

Unit Standard **21684**

Use MIG welding plant in the motor industry

Level 3 Credit 3 v2

Student Name:

School:

Date:

Marked By: _____ **Mark** _____ **%**

Feedback: **Excellent work**
 Good work

Please attempt all questions
Please resubmit

USEFUL WEBLINKS

MIG Welding

<http://youtu.be/ayQLOSJ3VhE>

<http://youtu.be/5KrwmK7df-s>

<http://youtu.be/AZbCTg8otRc>

<http://youtu.be/U1GTgDQFE4A>

Setting Up Mig Plant

<http://youtu.be/6eB9qnktmDI>

<http://youtu.be/YkmQYwK8c1k>

Duty Cycle

<http://youtu.be/XhWwDoythac>

Shielding Gases

<http://youtu.be/TVM969GD44w>

Welding Joints

<http://youtu.be/dMLWKqdn920>

<http://youtu.be/8JzqWBIs7yc>

Welding Faults

<http://youtu.be/hDm0MDd6IGc>

Welding Safety

http://youtu.be/Y_WPRhf8iPA

REVIEW QUESTIONS ONE

- Q1 List five safety precautions to be observed when carrying out any welding activity.
- Q2 Explain how a MIG welder produces an arc for welding
- Q3 Explain how the duty cycle works.
- Q4 All MIG welders have an amperage rating. Explain the term amperage rating.
- Q5 Name three advantages of MIG welding compared to other forms of welding.

- Q6 What is the recommended glass tint for MIG welding?
- Q7 What precautions must be taken when welding galvanised or painted metals?
- Q8 What precautions must be taken when MIG welding next to other vehicles
- Q9 What precautions must be taken before MIG welding on a vehicle?
- Q10 What precautions must be taken when storing gas bottles to prevent explosions?

REVIEW QUESTIONS TWO

- Q11 Explain how the wire feed unit operates
- Q12 Explain the purpose of the earth clamp.
- Q13 What is the purpose of the copper coating on a mild steel wire spool?
- Q14 Name the 4 types of shielding gases used when MIG welding.
- Q15 Explain the purpose of shielding gases when welding.

Q16 What is the recommended MIG wire stick out length?

Q17 What is the recommended MIG handgun welding angle?

Q18 What is the recommended MIG handgun travel speed?

REVIEW QUESTIONS THREE

Q19 Name the 5 most common types of metals that can be welded with a MIG welder.

Q20 Name six types of welding joints.

Q21 What three factors have to be taken into account before welding?

Q22 How would you prepare a metal surface for welding?

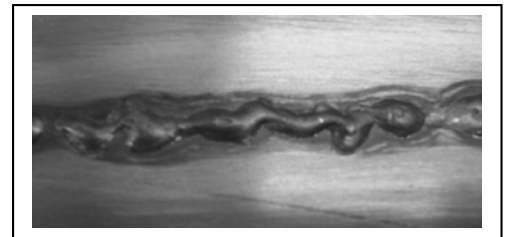
Q23 How would you prepare a metal surface with a thickness of more than 3mm for welding?

Q24 What type of shielding gas and welding wire must be used when MIG welding aluminium?

Q25 Identify and explain the possible causes for each of the following welding faults

Fault:

Causes:



Fault

Causes:



Fault

Causes:

