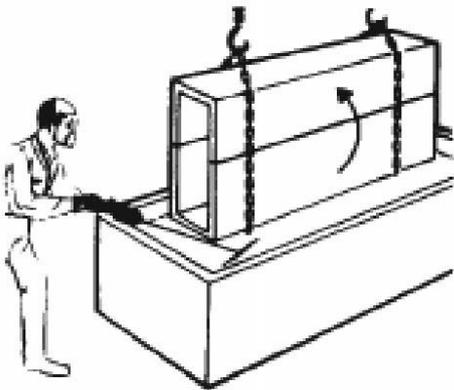


Double dipping Process

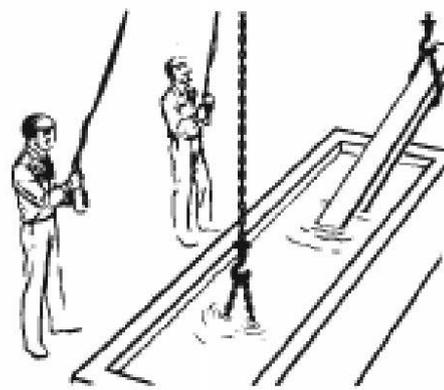
The description of 'double dipping' in our manual is as follows:

Double end or depth dipping is a term used to describe the process of galvanizing an item which is longer or deeper than available bath dimensions. In this procedure the item is lowered into the bath so that half or more of its length or depth is immersed in the zinc bath. When the zinc coating has been achieved, the item is raised from the bath and adjusted in handling so that the ungalvanized part can be immersed in the bath. It should be noted that in this procedure an overlap of zinc coating will occur and this may have to be addressed in the case of visually obvious structural elements that require an aesthetic finish.

Guidance in these cases should be sought from the galvanizer.



Double-end dipping for excess depth



Double-end dipping for excess length

The five photos below show an example of a beam too long for the zinc bath which was double dipped.

Photos 1 and 2 show the first stage, where one end is being immersed in the molten zinc while the excess length remains bare steel. After an article is removed from the zinc, at this stage it may or may not be quenched. This decision may be influenced by various factors, including the risk of distortion.

When able, the article would be turned around and/or re-hung. Typically, the part of the article that still needs to be galvanized will be re-fluxed before being dipped into the molten zinc.

Photo 3 shows the part of the beam that wasn't galvanized (in Photos 1 and 2) immersed in the molten zinc. Photo 4 shows a distinct difference in appearance between the parts of the beam galvanized at different times as the beam is being withdrawn from the molten zinc for the second time.

Photo 5 shows the whole beam after both ends were galvanized. The appearance of the galvanized coating on the right side of the 'double dip line' is duller due to the fact that it was galvanized first and, mostly likely due to slow cooling, the zinc-iron alloy layers of the galvanized coating have continued to form and consumed much of the zinc which was on the surface upon withdraw from the zinc bath before it solidified.

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5

