

# Trade of Metal Fabrication

Module 3:	Plate Fabrication
Unit 9:	Flat Backed Hopper
	Phase 2



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## **Document Release History**

<b>Date</b>	<b>Version</b>	<b>Comments</b>
21/12/06	First draft	
13/12/13	SOLAS transfer	

## Module 3 – Plate Fabrication

### Unit 9 – Flat Backed Hopper

Duration – 10 Hours

#### Learning Outcome:

By the end of this unit each apprentice will be able to:

- Read and interpret drawing
- Mark out, flame cut, bend, assemble and weld a flat backed hopper to a standard ± 2mm

#### Key Learning Points:

<b>Sk Rk</b>	Economic methods of marking out plate. (Also see Module 3 Unit 7).
<b>Rk</b>	Bending opposite hand. (Also see Module 3 Unit 7).
<b>Rk</b>	Application of flat backed hoppers in industry.
<b>Sk Rk</b>	Methods of development. (Instructor explains this is classroom).
<b>Rk</b>	Assembly procedures. (Instructor explains this is classroom).
<b>Rk</b>	Material forms of supply. (Also see Module 1 Unit 3).
<b>Rk</b>	Flame cutting. (Also see Module 2 Unit 1).
<b>Sk Rk</b>	Welding - M.A.G.s process. (Also see Module 2 Unit 10).
<b>Sk</b>	Templates.
<b>Sk</b>	Safety procedures.
<b>M</b>	Logarithms - Table of logarithms and anti-logarithms. (Instructor explains this is classroom).
<b>P</b>	Presentation and standard of work.

**Training Resources:**

- Fabrication workshop
- Oxy/fuel cutting equipment
- Apprentice tool kit
- Drawing equipment and paper for patterns
- M.A.G.s welding plant and equipment
- 5mm mild steel plate
- Safety clothing, equipment and procedures
- 150 x 150mm S.H.S.

**Key Learning Points Code:**

**M**= Maths      **D**= Drawing      **RK**= Related Knowledge      **Sc**= Science  
**P**= Personal Skills      **Sk**= Skill      **H**= Hazards

## Materials – Forms and Supply

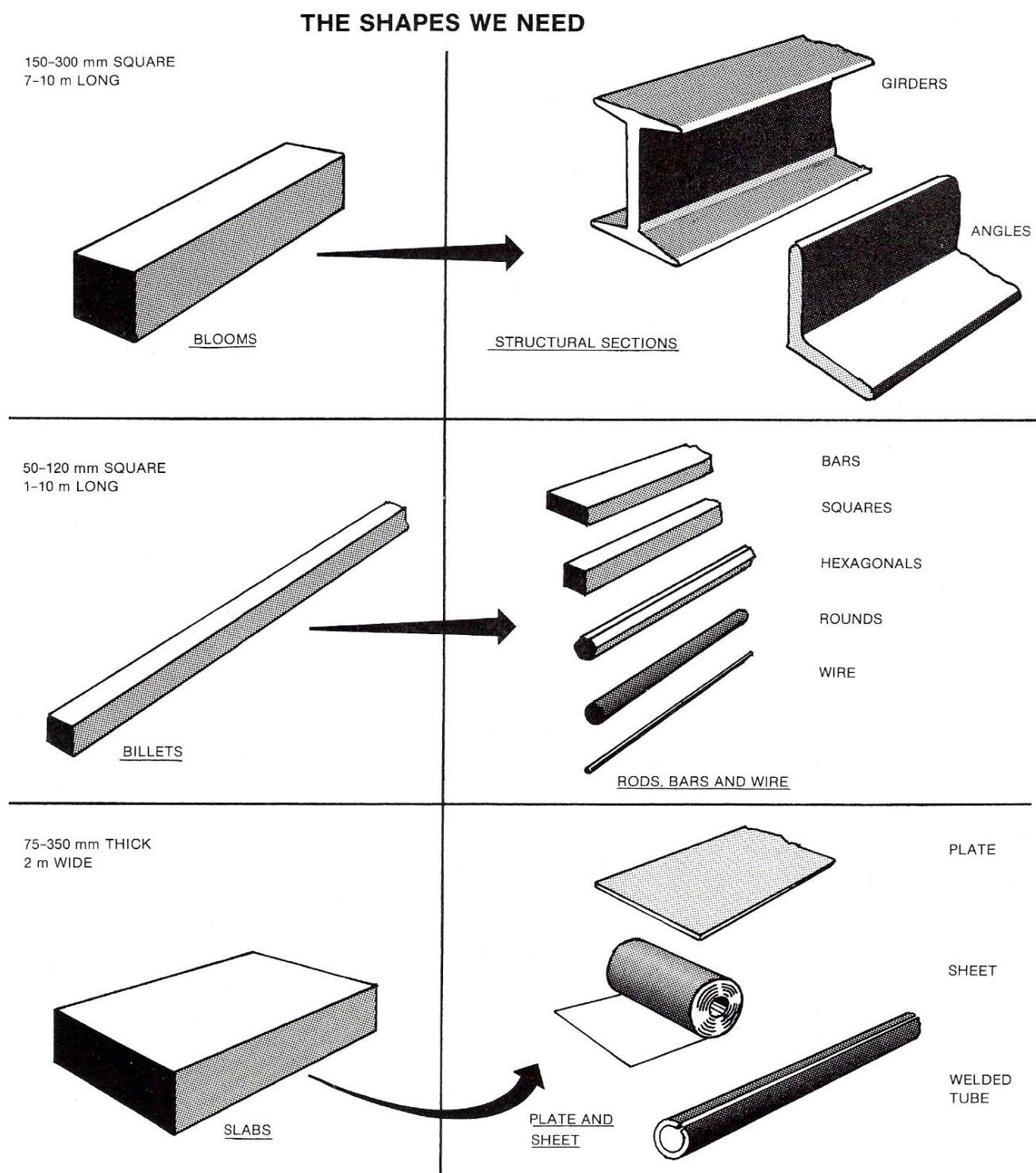


Figure 1 - The Shapes We Need

## **Self Assessment**

Questions on Background Notes – Module 3.Unit 9

**No Suggested Questions and Answers.**

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