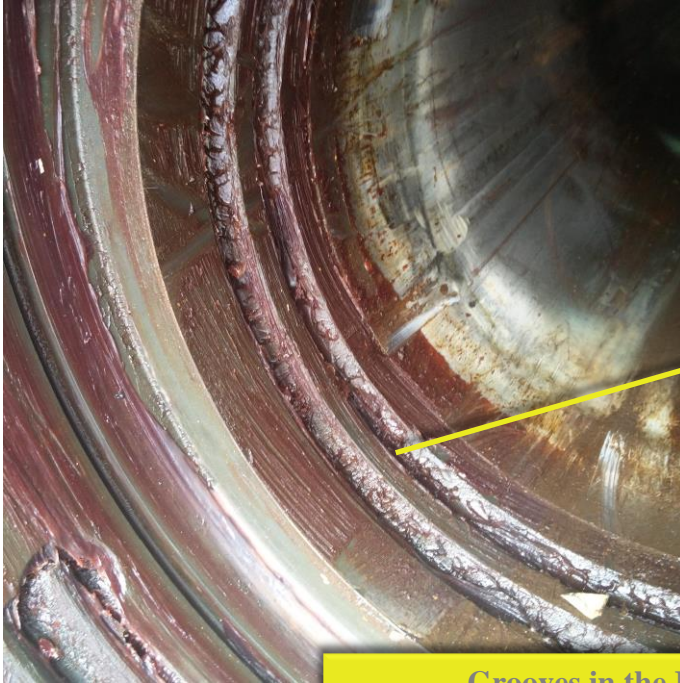


IN-SITU MACHINING OF NEW GROOVE IN A RISER PIPE

Customer's Challenge



Grooves in the Riser Pipe

A client in Singapore was sourcing for a large scale CNC equipped machine shop to bore additional groove for a batch of 140 riser pipes connectors. Due to this is a last minute site specification change for an offshore project, this modification is needed to carry out in very short time frame with connectors already welded to 20m piping.

After consider the availability of large scale lathe machine and hefty logistic arrangement that will be incurred, client decided to seek for on-site machining solutions instead.

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Solution



On-Site Machining and 3D Measurement

Metal Machines was approached by the client to provide a possible methodology to this critical task. After studied the engineering drawings for the GD&T requirement, the team proposed to use the WS3 Dragster 1000 portable CNC boring system after evaluating the tight precision and zero error allowable as welding on the connectors are not permissible.

To minimise possible error, a mock trial was conducted within 3 days which inclusive of modifying the machine holding frame and programming of G-code. 4 teams of dedicated technicians are formed and walked through the machining procedure to ensure consistence and repeatability result on every connectors. As the tolerance for the groove is so stringent, the final dimension acceptance was measured using our Faro Edge Arm.

Metal Machines deployed 2 unit of WS3 Dragster 1000 with 8 personnel running day and night shifts to complete the whole task within the client required lead time.

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Benefits



Through continuous investing in portable CNC and measurement equipment, Metal Machines Engineering Services Pte Ltd are striving to provide higher repeatability and consistent machining solutions. The client is well satisfied with the performance and commitment by the Metal Machines On-site Team.

Shared by: Yap Beng Chin (Assistant Engineer)

For any information or queries, please send your email to enquiry@metalmachines.com.sg or you can contact Metal Machines Sales Team directly through this number +65 6861 0484.