Tsachal

# Electrical Safety

## Introduction to Electrical Safety

- Issues associated with poor electrical safety in the workplace
- Electrical terms essential to understanding and meeting key electrical safety standards
- The intent of an Electrical program and essential elements of an effective program
- Using a “Status Check” survey to assess a facility’s electrical Safety program.
- Develop improvement strategies to electrical safety programs

## Identifying the Hazards

- Types of electrical hazards to personnel
- Description of the nature of hazards related to electric shocks, arcs and blasts
- Characteristics of an arc flash hazard
- Characteristics of an arc blast hazard

## OSHA Requirements

- Identify requirements specified in OSHA 29 CFR1910, NFPA and other local regulations
- Determining Training for workers in accordance with regulatory requirements.
- Overview of Safe installation practices including
    - Guarding
    - Identification
    - Flexible Cords and Cables
    - System grounding
    - Location of overcurrent protection devices
    - Work space clearance requirements
- Assess an electrical installation for compliance with OSHA and other relevant regulations

## Safe Related Work Practices

- Explain an “Electrically Safe Work Condition” and the steps required to ensure an electrically safe work condition.
- Facility Lockout/Tagout (LO/TO) procedures including requirements and activities in the procedures and persons responsible for each activity
- Determination of LO/TO procedure applicable to a given facility, operation, equipment or activity.
- Describe other safety work practices to protect from electrical hazards such as
    - De-energized work practices
    - Energized work practices
    - Approach boundaries and approach distances
    - Requirements for use of test instruments and equipment
    - Requirements for insulated tools

## Working on or Near Live Parts

- Identify persons that may be exposed to a source of electrical energy directly or indirectly
- Conditions under which “hot work” is allowed
- Purpose of an energized electrical work permit
- Three types of approach boundaries and the dimensions for each approach boundary
- Essentials of a Flash Hazard Analysis and Hazard Risk Category and its use

## Personal Protective Equipment (PPE)

- Basic types of personal protective equipment (PPE) for tasks involving electrical hazards
- How each type of PPE protects against hazards and their limitations
- Flame resistant (FR) clothing and layering of clothing for protection, clothing prohibited where electrical hazards are present.
- Selection of PPE for a given Hazard Risk Category including gloves, eye, head, face protection and (FR) clothing

## Action Planning and Course Wrap-Up

- Outline an Action Plan to achieve compliance with OSHA and other relevant regulations
- Provide assistance to help achieve workplace goals of OSHA and other relevant regulations compliance.