

NECESIDAD DE CONDICIONES ÓPTIMAS AMBIENTALES

Ing. Yerab Vidaurrázaga López

Maestro de la carrera de Ingeniería Industrial Universidad UNIVER de Mexicali.

yerab_vidaurrazaga@yahoo.com.mx

Condiciones Ambientales

RESUMEN.

Mexicali, es una ciudad que tiene un clima extremoso durante todo el año y esto a ocasionado que se tengan diversos problemas de salud debido a esta situación, la ubicación geográfica, intereses económicos y políticos, han llamado fuertemente el capital extranjero para la incorporación de las empresas maquiladoras sea una buena opción de inversión. Sin embargo la falta de interés en las condiciones ambientales por parte de estas empresas ha provocado una alta rotación, lesiones y otras circunstancias que afectan la calidad de vida del trabajador.

Con base a lo antes mencionado se dio a la tarea de valorar las condiciones ambientales reales que se presentan en los centros de trabajo de empresas maquiladoras de esta ciudad, para determinar si es una situación de riesgo para los trabajadores en su calidad de trabajo o es una condición que no afecta en el desarrollo de su actividad.

Mexicali, is a city that has an excessive climate all the year round and this to caused that have diverse problems of health due to this situation, the geographical location, economic and political interests, they have been called strongly factory-works the foreign capital for the incorporation of the companies it is a good option of investment. Nevertheless the lack of interest in the environmental conditions on

the part of these companies has provoked a high rotation, injuries and other circumstances that affect the quality of life of the worker.

With base to before mentioned it was given to the task of valuing the environmental royal conditions that appear in the centers of work of companies factory-works of this city, to determine if it is a situation of risk for the workers in his quality of work or is a condition that it does not affect in the development of his activity.

INTRODUCTION

Mexico, a country basically of companies factory-works due to the cheap workforce, must do emphasis in the importance of the environmental conditions in the centers of work, unfortunately a reality is that they destine few resources for this item. For such a motive there arose the idea of analyzing the environmental conditions in the centers of work (factory-works) to demonstrate if there are influence and / or repercussions in the quality of the performance of the worker during his labor day.

OBJECTIVE

To realize an investigation that generates a conscience of the importance of the environmental conditions inside the place of work, to administrators and workers and on the basis of this to demonstrate that the environmental conditions help to the increase the productivity and quality of life of the worker.

HYPOTHESIS

The environmental conditions in the centers of work reverberate of direct form in the performance and quality of the activity of the worker.

THEORETICAL FRAME

The environmental ergonomics are the area of the ergonomics that one entrusts of the study of the physical conditions that surround the human being and that influence his performance on having realized diverse activities. Environmental condition they are the different situations that they present in the area of work related to the environmental environment.

The types of environmental conditions are a sonorous, light and thermal environment. The aims of the environmental conditions are to help to the development of the activity of the person, to improve the conditions of the place of work and to establish an environment adapted for the physical and mental safety of the person, with this there is looked that the environmental conditions assure the well-being of the person to improve his quality of life in the development of the activity.

The sound is formed by waves that propagate across a way that can be solid, liquid or gaseous. The material particles that transmit such waves range in the direction of the spread of the same waves. The sound comes to the ears for the particles that compose the air, they vibrate and transmit his oscillation, the noise is any not wished sound, the sonorous waves originate for the vibration of some object, which establishes a wave section of comprehension and expansion across the way of transport of the sound (air, water, you machinate, tools, etc.). And the purpose of the sonorous environment is to define depending on the frequency to determine his tone, quality and extent of the waves and intensity. The problems caused by a sonorous inadequate environment are between some a poor communication, reduction of the clarity in the communication, disorders

sensorimotors, mental and physical fatigue, decrease of productivity, accidents of works, neurovegetative and metabolic disorders and irritability.

The human being is capable of working inside a wide interval of thermal conditions and his behavior was modified on the basis of the temperatures they change with regard to the normal ones.

The Thermal Environment is a part of the Environmental Ergonomics that describes the conditions of the environment in which the individual realizes an activity, taking in it counts the factors of temperature, dampness, ventilation and traffic of the air, takes as an essential purpose the health and comfort of the workers and to support a major productivity. An excess of heat or cold reduces the efficiency, efficiency and provokes a major quantity of accidents.

The human body works so that it keeps constant the temperature of the nervous system and of the internal organs, supporting the thermal balance for the constant exchange of heat with the environment, depending this exchange of factors as ventilation, dampness, heat, metabolism, physical activity and air quantity. The diseases for the cold are basically a nettle-rash (allergy to the cold), foot of trench, neuritis to frigore, conjunctivitis, certain anemias hemolíticas and the diseases for heat are the sunstroke with different symptoms.

The good visibility of the equipment, product and information related to the work it is an essential factor to accelerate the production, to reduce the number of defective pieces, to diminish the waste and the visual fatigue, since the lack of a correct lighting is a reason of accidents. The aim of the lighting is to design environments adapted for the vision and is not to provide light, but to allow that the persons should recognize without mistakes what they see, in a suitable time and

without getting tired. The diseases for the light inadequate environment are tired sight, conjunctivitis, lack or excess of tear, heaviness of head and eyelids, blurry vision and pain to the pressure of the eyeballs (eyes).

DELIMITING

The environmental conditions applied in this investigation are a sonorous, light and thermal environment in companies factory-works of the entity.

METHODOLOGY.

I realize a strategy of summary of information based on a series of interviews and questionnaires applied to the operators, guides, supervisors and engineers. The purpose of applying two means of compilation of information is to realize an analysis of correlation and to expire with a validity and reliability of the study.

The questions realized in the interview as well as in the questionnaire are similar in content, later to the application I realize a codification to turn to quantitative values and to be able to realize the correlation with the variables of every thermal environment.

RESULTS.

Once realized the analysis of correlation of the variables of the different environments before mentioned thought that each of them has direct repercussions in the development of the activity of the worker.

CONCLUSIONS.

The environmental Ergonomics are so important as any other factor in the productivity, efficiency, efficiency and quality of life of the worker, by means of the prevention of injuries and diseases, as well as the generation of ideal conditions for the development of a company.