The DOT was created by the Employment and Training Administration, and was last updated in 1991. It has been replaced by the O*NET.


PARTS OF THE OCCUPATIONAL DEFINITION

Work is organized in a variety of ways. As a result of technological, economic, and sociological influences, nearly every job in the economy is performed slightly differently from any other job. Every job is also similar to a number of other jobs.

In order to look at the millions of jobs in the U.S. economy in an organized way, the DOT groups jobs into "occupations" based on their similarities and defines the structure and content of all listed occupations. Occupational definitions are the result of comprehensive studies of how similar jobs are performed in establishments across the nation and are composites of data collected from diverse sources. The term "occupation," as used in the DOT, refers to this collective description of a number of individual jobs performed, with minor variations, in many establishments.

There are seven basic parts to an occupational definition. They present data about a job in a systematic fashion. The parts are listed below in the order in which they appear in every definition:

1) The Occupational Code Number
2) The Occupational Title
3) The Industry Designation
4) Alternate Titles (if any)
5) The Body of the Definition
   a) Lead Statement
   b) Task Element Statements
   c) "May" Items
   d) Glossary words
   e) Unbracketed Reference Title
   f) Bracketed Title
5c) May
5d) $T3
5e) COLORIST (profess. & kin.) 022.161-014 when color shade varies from
5e) COLORIST (profess. & kin.) 022.161-014 when color shade varies from
5f) [PRINTING-ROLLER HANDLER (textile) 652.385-010].
5f) [PRINTING-ROLLER HANDLER (textile) 652.385-010].
6) Undefined Related Titles (if any)
7) Definition Trailer

The seven basic parts of a definition are preceded in the following example definition by their identifying number and/or letter and ) symbol as used in the list above. An explanation of each part, preceded by the same identifiers, follows the example.

EXAMPLE DEFINITION

1) 652.382-010 2) CLOTH PRINTER 3) (any industry) 4) alternate titles: printer; printing-machine operator 5) $T1printing rollers,$T1 according to specifications. 5b) Turns screws to align register marks on printing rollers with register marks on machine, using allen wrench. 5b) Sharpens doctor blade, using file and oilstone, and verifies evenness of blade, using straightedge. 5b) Aligns doctor blade against printing roller, using handtools. 5b) Dips color from tubs into color boxes to supply printing rollers. 5b) Scans cloth leaving machine for printing defects, such as smudges, variations in color shades, and designs that are out of register (alignment). 5b) Realigns printing rollers and adjusts position of blanket or back gray cloth to absorb excess color from printing rollers. 5b) Records yardage of cloth printed. 5b) Coordinates printing activities with activities of workers who feed and doff machine and aid in setting up and cleaning machine. 5c) May mix own colors. 5c) May mount printing rollers on machine for change of pattern according to specifications. 5c) May notify COLORIST (profess. & kin.) 022.161-014 when color shade varies from specifications. 5c) May not notify COLORIST (profess. & kin.) 022.161-014 when color shade varies from specifications. 5c) May mix own colors. 5c) May mount printing rollers on machine for change of pattern $T1PRINTING-ROLLER HANDLER (textile) 652.385-010$. 5c) May not notify COLORIST (profess. & kin.) 022.161-014 when color shade varies from specifications. 5c) May mix own colors. 5c) May mount printing rollers on machine for change of pattern $T1PRINTING-ROLLER HANDLER (textile) 652.385-010$. 5c) May not notify COLORIST (profess. & kin.) 022.161-014 when color shade varies from specifications.

1) The Occupational Code Number

The first item in an occupational definition is the 9-digit occupational code (in the preceding example, 652.382-010). In the DOT occupational classification system, each set of three digits in the 9-digit code number has a specific purpose or meaning. Together, they provide a unique identification code for a particular occupation which differentiates it from all others.

The first three digits identify a particular occupational group. All occupations are clustered into one of nine broad “categories” (first digit), such as professional, technical and managerial, or clerical and sales occupations. These categories break down into 83 occupationally specific “divisions” (the first two digits), such as occupations in architecture and engineering within the professional category, or stenography, typing, and related occupations in the clerical and sales category. Divisions, in turn, are divided into small, homogeneous “groups” (the first three digits)-564 such groups are identified in the DOT. The nine primary occupational categories are listed below:

0/1 Professional, Technical, and Managerial Occupations
2 Clerical and Sales Occupations
3 Service Occupations
4 Agricultural, Fishery, Forestry, and Related Occupations
5 Processing Occupations
6 Machine Trades Occupations
7 Benchwork Occupations
8 Structural Work Occupations
9 Miscellaneous Occupations

In the example, the first digit (6) indicates that this particular occupation is found in the category, "Machine Trades Occupations." (For a listing of all occupational categories, divisions, and groups see page xxix.)

The second digit refers to a division within the category. The divisions within the "Machine Trades Occupations" category are as follows:

- 60 Metal Machining Occupations
- 61 Metalworking Occupations, n.e.c.
- 62/63 Mechanics and Machinery Repairers
- 64 Paperworking Occupations
- 65 Printing Occupations
- 66 Wood Machining Occupations
- 67 Occupations in Machining Stone, Clay, Glass, and Related Materials
- 68 Textile Occupations
- 69 Machine Trades Occupations, n.e.c.

Some divisions or groups end in the designation “n.e.c.” (not elsewhere classified). This indicates that the occupations do not logically fit into precisely defined divisions or groups, or that they could fit into two or more of them equally well.

In the example, the second digit (6) locates the occupation in the "Printing Occupations" division.

The third digit defines the occupational group within the division. The groups within the "Printing Occupations" division are as follows:

- 650 Typesetters and Composers
- 651 Printing Press Occupations
- 652 Printing Machine Occupations
- 653 Bookbinding-Machine Operators and Related Occupations
- 654 Typecasters and Related Occupations
- 659 Printing Occupations, n.e.c.

In the example, the third digit (2) locates the occupation in the "Printing Machine Occupations" group.

The middle three digits of the DOT occupational code are the Worker Functions ratings of the tasks performed in the occupation. Every job requires a worker to function to some degree in relation to data, people, and things. A separate digit expresses the worker's relationship to each of these three groups:

<table>
<thead>
<tr>
<th>DATA (4th Digit)</th>
<th>PEOPLE (5th Digit)</th>
<th>THINGS (6th Digit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>1</td>
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<td>5</td>
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<tr>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

As a general rule, Worker Functions involving more complex responsibility and judgment are assigned lower numbers in these three lists while functions which are less complicated have higher numbers. For example, "synthesizing" and "coordinating" data are more complex tasks than "copying" data; "instructing" people involves a broader responsibility than "taking instructions-helping"; and "operating" things is a more complicated task than "handling" things.

The Worker Functions code in the example (382) relates to the middle three digits of the DOT occupational code and has a different meaning and no connection with group code 652 (first three digits).

The Worker Functions code (382) may be found in any occupational group. It signifies that the worker is "compiling" (3) in relation to data; "taking instructions-helping" (8) in relation to people; and "operating- controlling" (2) in relation to things. The Worker Functions code indicates the broadest level of responsibility or judgment required in relation to data, people, or things. It is assumed that, if the job requires it, the worker can generally perform any higher numbered function listed in each of the three categories. (See Appendix B for a more detailed discussion of Worker Functions codes.)

The last three digits of the occupational code number serve to differentiate a particular occupation from all others. A number of occupations may have the same first six digits, but no two can have the same nine digits. If a 6-digit code is applicable to only one occupational title, the final three digits assigned are always 010 (as in the example). If there is more than one occupation with the same first six digits, the final three digits are usually assigned in alphabetical order of titles in multiples of four (010, 014, 018, 022, etc.). If another printing machine occupation had the same six digits as CLOTH PRINTER (any industry) 652.382-010, and began with the letter "D," it would be assigned the occupational code 652.382-014. In order to minimize the number of changes made to the existing occupational classification structure, "new" occupations added to the DOT since the publication of the Fourth Edition have simply been added sequentially following the previous last entry for each of the 6-digit codes. The full nine digits thus provide each occupation with a unique code suitable for computerized operations.

2) The Occupational Title

Immediately following the occupational code in every definition is the occupational base title. The base title is always in upper-case boldface letters. It is the most common type of title found in the DOT, and is the title by which the occupation is known in the majority of establishments in which it was found. In the example, CLOTH PRINTER (any industry) 652.382-010 is a base title.

a) Master Titles

Some titles are classified as master titles. These titles are designed to eliminate unnecessary repetition of tasks common to a large number of occupations. Master titles define the common job tasks having a wide variety of job variables and wide variety of titles. An example is the title "SUPERVISOR (any industry)." Each individual supervisor
occupation has its own separate definition in the DOT describing its unique duties, but at the end of the definition the reader is referred to the master definition; in this case by a sentence reading: "Performs other duties as described under SUPERVISOR (any industry) Master Title". By referring to this master definition, the user will learn about the typical supervisory duties which are commonly performed.

b) Term Titles

Another type of DOT title is a term title. These include occupations with the same title but few common duties. An example of a term definition is:

CONSULTING ENGINEER (profess. & kin.): A term applied to workers who consult with and advise clients on specialized engineering matters in a particular field of endeavor, such as chemical engineering, civil engineering, or mechanical engineering.

Since neither master nor term definitions are occupations, they are not coded in the Occupational Group Arrangement but are found in separate sections of the DOT (see Contents).

There are other major types of titles used in the DOT, including alternate titles and undefined related titles. These are discussed later in this section.

3) Industry Designation

The industry designation is in parentheses immediately following the occupational base title. It often differentiates between two or more occupations with identical titles but different duties. Because of this, it is an integral and inseparable part of any occupational title. An industry designation often tells one or more things about an occupation such as:

- location of the occupation (hotel & rest.; machine shop)
- types of duties associated with the occupation (education; forging)
- products manufactured (optical goods; textile)
- processes used (electroplating; petrol. refin.)
- raw materials used (nonfer. metal; stonework)

While a definition usually receives the designation of the industry or industries in which it occurs, certain occupations occur in a large number of industries. When this happens, the industry assigned is a cross-industry designation. For example, clerical occupations are found in almost every industry. To show the broad, cross-industry nature of clerical occupations, “clerical” is an industry designation in itself. Among other cross-industry designations are: "profess. & kin.", "machine shop", and "woodworking".

Occupations which characteristically occur in nearly all industries, or which occur in a number of industries, but not in most industries and which are not considered to have any particular industrial attachment, are assigned the designation of "any industry." The job title in the example is assigned this designation. It should always be identified as CLOTH PRINTER (any industry) 652.382-010.

In compiling information for the DOT, analysts were not able to study each occupation in all industries where it occurs. The industry designation, therefore, shows in what industries the occupation was studied but does not mean that it may not be found in others. Therefore, industry designations are to be regarded as indicative of industrial location, but not necessarily restrictive.

4) Alternate Titles

An alternate title is a synonym for the base title. It is not as commonly used as the base title. Alternate titles are shown in lower-case letters immediately after the base title and its industrial designation. In the example, two alternate titles are given: "printer" and "printing-machine operator". Alternate titles may not be used by public employment service offices in assigning occupational classifications. Alternate titles are cross-referenced to their base titles in the Alphabetical Index of Occupational Titles. A particular occupation may have a large number of alternate titles or none at all. Alternate titles carry the code numbers and industry designations of the base title.

5) The Body of the Definition

The body of the definition usually consists of two or three main parts: a lead statement, a number of task element statements, and a third part known as a "may" item.

a) The Lead Statement

The first sentence following the industry designation and alternate titles (if any) is the lead statement. It is followed by a colon (:). The lead statement summarizes the entire occupation. It offers essential information such as:

- worker actions
- objective or purpose of the worker actions
- machines, tools, equipment, or work aids used by the worker
- materials used, products made, subject matter dealt with, or services rendered
- instructions followed or judgments made

In the example, the sentence "Sets up and operates machine to print designs on materials, such as cloth, fiberglass, plastics sheeting, coated felt, or oilcloth:" is the lead statement. From it, the user can obtain an overview of the occupation.

b) Task Element Statements

Task element statements indicate the specific tasks the worker performs to accomplish the overall job purpose described in the lead statement. The sentences in the example beginning with "Turns handwheel . . . ", "Turns screws . . . ", "Sharpens doctor . . . ", "Aligns doctor . . . ", "Dips color . . . ", etc. are all task element statements. They indicate how the worker actually carries out the job duties.

c) "May" Items

Many definitions contain one or more sentences beginning with the word "May". They describe duties required of workers in this occupation in some establishments but not in others. The word "May" does not indicate that a worker will sometimes perform this task but rather that some workers in different establishments generally perform one of the varied tasks listed. In the example, the three sentences beginning "May notify. . . ", "May mount. . . ", "May position. . . ", are "May" items. Do not confuse "May" items with the "May be designated. . . " sentence which introduces undefined related titles.

The definition also contains a number of additional information elements designed to assist the user. Among these elements are:

*Italicized words*: Any word in a definition shown in italics is defined in the "Glossary". *Italicized words* are technical or special uses of words not ordinarily found in a dictionary. In the example, the words "printing rollers" are italicized. Their precise meaning can be found in the "Glossary".
Bracketed titles: A bracketed title indicates that the worker in the base title occupation performs some duties of the bracketed occupation as a part of the worker's regular duties. In the example, the CLOTH PRINTER (any industry) 652.382-010 "May mount printing rollers. . ." Since this task is usually performed by a PRINTING-ROLLER HANDLER (textile) 652.385-010, this occupation is bracketed. To learn more about this particular aspect of the occupation, the user can read the definition of the bracketed occupational title.

Unbracketed titles: Unbracketed titles are used for occupations that have a frequent working relationship with the occupation defined. In the example, the CLOTH PRINTER (any industry) 652.382-010 has a close working relationship with a COLORIST (profess. & kin.) 022.161-014. This unbracketed title is therefore included in the definition.

Roman numerals: Several somewhat different occupations with the same job title may be found in the same industry. In this event, a Roman numeral follows each title. For example, there are two titles in the DOT listed as ASSEMBLER (ordnance). In order to distinguish between them, a Roman numeral is assigned to each one: ASSEMBLER (ordnance) I 736.381-010 and ASSEMBLER (ordnance) II 736.684-014. There is no connection in the sequence of these numbers with the level of complexity of these occupations or the frequency with which they occur in the U.S. economy.

Statement of significant variables: Another element found in some definitions is a statement of significant variables. It appears near the end of a definition and indicates possible variations that can occur in jobs. This eliminates the need to include a large number of almost identical definitions in the DOT. The statement begins with "Important variations include. . .". There is no statement of significant variables in the definition of CLOTH PRINTER (any industry) 652.382-010.

6) Undefined Related Titles
Undefined related titles, when applicable, appear at the end of the occupational definition, with initial capital letters, preceded by a phrase, such as "May be designated according to. . .". In the example, three undefined related titles are given: Novelty-Printing-Machine-Operator (textile), Proofing-Machine Operator (print. & pub.), and Plisse-Machine Operator (textile). This type of title indicates a variation or specialization of the base occupation. It resembles the base enough to accompany it, but differs from it enough to require an explanatory phrase and its own unique title. An undefined related title has the same code as its base title. Undefined related titles found in occupational definitions are listed in the Alphabetical Index of Occupational Titles in initial capital letters. The entry includes the industry designation and the 9-digit code of the corresponding base title. In addition, undefined related titles appear in alphabetical order with their nine-digit code under their appropriate industry in the list of Occupational Titles Arranged by Industry Designation.

7) Definition Trailer
Selected characteristics and auxiliary profile data are contained in a "trailer" appended to each definition. The trailer contains the following selected occupational analysis characteristics: GOE Code; Strength rating; R, M, and L of GED; and SVP. (Refer to Appendix C for a detailed explanation of these characteristics.)

The Date of Last Update (DLU), the last item in the trailer, is the date of the most recent material gathered in support of that occupation. The date "1977" indicates that the job has not been studied since the publication of the Fourth Edition DOT in 1977 (See Appendix A.) This entry allows the reader to identify the currency of each definition. It will also provide easy identification of definitions "new" to the DOT or alert the reader to previously published and recently updated definitions.