

MFG 283 : GTAW II

Transcript title

GTAW II

Credits

3

Grading mode

Standard letter grades

Total contact hours

60

Other hours

60

Prerequisites

MFG 281.

Course Description

GTAW welding complete joint penetration welds on 2" and 6" pipe in 2G and 5G positions.

Course learning outcomes

1. Demonstrate safe practices in the MATC Welding Lab using GTAW processes at an advanced level.
2. Weld thin and thick wall 2" mild steel pipe in 2G and 5G (advanced) positions with GTAW process to AWS D1.1, API 1104, and multiple ASME Codes/Standards. Weldments will be done in multiple edge configurations, progression and weld types.
3. Weld thin and thick wall 6" mild steel pipe in 2G and 5G (advanced) positions with GTAW process to AWS D1.1, API 1104, and multiple ASME Codes/Standards. Weldments will be done in multiple edge configurations, progression and weld types.
4. Apply visual and destructive examination principles and practices at an advanced level in accordance with AWS D1.1, API 1104, and applicable ASME Code/Standards.

Content outline

- GTAW
 - 2" mild steel pipe
 - Sched 10
 - Grooved butt welds
 - Carbon/stainless filler
 - 2G, 5G
 - Test x1 Practice x20
- 2" mild steel pipe
 - Sched 80
 - Grooved butt welds
 - Carbon/stainless filler
 - 2G, 5G
 - Test x1 Practice x20
- 6" mild steel pipe

- Sched 10
- Grooved butt welds
- Carbon/stainless filler
- 2G, 5G
- Test x1 Practice x10
- 6" mild steel pipe
 - Sched 80
 - Grooved butt welds
 - Carbon/stainless filler
 - 2G, 5G
 - Test x1 Practice x10

Required materials

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