

MFG 286 : FCAW III

Transcript title

FCAW III

Credits

3

Grading mode

Standard letter grades

Total contact hours

60

Other hours

60

Prerequisites

MFG 284.

Course Description

Includes FCAW welding complete joint penetration welds of 2" and 6" pipe in 6G, qualification test practice, and construction of saddle tees.

Course learning outcomes

1. Demonstrate safe practices in the MATC Welding Lab using FCAW processes at an expert level for pipe weldments.
2. Weld 2" pipe in 6G (expert) position with FCAW processes to AWS D1.1, API 1104, and multiple ASME Codes/Standards. Qualification test preparation.
3. Weld 6" pipe in 6G (expert) position with FCAW processes to AWS D1.1, API 1104, and multiple ASME Codes/Standards. Qualification test preparation.
4. Apply visual and destructive examination principles and practices in accordance with AWS D1.1, B2.1, API 1104, and applicable ASME Code/Standards visual acceptance criteria.
5. Construct and weld 2" and 6" saddle tee with FCAW processes to API 1104 Standard.

Content outline

FCAW 2" pipe Sched 40 filler/cover 6G destructive test x2 FCAW 2" pipe Sched 40 qualification test prep destructive test/inspect FCAW 6" pipe Sched 40 filler/cover 6G destructive test x2 FCAW 6" pipe Sched 40 qualification test prep destructive test/inspect FCAW 2" and 6" pipe construct and weld saddle tee to industry standards Weldments joints, design, inspection Industry Drawings interpretation of symbols fabrication requirements general industry requirements material handling and callouts

Required materials

This class requires the purchase of safety equipment, reference books, measurement equipment, and tools.