NB-4422 Peening

(a) Peening is a process (e.g., shot peening, pneumatic needle gun) that physically deforms the material by cold working to control distortion. Controlled peening may be performed to minimize distortion. Except when used as a surface stress improvement technique with the purpose of introducing compressive stresses on a weld or base material in accordance with NB-4422(b), peening shall not be used on the initial layer, root of the weld metal, or final layer unless the weld is postweld heat treated.

(b) Surface stress improvement techniques (e.g., waterjet peening, laser peening) are processes that reduce the residual tensile stresses on the surfaces of welds and base material that were caused by welding or cold-working processes. Controlled surface stress improvement techniques that have been demonstrated to reduce surface tensile residual stresses may be performed on the final surface in contact with the corrosive environment. Surface stress improvements shall be performed after examinations required by Article NB-5000 are completed.
Record 19-324
Editorial clarification on approved language from Records 12-1461 and 18-1506

NC-4423.3 Peening

(a) Peening is a process (e.g., shot peening, pneumatic needle gun) that physically deforms the material by cold working to control distortion. Controlled peening may be performed to minimize distortion. Except for surface stress improvement techniques with the purpose of introducing compressive stresses on a weld or base material in accordance with NC-4423.3(b), peening shall not be used on the initial layer, root of the weld metal, or final layer unless the weld is postweld heat treated.

(b) Surface stress improvement techniques (e.g., waterjet peening, laser peening) are processes that reduce the residual tensile stresses on the surfaces of welds and base material that were caused by welding or cold-working processes. Controlled surface stress improvement techniques that have been demonstrated to reduce surface tensile residual stresses may be performed on the final surface in contact with the corrosive environment. Surface stress improvements shall be performed after examinations required by Article NC-5000 are completed.
ND-4422 Peening

(a) Peening is a process (e.g., shot peening, pneumatic needle gun) that physically deforms the material by cold working to control distortion. Controlled peening may be performed to minimize distortion. Except for surface stress improvement techniques with the purpose of introducing compressive stresses on a weld or base material in accordance with ND-4422(b), peening shall not be used on the initial layer, root of the weld metal, or final layer unless the weld is postweld heat treated.

(b) Surface stress improvement techniques (e.g., waterjet peening, laser peening) are processes that reduce the residual tensile stresses on the surfaces of welds and base material that were caused by welding or cold-working processes. Controlled surface stress improvement techniques that have been demonstrated to reduce surface tensile residual stresses may be performed on the final surface in contact with the corrosive environment. Surface stress improvements shall be performed after examinations required by Article ND-5000 are completed.
NG-4422 Peening

(a) Peening is a process (e.g., shot peening, pneumatic needle gun) that physically deforms the material by cold working to control distortion. Controlled peening may be performed to minimize distortion. Except for surface stress improvement techniques with the purpose of introducing compressive stresses on a weld or base material in accordance with NG-4422(b), peening shall not be used on the initial layer, root of the weld metal, or final layer unless the weld is postweld heat treated.

(b) Surface stress improvement techniques (e.g., waterjet peening, laser peening) are processes that reduce the residual tensile stresses on the surfaces of welds and base material that were caused by welding or cold-working processes. Controlled surface stress improvement techniques that have been demonstrated to reduce surface tensile residual stresses may be performed on the final surface in contact with the corrosive environment. Surface stress improvements shall be performed after examinations required by Article NG-5000 are completed.