

steel sections in this case can be up to 0.5 mm/year. Second of all, performing high-quality corrosion-resistant coating of beaded capacitive structures with many protrusions, deepening, representations and hard-to-reach places is rather problematic (**Figure 8**). Therefore, in practice, the issue of operation was quite often neglected and then corrosive wear can reach 60-80%.

The third error, often permitted during the operation of the steel-capacitive structures, is

loading the bulk material into the construction without special charging devices. The fact is that the capacitive structures in many cases have a considerable height. Therefore, if the structure is partially filled with the stored material, then again charged material falls from a certain height, creating dynamic impact and vibration. This compounds the effect of the listed earlier accident causes of capacitive structures from the first two groups.



Figure 7. Bend of the silo roof



Figure 8. Corrosion damage of hopper walls

Conclusions

Thus, there are three main groups of specific

causes of failures and accidents of steel capacitive structures. It is quite difficult to indicate a dominant cause, since they are all fairly common