Ratchet Type Tack and No Tack Cage Clamps

1. Description and function
   The Hand Lever Tack and No Tack Cage Clamp is used for the alignment pipes for welding. The Tack Type clamp is available for pipe sizes 2” to 60”. The No Tack Clamp is available for pipe sizes 3 ½” to 60”. The clamp is designed to align only one diameter of pipe.

2. Working environment up 50 degree to - 25 degree Celsius
   The clamp is not design to be used at a temperature below -25 degrees.

3. Cage Clamp Nomenclature
   The Hand Lever Cage Clamp consist of a Right Frame, Left Frame and Cam Mechanism with Arm.

4. Operating Instructions
   **Tack Type Cage Clamp**
   A. Release all pressure on the Ratchet Mechanism (A) by rotating the 1” square nut (C) counterclockwise.
   B. Lift the Ratchet Mechanism (A) from hook (B) on the clamp end.
   C. Open the clamp
   D. Place the clamp on pipe
   E. Center the cross bar on the pipe end.
   F. Grasp the clamp handles and close the clamp on the pipe
   G. Engage Ratchet Mechanism (A) on the hook (B) on the clamp end.
   H. Rotate the 1” square nut (C) clockwise until the both pipes are aligned in the clamp.
   I. Tack weld the pipe ends together at points between the cross bars.
   J. Release the clamp from the pipe by rotating 1” square nut (C) counterclockwise.
   K. Lift the Ratchet Mechanism (A) from hook (B) on the clamp end.
   L. Open the clamp.
   M. Remove the clamp from the pipe.
   P. Weld per the established procedure.

   **No Tack Type Cage Clamp**
   A. Release all pressure on the Ratchet Mechanism (A) by rotating the 1” square nut (C) counterclockwise.
   B. Lift the Ratchet Mechanism (A) from hook (B) on the clamp end.
   C. Open the clamp
   D. Place the clamp on pipe
   E. Center the opening in the cross bar on the pipe end.
   F. Grasp the clamp handles and close the clamp on the pipe
   G. Engage Ratchet Mechanism (A) on the hook (B) on the clamp end.
   H. Rotate the 1” square nut (C) clockwise until the both pipes are aligned in the clamp.
   I. Weld per the established procedure.
   J. Release the clamp from the pipe by rotating 1” square nut (C) counterclockwise.
Ratchet Type Tack and No Tack Cage Clamps

1. Lift the Ratchet Mechanism (A) from hook (B) on the clamp end.
2. Open the clamp.
3. Remove the clamp from the pipe.

5. ATTENTION! Don’t use the Cage Clamp
   • Should not be used as the sole support of the pipe.
   • A lift mechanism should not be attached to the clamp to lift the pipe.
   • Wedges should not be driven under the frame of the clamp in an attempt to reform the pipe as it will damage the clamp and void the warranty.
   • The clamp is not designed for the alignment of the Tees, elbows, valves and other fittings.
   • The clamp should not be used with any type of device that is used to preheat the pipe prior to welding as this may result in failure of the clamp.

6. Maintenance
   After each use the clamp cleaned and sprayed with a light film of oil to avoid rusting. Prior to use the clamp should be inspected for cracks and deformation of the clamp. If any cracks or deformation of the clamp are present, the clamp should be replaced. No other maintenance is required.

7. Storage
   The clamp should be kept in a dry environment when not in use.