

BAE SYSTEMS Submarines' Plate Cutting and Plate Preparation Facilities are extensively computerised to ensure maximum efficiency and flexibility.



Plate Cutting and Preparation

Plates are cut on an area 40m by 8.4m using Numerically Controlled (NC) machines. The latest of these machines, the Messer Griesheim CNC 4-head profile burner, is capable of cutting four identical patterns in a single run and will accept plates up to 5m by 2.5m. Mild steel up to 200mm thick can be cut with ease.

The Plate Preparation Facility produces tapes for use with NC and CNC burning machines. Programming is specifically designed to allow the maximum number of components to be cut from a single plate. Individual cuts are arranged so as to optimise burning time and ensure economical use of materials.

The CNC plasma and flame burning machines will handle plates up to 11m long and 7m wide. Non-ferrous plates up to 150mm thick and ferrous metals up to 1 metre thick can be cut. Plates with a thickness of less than 15mm are usually cut underwater.

Bay & Floor Area		Effective Working Height	Effective Entrance Dimensions (w x h)
Production Area	6196m ²	8m	6.1m x 6.7
Storage Area	2256m ²	6.8m	

Cranage

15-tonne beam magnet & 5 tonne beam magnet (Storage Area)
7.5-tonne Semi-Goliath (x 2) & 3 tonne Semi-Goliath
10-tonne jib (attached to Roll Press)
15-tonne overhead

Machines

Machines	Maximum Capacities
CNC Plasma & Flame Burning Machine	11m x 7m x 150mm thickness non-ferrous
NC Flame Burning Machine	40m x 8.4m x 200mm thickness mild steel
Radial Arm Burner (Portable)	12.8m dia max
CNC Profile Burning Machine	2.5m x 5m x 200mm thickness mild steel
Profile Burning Machines (2)	1.5m ² & 1.5m x 3m x 100mm thickness mild steel
Guillotine	25mm thickness mild steel
Edge Mill	12.2m long
Press - Brake	500 tonnes
Press - Ring	1000 tonnes
German Rolls	4.875m x 88mm thickness mild steel
Roll Press	2000 tonnes
Verina Rolls	4m x 16mm thickness mild steel
Flame Plane	12m x 3.6m x 100mm thickness plate mild steel
NC Programming Facility	