

ROLL HANDLING AND STORAGE

Special care and attention must be used in the handling and storage of forged hardened steel rolls to avoid premature roll problems and to maintain a safe environment for employees. The following recommendations are given for this purpose:

A. Roll Handling

1. Avoid roll on roll contact by moving only one roll at a time.
2. Proper slings should be used in the appropriate lift area of the roll neck.
3. Roll bodies should not come into contact with any “hard” surface during transportation.
4. Welding of “attachments” to broken rolls to facilitate handling should never be attempted.
5. Rolls should never be handled with an electromagnet.

B. Roll Storage

1. Avoid roll contact by using a type of separator between the roll bodies (wood wedge, rubber strapping).
2. Roll journals, seal areas and body should be protected from corrosion (rust).
3. Avoid sudden temperature changes in the roll body by storing in a proper environment.
4. Insure that the storage area, racks and equipment are free of any residual magnetism.
5. Damaged rolls (adhering spalls) should be either enclosed or covered with a protective blanket. As a minimum, the damaged area should be turned towards the floor. Acoustic emission testing can also be performed to help determine whether or not the damaged roll has attained a state of equilibrium (no significant acoustic activity).
6. Rolls from the mill should not be ground until the roll body temperature approaches the ambient temperature in the roll shop. Sudden cooling to achieve this condition is not advisable.