

Additional advantages of 'Omega Section' continuous cold roll formed limpet coil

Technical Advantages

- <u>Profile with Weld Edge:</u> Omega section is designed to completely eliminated weld edge preparation process prior to welding of limpet coil.
- <u>Efficiency</u>: Omega cross-section have higher heat transfer area compared to half round crosssection; which provides around 10-12% better efficiency.
- <u>Higher Pitch:</u> while depth of the Omega section is similar to half round section but width is higher, which would result in 7-8% higher pitch.
- <u>Burr Free Profile: Elimination of grinding/machining would also elimination of burr generation</u> during such processes which is one of the sources for beginning of contamination.
- <u>Better Suited for Full Penetration Welding</u>: As the profile offers point contact with the shell, it offers better prospects for full penetration welding.
- <u>No Weakening of Section:</u> Unlike conventional method of weld edge preparation where material is removed by grinding/machining, omega profile provides weld edge without material removal. Hence weakening of section does not happen.
- <u>No Material Loss</u>: As no grinding/machining is weld preparation, base material is not wasted.

Cost Benefits

- <u>Material Saving</u>: due to better heat transfer efficiency, total length of limpet coil required for desired heat transfer reduces which saves material and in turn cost of the project.
- <u>Saving in Consumable Cost:</u> As no grinding/machining is weld edge preparation, cost of consumable for these processes is saved.
- <u>Saving in Labor Cost:</u> As the entire process of weld edge preparation is eliminated, labor cost is also saved.

Time Saving

• <u>Time Saving:</u> Omega Limpet Coil offers significant time saving compared to conventional method as weld edge preparation process is eliminated.