

## THERMIT WELDING - 5 Day TRAINING PROGRAM

Course Code No. TWRTC- 02

| TIME                               | Day 1<br>Theory                                                                   | Day 2<br>Theory/Practical                                               | Day 3<br>Practical / Skills                                                | Day 4<br>Practical / Skills                                 | Day 5<br>Theory /Practical                           |                  |                  |
|------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------|------------------|------------------|
| 08:00 hours<br>or<br>as designated | Introduction / Thermit<br>Welding Theory Lecture<br>& Power Point<br>Presentation | Gas and Equip. usage<br>Safety precautions<br>Rail end preparation      | Practical test*<br>Cutting / Weld Gap*<br>Rail alignment*                  | Practical test* on<br>overall Thermit<br>Welding procedures | Practical test*<br>Profile grinding &Weld<br>finish* | As<br>Designated | As<br>Designated |
| 9:30 hours<br>or<br>as designated  | Morning Break                                                                     | Morning Break                                                           | Morning Break                                                              | Morning Break                                               | Morning Break                                        |                  |                  |
| 9:45 hours                         | Power Point<br>Presentation cont-                                                 | Rail Cutting<br>Weld Gap<br>Rail Alignment                              | Thermit Equipment*<br>Sand Moulds*<br>Luting*                              | Practical test*<br>cont.                                    | Practical test*<br>cont.                             |                  |                  |
| 12:00-12:30<br>or<br>as designated | Lunch Break                                                                       | Lunch Break                                                             | Lunch Break                                                                | Lunch Break                                                 | Lunch Break                                          |                  |                  |
|                                    | Power Point<br>Presentation cont-                                                 | Equipment set-up<br>Sand Moulds set-up<br>Luting mix & usage            | Instruction Preheating<br>Weld Specifications Gas<br>Pressures .& Settings | Practical test*<br>cont.                                    | Testing of Qualification<br>welds<br>& test results  |                  |                  |
| 14:30 hours<br>▼                   | Gas Safety Awareness<br>&<br>Safety with gases                                    | Preheat equip. & usage<br>Gas pressure settings<br>Preheat Demo & Instr | Practical test*<br>Preheat Operations*<br>Results Achieved                 | Practical test*<br>cont.                                    | Discussions on findings<br>& general<br>Recap.       |                  |                  |
| 15:00 hours<br>or<br>as designated | Afternoon Break                                                                   | Afternoon Break                                                         | Afternoon Break                                                            | Afternoon Break                                             | Afternoon Break                                      |                  |                  |
| 15:15 hours<br>▼                   | Written Exam GSA #<br>Gas Safety Awareness                                        | Question and answer<br>Time. Oral test ^                                | Question and answer<br>Time. Oral test ^                                   | Completion of<br>Qualification welds                        | Written Exam #<br>Welding Processes                  |                  |                  |
| 16:00 hours<br>▼                   | Review of day<br>Learning outcomes                                                | Review of day<br>Learning outcomes                                      | Review of day<br>Learning outcomes                                         | Review of day<br>Learning outcomes                          | Marking & overall results                            |                  |                  |
| 14:30 hours<br>or<br>as designated |                                                                                   |                                                                         |                                                                            |                                                             | End of course                                        |                  |                  |

PI\_GAU\_TS

^ORAL

# WRITTEN EXAMINATIONS

\*PRACTICAL TEST