In the selection of a belt for general industrial use, the job requirements must be considered and matched against the types of belts available If the only purpose of the belt is to stop a workman in case of a fall, then a waist belt with a single D-ring may be satisfactory This single D-ring may be attached for positioning at any point on the belt, for the belt can be turned to different positions after being buckled on the wearer

Where possible, safety harness and chest-waist belts are preferable because they do a better job of absorbing impact and keeping a man upright in case of a fall

If a belt is to furnish support to a man while he is working, it should have adequate means for such support A belt for a man who will lean back in it as he works on a sloping roof or hillside should have two D-rings, one on each side of his belt, (Fig 38-40), to which a throw rope or lanyard can be attached and connected to a suitable anchorage

If the belt is to be used much for supporting the entire weight of a man vertically while he works, as in raising or lowering him along the wall of a building, a boatswain's suspension harness may be used In this type of belt, one strap is used as a seat, sometimes with a board to make it more comfortable Leg straps and a strap around the man's waist prevent him from falling out of the seat

An industrial belt used to hoist a man out of a tank is usually subjected only to a static load Such a belt should be of either the shoulder harness, chest-waist, or parachute type with the D-ring so placed as to hold a man in a relatively erect position

In a window cleaner's belt, separate ropes should be used for the service and safety lines (Fig 38-38) The service rope, which supports the man while he works, must be shorter than the safety rope so that the former will be taut and the safety rope slack Thus, all wear will be placed upon the service rope, and the safety rope will retain its full strength for use in stopping a fall

The safety rope should contain a shock absorber which will reduce the loading in the event of a fall, thus relieving strain on the building anchor, waist belt, and man There should be a device in the belt to release the service rope in case of a fall and bring into play the shock-absorbing safety rope

Belt care

Dirt adhering to leather safety belts should be brushed off carefully so as not to scratch the leather The belt should then be washed with warm water and either saddle soap or castile soap After a rinse in clean warm water, it should be dried at room temperature

Before becoming completely dry, a leather belt should be oiled with neatsfoot, castor, soy bean, or a compound oil, *never a mineral oil* A leather belt which has been unused and not oiled for a year or two is much weaker than one which has been regularly used and also adequately oiled over the same period, although the unused belt will look newer and stronger

Leather belts should not be exposed to excessive heat, such as from a radiator, because they may be permanently damaged by a temperature as low as 150 F Any heat painful to a man will damage leather

Cotton or linen webbing belts should be washed in soapy water, rinsed, and dried by moderate heat They are not damaged by temperatures up to 212 F If a belt is to be subjected to unusual conditions of use the manufacturer should be consulted as to its care

Synthetic fiber belts should not be exposed to excessive heat that might soften or melt the fibers, or to chemicals that might affect the composition of the fiber

Inspection and testing

Wearers of life belts should inspect them before each use (Fig 38-39) At least every one to three months they should be examined by a trained inspector Leather belts especially must be watched for cuts or scratches on either side of the strap A deep cut of any considerable length, crosswise to the belt, warrants discard However, cuts running lengthwise do not seriously affect strength

Fabric belts should not be used if considerable portions of the outer fibers are cut or worn through

Belt hardware should be examined and worn parts replaced Each belt rivet should be examined to be certain that it is secure No rivet should be used in a web belt which may be subjected to impact loading

Safety belts in service should not be tested Any service test to prove whether the belt