4 Placement hazards

5 Inadequate guarding

6. Public hazards

Within each one of these general classifications, more specific classifications are set up Under "Defects of agencies," for example. are listed

1 Composed of unsuitable materials

2 Dull

3 Improperly constructed, assembled, etc

4 Improperly designed

5 Rough

6. Sharp

7 Slippery

8 Worn, cracked, broken, etc

9 Other

It is not always possible to set up classifications before the analysis is begun In this case, classifications can be developed as reports are reviewed and situations are revealed

For example, if an analysis is being made of ladder accidents and it is found that in a number of cases broken rungs caused the accidents, a specific group "Broken rungs" should be set up under the classification "Defects of agencies"

ANSI Z16 2 recommends general and specific classifications for all the key facts These classifications are presented principally as suggestions to guide the analyst in setting up classifications to fit his own problems The point must be emphasized that for an analysis to be of maximum usefulness, classifications must be set up to encompass the situations which are pertinent to the particular company

Use of a numerical code. Regardless of the method which eventually will be used to sort and tabulate the various key facts, the work will be facilitated if code numbers are assigned to the different classifications With this method, each case need be read only once, at which time code numbers are assigned to the different facts, and subsequent sorting of the various facts can be quickly completed merely by reference to the code numbers.

A numerical code is simply the assigning of numbers in sequence to a list of similar facts For each key fact (agency of accident, accident type, hazardous condition, etc), there should be no duplication of numbers, but for the different facts, the numbering series may be repeated Fig 7–1 shows how code numbers were assigned for two key facts in an analysis of ladder accidents

After the cases have been reviewed and code numbers have been assigned to the different key facts, the reports can be easily and quickly sorted or arranged by any of the facts to reveal the principal data concerning the accidents

Numerical codes are already assigned to all the classifications which are included in ANSI Z16 2, and if an analyst uses this standard, he can use the code numbers, too If he uses the standard as a starting point and adds other classifications to cover the specific accident experience of his own company, he can code the additional items to fit into the code of the standard

Making the analysis

Experience has proved that the most effective way to reduce accidents is to concentrate on one phase of the accident problem at a time rather than attempting to stop all accidents at once There are different ways in which the problem can be approached on this basis, any one of which should prove effective

The reports may be grouped by occupation of the injured person Each group of reports, then, may be reviewed to determine what accident types, sources of injury, and agencies of accident are most prevalent among different occupations Such information is particularly helpful in planning employee training and in developing educational materials and programs

Injury frequency rates computed by departments may reveal that injuries occur at sharply higher rates in some departments than in others If this is the case, an analysis should be made of the accidents in the high-rate departments to find out the sources of the accidents and their causes This method will permit concentration of effort in the locations in which accidents occur most frequently

If injury frequency rates reveal that a high