

NP4 Grade RCC Hume Pipes for Jack Pushing

With our time tested expertise in the area of manufacturing RCC Hume Pipes, we have been able to innovate and upgrade the standard NP4 pipes prescribed in BIS 458:2003, to a variant suitable for the process of Jack Pushing. Fitted with a MS Collar, the reinforcement cage design is modified to support the higher lateral force exerted at the time of Jack Pushing, also enhancing the overall target load bearing of the product substantially.



Fig (i): 2000mm dia NP4 Grade Jack Pushing Type RCC Hume Pipes fitted with MS Collar



Adequate caution is exercised while sourcing the raw materials. M40 grade of concrete is used. Reinforcement cage is designed using 8mm/10mm TMT Rebars and Hard Drawn Wire to ensure maximum strength.

Adhering to the design principle issued to us by RITES, with whom we had partnered for one of their projects in Kolkata, the cage is prepared in strict adherence to BIS 458:2021 for standard NP4 Grade RCC Hume Pipes.

Fig(ii) showing cage fitted in mould prior to casting.

MS Collar

Every pipe is fitted with a 400mm wide MS Collar. The collar is bolted in sockets, which are cast into the pipe at the time of manufacturing. Welded to the reinforcement cage, these sockets ensure that the collar stays in place. Bolted and then welded into these sockets, the process ensures the casting is kept safe from any cracks that may develop, if the collar is bolted by drilling the concrete, in situ.



Fig (iii): 400mm broad MS Collars bolted into sockets cast into the pipes

Testing Protocols

Subjected to thorough testing post manufacturing, the pipes are put through to all the tests as prescribed in BIS 458:2003, like Hydrostatic Test and Three Edge Load Bearing Test.



Fig (iv): Hydro Static Test being performed on 2000mm dia NP4 Jack Pushing Pipes



Fig (v): Three Edge Load Bearing Test being performed on 2000mm dia NP4 Jack Pushing Pipes