

Bolt and Fixing

TEST PAPER

CANDIDATE NAME: _____ GROUP NO: _____

RESULT: PASS

Needs more training: DATE: _____

ASSESSOR: _____ *PRINT* _____ *SIGN*

1	Give three methods of applying torque to a bolting system and state which one is the most accurate
2	Give four methods preventing nuts and bolts from coming lose
3	What grade of carbon steel bolt material is most commonly used in the petrochemical industry and how can it be verified

4	What grade of stainless steel bolt material is most commonly used in the petrochemical industry and how can it be verified
5	Sketch and explain why it is important to use girder-washers on some “mainly old” sections of structural steel

6	What is the main difference between the unified thread form and the Whitworth thread form
7	What is the main difference when measuring the imperial thread pitch and the metric thread pitch form
8	What's the importance of using the correct fitting spanner on hexagon headed nuts and bolts. (at least three reasons)
9	What is the danger of using the wrong size allen key on a cap head bolts or a grub screw
10	Which has the greater strength (pull-out strength) a fine or a course thread pitch form.
11	When a bolting system is fully tightened how much thread if any should be visible after the nut

12	With reference to “Young’s Modulus of Elasticity” draw and label the load extension graph and explain its importance to applying the correct torque to a bolting system
----	---

13	Sketch and number a bolt tightening sequence for an eight bolt flange cover and explain why it is important
----	---