

STATE OF OHIO (DAS)
CLASSIFICATION
SPECIFICATION

CLASSIFICATION SERIES:

Ergonomist

SERIES NO.:

2451

MAJOR AGENCIES:

Workers' Compensation

EFFECTIVE DATE

SERIES PURPOSE

The purpose of the ergonomist occupation is to perform ergonomic surveys of public & private employers in order to identify work place conditions that impair safety & health of workers, gather data to perform task analysis & formulate corrective recommendations, based on analyses, such as work place design modification, layout alternatives, machinery & equipment adaptations & placement modifications & other alternate measures to further the goal of accident prevention & safety & health of workers.

At the lowest level, incumbents perform routine surveys (i.e., employer has existing safety record, problems are easily identifiable & recurrent or pose low-risk hazard) & receive training in performance of comprehensive & most complex ergonomic surveys & investigations to gain expertise in identification of existing risk factors.

At the higher levels, incumbents perform ergonomic surveys & investigations of increasing complexity to identify existing or potential health hazards & to develop & assist employers to implement corrective & safety programs.

Ergonomics duties pertain specifically to consideration of characteristics of people & their safety & health in the work place & in designing & arranging machines & processes they use in order that people, machines & processes interact most effectively & safely.

Reviews of industrial facilities for mechanical engineering problems which pose possible threat of injury to human extremities are performed by Industrial Safety Consultants, 2448.

Chemical analyses or assessments of extent of physiological damage to humans are performed by Industrial Safety Hygienists, 2447.

CLASS TITLE

Ergonomist 1

CLASS NUMBER:

24511

EFFECTIVE DATE

04/04/1993

CLASS CONCEPT:

The developmental level class works under general supervision & requires working knowledge of industrial engineering & ergonomics & related safety practices in order to perform routine ergonomic surveys of industrial, commercial & public employers to identify existing hazardous ergonomic conditions & develop corrective & safety programs to reduce risk of accidents & health hazards.

CLASS TITLE

Ergonomist 2

CLASS NUMBER:

24512

EFFECTIVE DATE

04/04/1993

CLASS CONCEPT:

The full performance level class works under direction & requires considerable knowledge of industrial engineering & ergonomics in work place, survey & investigation principles & techniques & ergonomics guidelines in order to perform comprehensive ergonomic surveys (i.e., employers have no established safety record or perform variety of activities, problems are unknown, not easily identifiable or pose high risk hazards & solution involves multiple factors or problems not previously encountered), develop corrective recommendations & assist employers with implementation.

CLASS TITLE:

Ergonomist 3

CLASS NUMBER:

24513

EFFECTIVE DATE:

04/04/1993

CLASS CONCEPT:

The advanced level class works under direction & requires extensive knowledge of industrial engineering & ergonomics in work place, industrial safety standards & regulations & industrial safety investigative principles & techniques in order to perform most complex ergonomic surveys & investigations (i.e., work environments involving multiplicity of insidious hazards to include heat/cold stress, occupational stress, work place design & layout, shift work, cumulative trauma disorders & other ergonomic considerations), recommend solutions & lead team of ergonomists on large scale & complex investigations.

CLASS TITLE Ergonomist 1	CLASS NUMBER: 24511	BARGAINING UNIT: 07
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EFFECTIVE DATE

04/04/1993

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Performs routine ergonomic surveys (i.e., employer has existing safety record, problems are easily identifiable & recurrent or pose low-risk hazard) of industrial, commercial &/or public employers, operates testing & other equipment (e.g., spring scales, camcorder, audio recorder, light meter, sound level equipment, heat stress meter, camera, tape measure) to identify existing conditions & obtain data for analysis, performs detailed task analysis to study intricate motions & postures for risk evaluation of work force, researches varied technical topics & theories related to particular work environment, reviews employer's safety records & evaluates effectiveness of safety programs, confers with safety consultants or safety engineers to provide information or assistance, operates computers & word processing equipment to analyze data, researches specific problems, formulates recommendations for corrective measure, prepares written reports of results of investigations & surveys, confers with employers to provide information, provides advice concerning implementation of corrective measures, provides technical expertise to solve hazardous conditions, control problems & conducts follow-up investigations to ensure employers implement corrective measures.

Assists higher-level ergonomists & other industrial safety staff in performance of comprehensive & complex surveys to receive training & gain expertise in identification of existing risk factors.

Represents department at meetings with public & private employers, trade associations, unions & other groups concerned with industrial safety & health; completes OCOSH courses & attends occupational safety & health conference & seminars; maintains audio visual equipment; completes reports (e.g., travel, expense, activity); participates in safety & health conferences & seminars to receive training.

MAJOR WORKER CHARACTERISTICS:

Knowledge of industrial engineering or physical/natural sciences; ergonomics; state & federal industrial safety standards, laws & regulations; public relations; industrial safety practices; agency policy & procedures pertaining to industrial safety surveys; investigation principles & techniques; technical writing; safety training*. Skill in operation of testing & other equipment (e.g., spring scales, camcorder, audio recorder, light meter, sound level equipment, heat stress meter, camera, tape measure); computer & computer software. Ability to deal with many variables & determine specific action; prepare meaningful, concise & accurate reports; communicate effectively, orally & in writing; handle sensitive inquiries from employees, employers & union representatives pertaining to industrial safety/ergonomics issues.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in industrial engineering; 12 mos. exp. performing industrial safety surveys; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or completion of undergraduate core program in physical or natural sciences; 12 mos. exp. in industrial engineering performing industrial safety surveys; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or 12 mos. exp. as Industrial Safety Hygienist 1, 24471; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Travel required; occasional overnight travel may be required; exposed to noise, dirt & temperature extremes; exposed to all types of industry.

CLASS TITLE Ergonomist 2	CLASS NUMBER: 24512	BARGAINING UNIT: 07
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EFFECTIVE DATE

04/04/1993

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Performs comprehensive ergonomic surveys (i.e., employers have no established safety record &/or perform variety of activities, problems are unknown, not easily identifiable or pose high risk hazards & solution involves multiple factors &/or problems not previously encountered) of industrial, commercial &/or public employers, operates testing & other equipment (e.g., spring scales, camcorder, audio recorder, light meter, sound level meter, heat stress meter, cameras, tape measure, vibration analyzer equipment, octave band analyzer) to identify existing or potential health hazards & obtain data for analysis, confers with safety consultants & safety engineers to refer safety violations & provide information or assistance, uses computers & appropriate software (e.g., CAD system, spread sheet statistical packages, database program calculation, word processing) to analyze investigation data collected, interprets results, recommends corrective measures, prepares written technical report of results of investigations & surveys, confers with employers to provide information & advice pertaining to implementation measures, conducts follow-up investigation to ensure implementation of corrective measures & investigates employee complaints of health hazards.

Assists higher level ergonomists & industrial safety consultants in conducting most complex & comprehensive industrial safety surveys involving multiplicity of insidious cumulative trauma disorders to receive training & gain expertise in identification of existing or potential health hazards (i.e., receives training in current techniques to reduce occupational illnesses through ergonomics recommendations).

Represents department at meetings with public & private employers, trade associations, unions & other groups concerned with industrial safety & health; attends safety meetings & training seminars; maintains audio visual equipment; reads scientific & technical publications concerning industrial safety & health to expand base of knowledge & to obtain information concerning current trends & procedures in field of ergonomics; completes miscellaneous reports (e.g., travel, expense, activity); provides guidance to lower-level ergonomists concerning work-related problems; participates in safety & health conferences & seminars to receive training; recommends revisions to department training programs; provides information to telephone inquiries.

MAJOR WORKER CHARACTERISTICS:

Knowledge of industrial engineering or physical/natural sciences; ergonomics; state & federal industrial safety standards, laws & regulations; industrial safety practices; technical writing; agency policy & procedures pertaining to industrial safety surveys; investigation principles & techniques; safety training; public relations. Skill in operation of various testing & other equipment (e.g., spring scales, camcorder, audio recorder, light meter, sound level meter, heat stress meter, octave band analyzer, vibration analyzer equipment, tape measure); camera; computer & computer software. Ability to deal with many variables & determine specific action; write technical reports; interpret extensive variety of technical material in books, journals & manuals; handle sensitive inquiries from employers, employees & union representatives pertaining to industrial safety/ergonomics issues.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of undergraduate core program in industrial engineering; 24 mos. exp. performing industrial safety surveys; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or completion of undergraduate core program in physical or natural sciences; 24 mos. exp. in industrial engineering performing industrial safety surveys; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or 12 mos. exp. as Ergonomist 1, 24511; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Requires travel; occasional overnight travel may be required; exposed to noise, dirt & temperature extremes.

CLASS TITLE Ergonomist 3	CLASS NUMBER: 24513	BARGAINING UNIT: 07
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EFFECTIVE DATE:

04/04/1993

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Performs most complex ergonomic surveys & investigations, develops formal presentation & meets with employer to discuss findings & to recommend solutions (i.e., unique work place problems, situations with limited reference material available & complex industrial conditions involving multiplicity of insidious hazards to include heat/cold stress, occupational stress, workplace design & layout, shift work, cumulative trauma disorders & other ergonomic considerations) &/or leads team of ergonomists when assigned responsibility to conduct large scale & complex investigations (e.g., determines methodologies, assigns & reviews work, provides on-job training), develops safety programs for existing & non-existent employers (i.e., analyzes workplace design, manual material handling & video display terminal related stresses; assesses engineering considerations of material flow; work layout & safety systems), confers with engineering staff to evaluate &/or recommend design improvements, operates various testing equipment (e.g., heat stress meter, octave band analyzer, motion analysis equipment, inclinometer, light meter, velometer, sling psychrometer, Draeger colormetric detection tubes) to obtain data & samples, develops new techniques using computer modeling to analyze data & develop solutions, inspects work sites to identify physical hazards, conducts follow-up investigations to evaluate adverse work environments & safety program failures, completes technical reports & conducts routine & comprehensive ergonomics investigations as necessary.

Monitors reports & surveys of ergonomists & other staff at all levels as part of peer review program; provides technical expertise to employers & employees concerning ergonomic issues; performs cost & statistical analyses relative to 5 year accident report; researches & writes articles for publication; reviews ergonomics reports for accuracy & analyzes investigation data.

Attends &/or conducts ergonomic & engineering meetings, attends training seminars & participates in training of lower-level ergonomists by providing guidance on work-related problems; develops techniques to improve effectiveness of ergonomics services; recommends revisions to department training program; completes routine reports (e.g., travel, expense, activity); answers telephone inquiries & conducts correspondence concerning industrial safety/ergonomics issues.

MAJOR WORKER CHARACTERISTICS:

Knowledge of industrial engineering or physical/natural sciences; ergonomics; state & federal industrial safety standards, laws & regulations; industrial safety practices; technical writing; public relations; computer modeling*; agency policy & procedures pertaining to industrial safety surveys; investigation principles & techniques; safety training. Skill in operation of various testing & other equipment (e.g., heat stress meter, octave band analyzer, motion analysis equipment, inclinometer, light meter, velometer, sling psychrometer, Draeger colormetric detection tubes); cameras; computer & computer software. Ability to deal with many variables & determine specific action; write complex technical reports; interpret extensive variety of technical material in books, journals & manuals; handle sensitive inquiries from employers, employees & union representatives pertaining to industrial safety/ergonomics issues; write & edit articles for publication; read technical literature.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

12 mos. exp. as Ergonomist 2, 24512; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or completion of undergraduate core program in industrial engineering or physical/natural sciences; 12 mos. exp. in private sector or other governmental agency performing same or comparable duties of Ergonomist 2, 24512; 1 course or 3 mos. exp. in technical writing; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Requires travel; occasional overnight travel may be required; exposed to noise, dirt & temperature extremes.