid flap to indicate that weight has been checked and sets carton on conveyor.

Check Study #1 (CROSS-VALIDATION SAMPLE)

Job Title: Trimmer (can. & preserv.) 529.886

Job Summary: Removes defective carrots from moving conveyor and cuts imperfections and defects from them using sharp knife.

Work Performed: Removes defective carrots from moving conveyor and holds in hand or places on cutting board to cut out defects, such as splits, black spots, and rotten sections using a sharp knife.

Drops waste material down one chute and trimmed carrots down another.

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May 1967

FACT SHEET
(VALIDATION SAMPLE)

Sample 1

Job Title: Sorter (can. & preserv.) 529.886

Job Summary: Inspects peas for impurities prior to canning. Sits on a stool near moving conveyor belt and visually inspects peas as they pass by. Manually spreads and examines peas; removes and discards discolored, blemished or immature peas and any foreign matter.

Sample 2

Job Title: Trimmer (can. & preserv.) 529.886

Job Summary: Trims imperfect tips and defects from ears of corn by hand or by feeding ears into an automatic trimming machine. Picks defective ear from conveyor and pushes tip into trimming machine to depth necessary to trim tip properly. Uses hand knife to cut out defects. Tosses trimmed ears onto conveyor which goes to the corn-cutting machines, and drops rejected ears on another conveyor.

Samples 3 and 4

Job Title: Cutter, Hand (can. & preserv.) 529.887

Job Summary: Cuts or slices vegetables such as onions, beans, and mushrooms into pieces to prepare them for canning and/or preserving. Removes portions of vegetables so that they meet required standards for canning, by using a paring knife to remove tops and bottoms from onions and cut stems from mushrooms. Visually inspects vegetables and cuts off decayed or spotted parts. Performs other tasks as required.

Work Performed: Performs one or more of the operations described below to prepare vegetables for canning and/or preserving.

Takes onion from pan with (gloved) left hand. Cuts top and bottom from onion, using paring knife held in right hand. Places onion in bucket and returns tops and bottoms to pan. Places full bucket and pan on conveyor belt.

Visually inspects vegetables from which skins or outer surfaces have been removed by machine, for decayed or spotted parts as the vegetables move on a conveyor belt. Picks up decayed or spotted vegetables with (gloved) left hand. Cuts out all decayed or spotted parts, using paring knife held in right hand. Breaks tips from stringless beans if machine has failed to cut them. Removes inner skin from onions by pressing between thumb and index finger. Replaces vegetables on conveyor belt.

Picks up several mushrooms in one hand (number depending on size) and, using small paring knife in other hand, cuts mushrooms into pieces, trims out spotty or dirty parts of mushrooms; cuts off thin tips of stems and then cuts stems off close to button. Throws stems and buttons into proper receptacles and then throws selected buttons on a conveyor belt which carries them to proper inspection and packing centers.

Sample 5

Job Titles: Cannery Worker, 529.886
Cutter, Hand, 529.887
Sorter, 529.886
Trimmer, 529.886

Job Summary: Performs any or all of the following tasks preparatory to the freezing of various vegetables and fruits. Trims vegetables by taking them from a conveyor belt, inspecting them for quality and cutting off excess stems and stalks. Sorts vegetables and fruit by removing off-color or defective produce from conveyor. Discards waste in chute. Picks up grade A vegetables from conveyor and packs in cartons. Weighs carton and sets carton on conveyor.

Work Performed: Working rapidly with both hands, trims excess leaves and stalks from vegetables on conveyor belt. Discards waste in chute tosses trimmed pieces onto conveyor. Prepares peaches for freezing. Picks pre-peeled peach from conveyor belt; halves peach by pressing and rotating it against stationary knife; removes pit, quickly lays peach halves on conveyor and drops pit into box. Sorts peaches or vegetables by quickly segregating and removing off-color or defective peaches or vegetables and waste from conveyor belt. Discards waste in waste chute. Packs vegetables by taking cartons from supply on conveyor and rapidly picking grade A vegetables from conveyor belt to pack them in cartons. Discards off-color vegetables and returns full cartons to conveyor. Checks weight of packed cartons. Takes packed carton from conveyor belt; sets carton on scales at side of conveyor. observes pointer on scales and adds or removes vegetables as necessary for carton to reach specified weight. Bends back one side of lid flap to indicate that weight has been checked and sets carton on conveyor.

Check Study #1 (CROSS-VALIDATION SAMPLE)

Job Title: Trimmer (can. & preserv.) 529.886

Job Summary: Removes defective carrots from moving conveyor and cuts imperfections and defects from them using sharp knife.

Work Performed: Removes defective carrots from moving conveyor and holds in hand or places on cutting board to cut out defects, such as splits, black spots, and rotten sections using a sharp knife.

Drops waste material down one chute and trimmed carrots down another.

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