



ENGINEERING LTD.

CONTENTS



TABLE OF CONTENTS

About Us.....	3
Quality.....	4
Markets.....	5
Manufacturing Services.....	6
CNC Punching Services.....	7
CNC Forming Services.....	8
CNC Laser Cutting Services.....	9
Powder Coating Services.....	11
Product Design Services.....	12
Production Control.....	13
Factory.....	14
Plant List.....	15
Map & Directions.....	16
Work Examples.....	17
Conditions Of Sale.....	18

ABOUT US

The company supplies many well respected national companies both in the UK and Europe.

Formed in 1981 ALAR's success has been based on its investment in the very latest technology and automated equipment, and its ability to recognise and develop customers in a wide range of different market sectors. The growth and expansion of the company comes from the flexibility that the automated machinery can offer combined with the skills and training that our personnel have to compete in International markets.

ALAR Engineering's strength over many of its competitors is that we can provide a one stop shop for your sheet metal requirements. The complete service includes product design, CNC automated punching, CNC laser cutting, CNC forming, full welding and spot welding, in house powder coating and mechanical assembly.

ALAR's philosophy is simple, put the customer first by having an understanding and awareness of what the customer's requirements are. Be professional and work as a team to strive for continuous improvement. We are dedicated to customer satisfaction, producing competitively priced, quality products, with a prompt and efficient delivery service stemming from a flexible shift pattern.





ISO 9001 REGISTERED

This document certifies that the quality management systems of

ALAR ENGINEERING LTD

Unit 32, Portmanmoor Road Industrial Estate, Cardiff CF24 5HB

have been assessed and approved by QMS International Ltd to the following quality management systems, standards and guidelines:-

ISO 9001 : 2008

The approved quality management systems apply to the following:-
THE MANUFACTURE OF PRECISION SHEET METAL COMPONENTS AND FABRICATION OF FINISHED ASSEMBLIES.

Original Approval: 07 November 2005

Current Certificate: 06 November 2015

Certificate Expiry: 06 November 2025

Certificate Number: 14129338



This Certificate remains valid while the holder maintains their management system in accordance with the published standard. To check the validity and status of this certificate please email certificates@qmsuk.com

This Certificate is the property of QMS International Ltd and must be returned in the event of cancellation


On behalf of QMS International Ltd ✓

QMS International Ltd • Muspole Court • Muspole Street • Norwich NR3 1DJ • T: 01603 630 345
www.qmsuk.com • Registered in England No. 9512735

QUALITY

Quality is at the core of our business and ALAR's policy of putting the customer first is built on a foundation of providing the highest levels of quality and service.

Our quality assurance is a fully documented Quality Management System to the requirements of ISO 9001:2008.

Throughout the production process this Quality Management System ensures all commercial and technical aspects are specified, measured and reviewed.



**ISO 9001
REGISTERED FIRM**

MARKETS

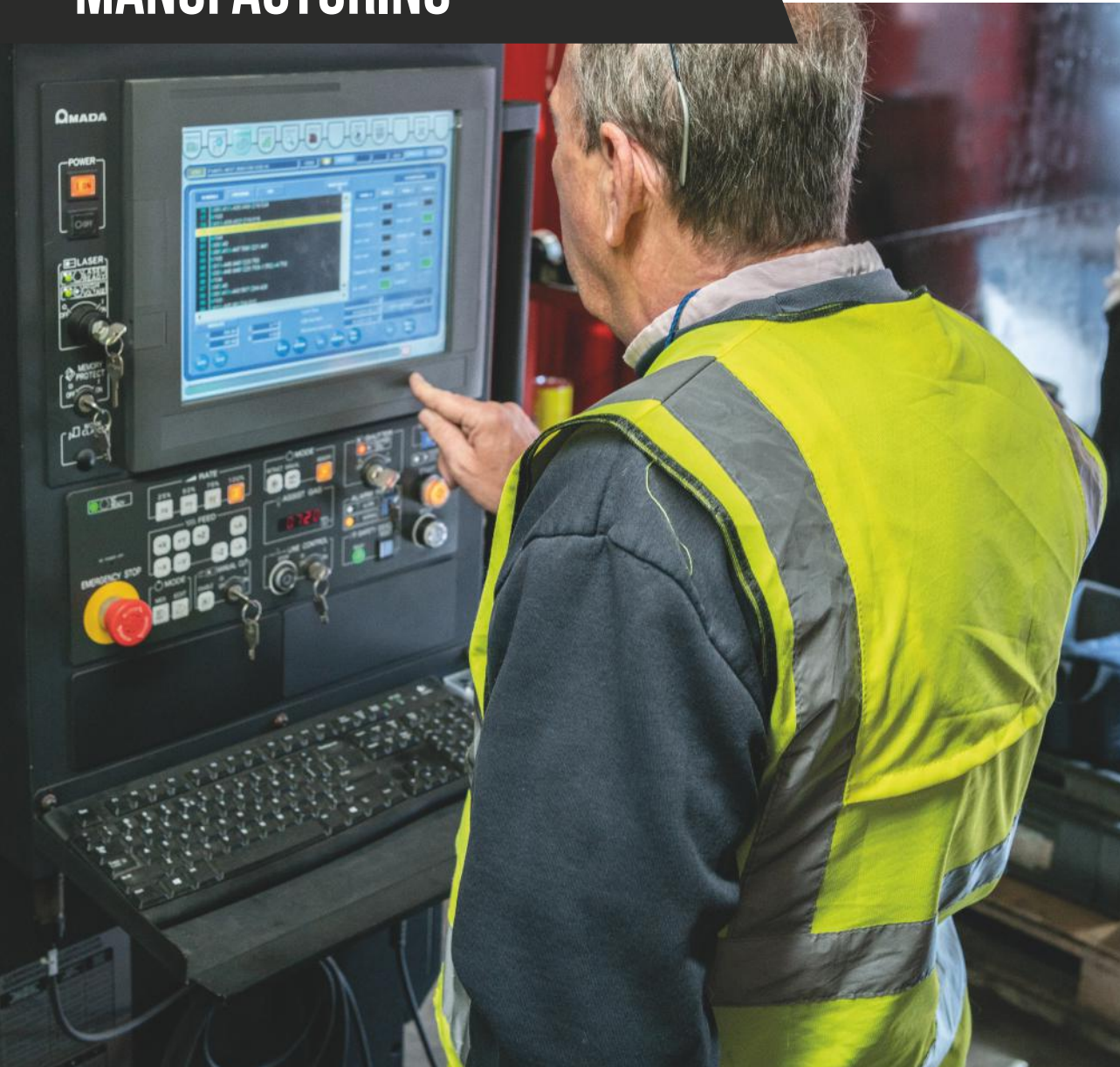
ALAR's strength is demonstrated by its wide customer base in the following industries:

- Air conditioning
- Close Circuit T.V.
- Defence
- Electronics
- Electrical Switchgear
- Gaming and Vending Machines
- Lighting
- Medical Equipment
- Point of Sale
- Refrigeration
- Solar heating
- Retail Shelving
- Telecommunications

INDUSTRIES



MANUFACTURING



MANUFACTURING SERVICES

Product Design

At the centre of ALAR's design and engineering department is the latest Radan CAD/CAM system.

CNC Punching

ALAR Engineering has invested heavily in the very latest fully automated high speed punching cell. This system is only one of a few fully automated systems in the UK.

CNC Laser Cutting

NEW IN 2015 AMADA LCG 3015 CO2 Laser Cutter with an Automated Material Handling System represents a £500K investment in line with Alar Engineering's policy of continuous improvement.

CNC Forming

ALAR Engineering has the very latest state of the art high speed Amada press brakes.

Powder Coating

Substantial investment in powder coating technology enables ALAR to offer the complete powder coating service. A wide range of finishes are available for all base metals.

CNC PUNCHING SERVICES

ALAR Engineering has invested heavily in the very latest fully automated high speed punching cell. This system is only one of a few fully automated systems in the UK.

Sheets are automatically fed onto the punching machine from a 30 tonne storage tower processed at punching speeds of 1000 hits per minute. Tool changes occur robotically from a 224 tool carousel which enables very quick change over between jobs

Finally punched parts are automatically removed and stacked by a part removal system. The complete punching cell can run 24 hours per day, 7 days a week increasing flexibility, productivity and output



CNC FORMING



CNC FORMING SERVICES

ALAR Engineering has the very latest state of the art high speed Amada press brakes. All machines can be programmed off-line with most components being able to be bent in one handling with up to 8 axis movement on the machines.

With ALAR's large range of tooling, setups are quick and repeatable.

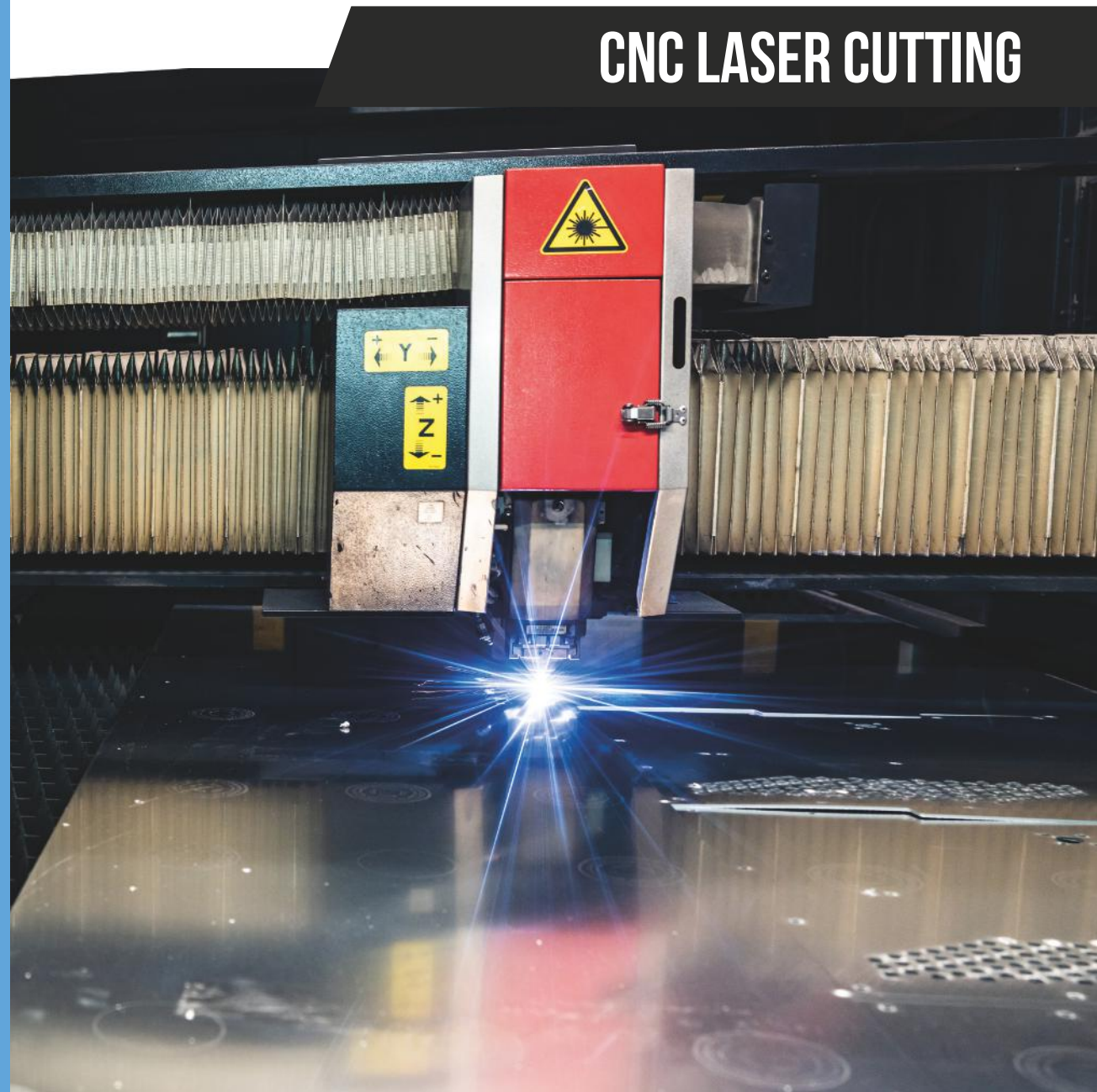
CNC LASER CUTTING SERVICES

AMADA LCG 3015 3500 Watt CO2 Laser with Automated Material Handling System. NEW IN 2015 This new AMADA LCG 3015 CO2.

Laser Cutter with an Automated Material Handling System represents a £500K investment in line with Alar Engineering's policy of continuous improvement.

Alar Engineering has invested extensively in technology since it was founded in 1981 and this latest laser cutting equipment means we can increase capacity and respond faster to the needs of customers. Using the very latest laser technology and software, this new laser cutter is fully automated with the ability to run lights out, 24 hours per day, 7 days a week unmanned.

CNC LASER CUTTING



CNC LASER CUTTING



AMADA LCG 3015 LASER CAPACITY

Sheet size: 3m x 1.5m

Material Thicknesses:

- Mild Steel 20mm
- Stainless Steel 10mm
- Aluminium 8mm

With Automated Material Handling System.

The AMADA ASLUL Load\Unload Tower System incorporates multiple raw material and finished parts pallets to allow continuous scheduled processing. Parts and material can be loaded\unloaded without interrupting the laser cutting cycle.

POWDER COATING

Substantial investment in powder coating technology enables ALAR to offer the complete powder coating service. A wide range of finishes are available for all base metals.

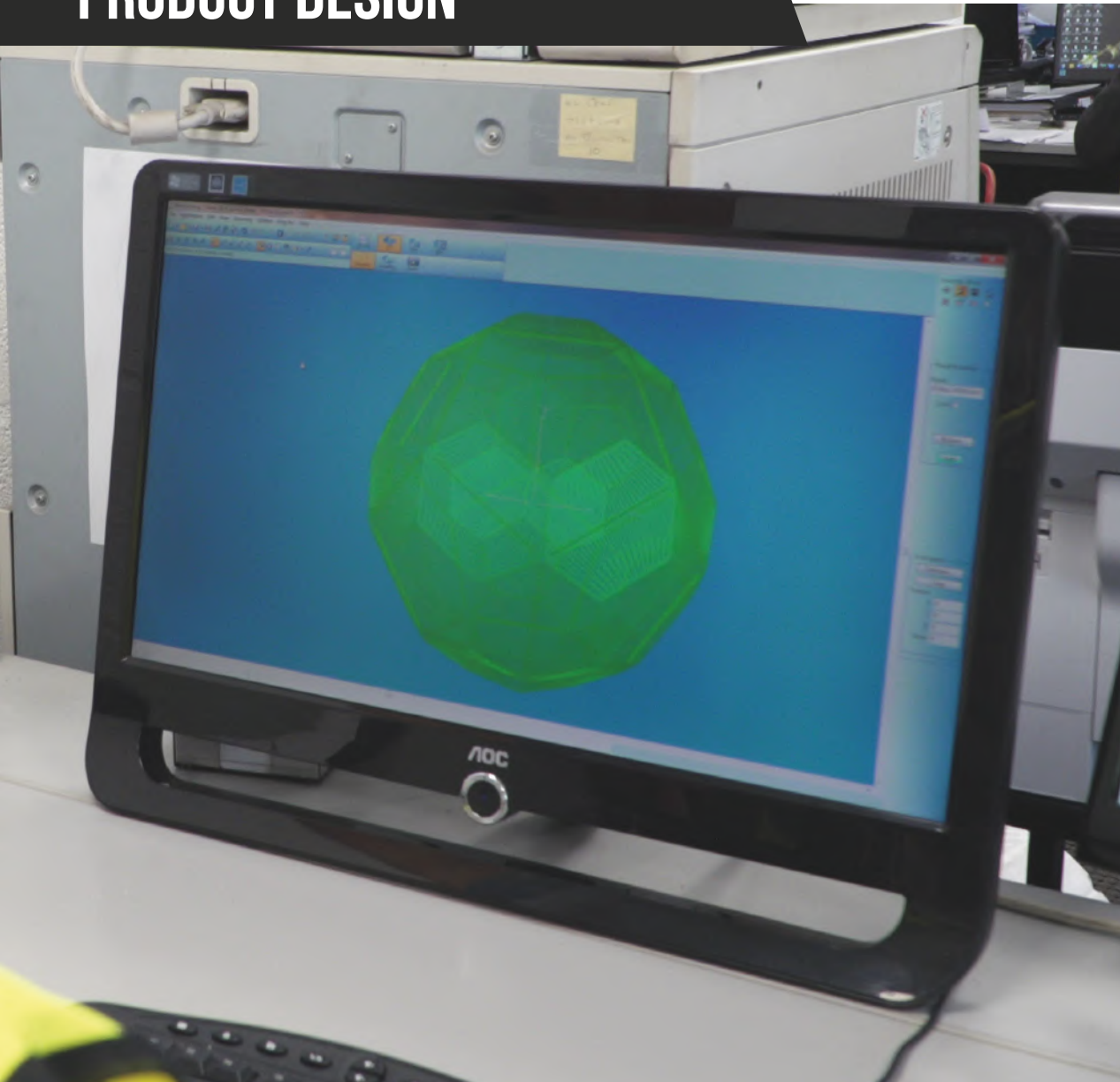
Powder coating offers an economical and durable finish with many colours being held in stock. The Nordson electrostatic system allows for fast and efficient colour changes. High quality silk screen printing can be under taken so that the customer receives the finished item with no extra operations having to be under taken.

Alar Engineering also offer the following electroplating plating finishes to the products that it makes. Clear zinc plate and chromate passivate, colour zinc plate and chromate passivate, range of trivalent passivates, electro tin plate, anodizing in various colours, alocrom 1200, alocrom 1000, Iridite NCP, alodine 160/161, bright and dull nickel, zinc phosphating, nickel and chrome plate.

POWDER COATING



PRODUCT DESIGN



PRODUCT DESIGN SERVICES

At the centre of ALAR's design and engineering department is the latest Radan CAD/CAM system. 2D and 3D visualising and a DNC link provide a sophisticated electronic transfer between customers design engineers and high speed fully automated punching and laser cells.

Electronic drawing data can be received in 2D drawing formats such as DXF or DWG 3D formats in SAT or IGES.

Our engineers look to work closely with customers at an early stage to identify the best method of manufacture and construction and to eliminate any unnecessary operations, so that the components are made in the most cost efficient way.

PRODUCTION CONTROL

ALAR know and understand that the job is not complete until it is correctly delivered.

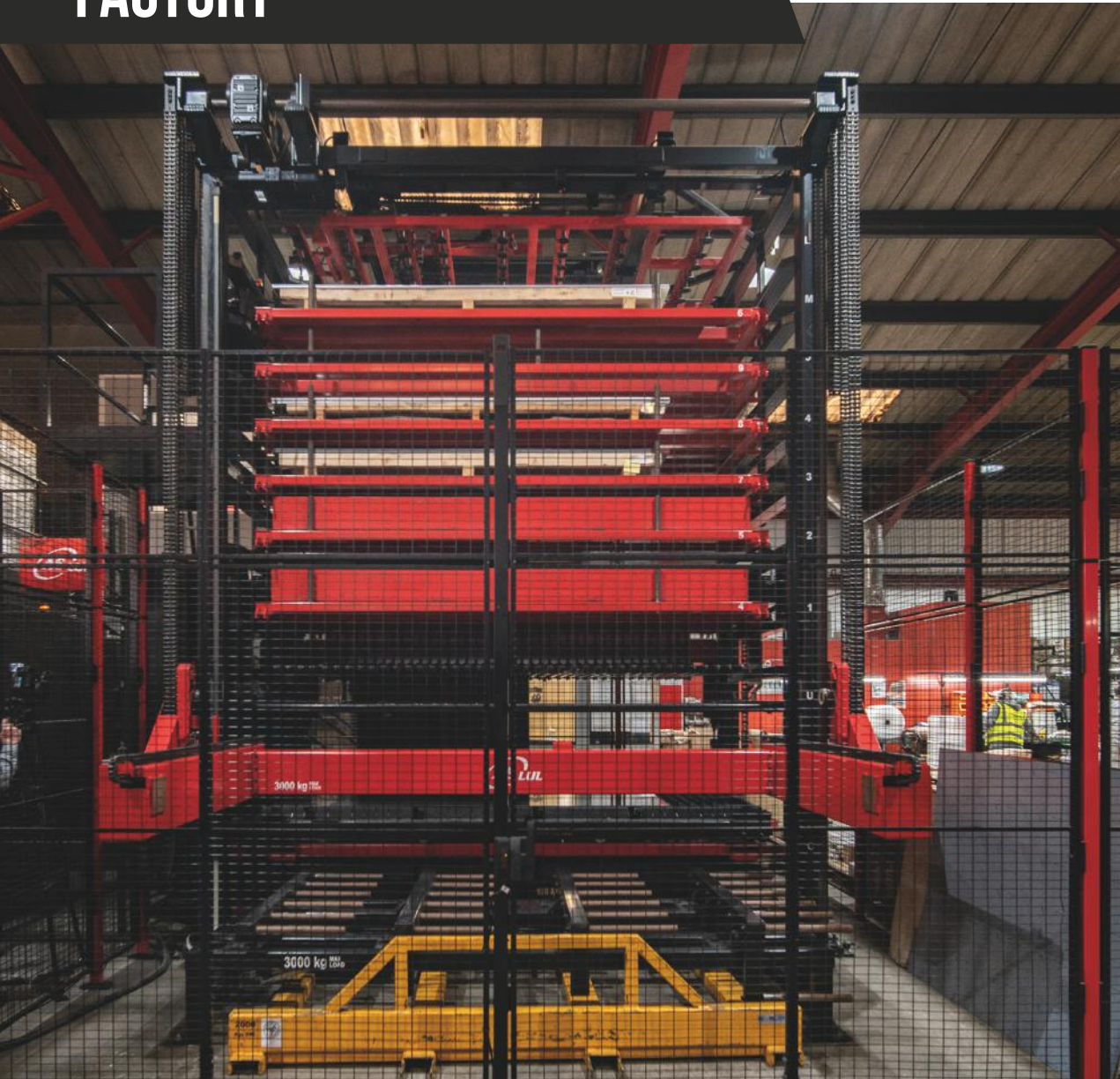
Using the EFACS production control system which can cater with customers fast moving and changing delivery schedules, products are packed and delivered on our own fleet of vehicles maintaining high product quality and ensuring that no damage occurs in transit.

ALAR are familiar with operating to a variety of different supply methods including just in time and KANBAN depending on customer requirements.

PRODUCTION CONTROL



FACTORY



OUR FACTORY

ALAR Engineering Ltd has a production space of 20,000 sq. ft together with additional office space.

The factory contains fully automated Amada CNC turret punches, Amada CNC laser cutting and Amada CNC forming equipment.

PLANT LIST

CAD/CAM PROGRAMMING

RADAN 2011 R2 with FIVE High Speed PC's operating the CAD/CAM facility using the latest software including RADPUNCH, RADRAFT, RADBEND and RADPROFILE. 2D and 3D visualising with DNC link to Turret Presses and Laser Machines. DXF & DWG software allows customer 2D drawings to be imported into the Radan software and the additional facilities of IGES, SAT & STEP 3D software allows for work to be imported from customer 3D images.

COMPUTERISED SYSTEM

EXEL EFACS computer software is extensively used throughout to control all manufacturing processes from Sales Order Processing and Estimating, Purchase Order Processing, Shop Floor Data Capture and Job Costing, to Despatch and Accounts.

FULLY AUTOMATED CNC LASER CUTTING

Fully Automated AMADA LCG 3015 3500 Watt CO2 Laser Cutter with AMADA ASLUL Load\Unload Tower System, incorporating multiple raw material and finished parts pallets to allow continuous scheduled processing. Parts and material can be loaded\unloaded without interrupting the laser cutting cycle. Max sheet size 3000mm x 1500mm, up to 20mm Mild Steel, 10mm Stainless Steel and 8mm Aluminium. Cutting Accuracy +/-0.1mm. The machine can run lights out, 24 hours per day, 7 days a week unmanned.

FULLY AUTOMATED CNC PUNCHING

Fully Automated AMADA Vipros Z 3510 PDC King, High Speed, 30 Tonne Hydraulic Punch Press. Maximum hit rate of 1000 HPM, 224 Tool Carousel with automatic tool changer. Press is automatically fed from 30 Tonne storage tower and punched parts are automatically removed and stacked by PR System. The machine can run lights out, 24 hours per day, 7 days a week unmanned.

BENDING

4 x Amada Promecam CNC multiaxis Press Brakes, down stroking with enhanced daylight opening of 470mm allowing deeper components to be bent. 1xHFB 8025 - 8 axis. Bend length 2.5 metre x 80 tonne. 3xHFB 5020 - 8 axis. Bend length 2 metre x 50 tonne.

TOOL GRINDING

AMADA TOGU III Automatic Punch Press Tool Grinder.

BUSH AND STUD INSERTION

2 x HAEGER 6 Ton Semi Automatic Bush Insertion Machines.
2 x SERTABUSH 6 Ton Hydraulic Bush Insertion Machines.

WELDING

1 x Techna 25 kva Spot Welder.
1 x Techna 20 kva Spot Welder.
1 x Sureweld Pei 25 kva Spot Welder.
MIG and TIG Welding Sets and CD Stud Welding.

DEBURRING

GRINDMASTER Series 2000 (MSB) 1100mm Wide Belt Surface Finishing Machine. Lakeside Fettling Booths with Disc and Orbital Sanders.

GENERAL MACHINING

Ajax Evolution 200 CNC Lathe 1000X400 mm capacity.
Bridgeport Universal Milling Machine. Archdale Radial Drills X4. IBP Chop Saw.

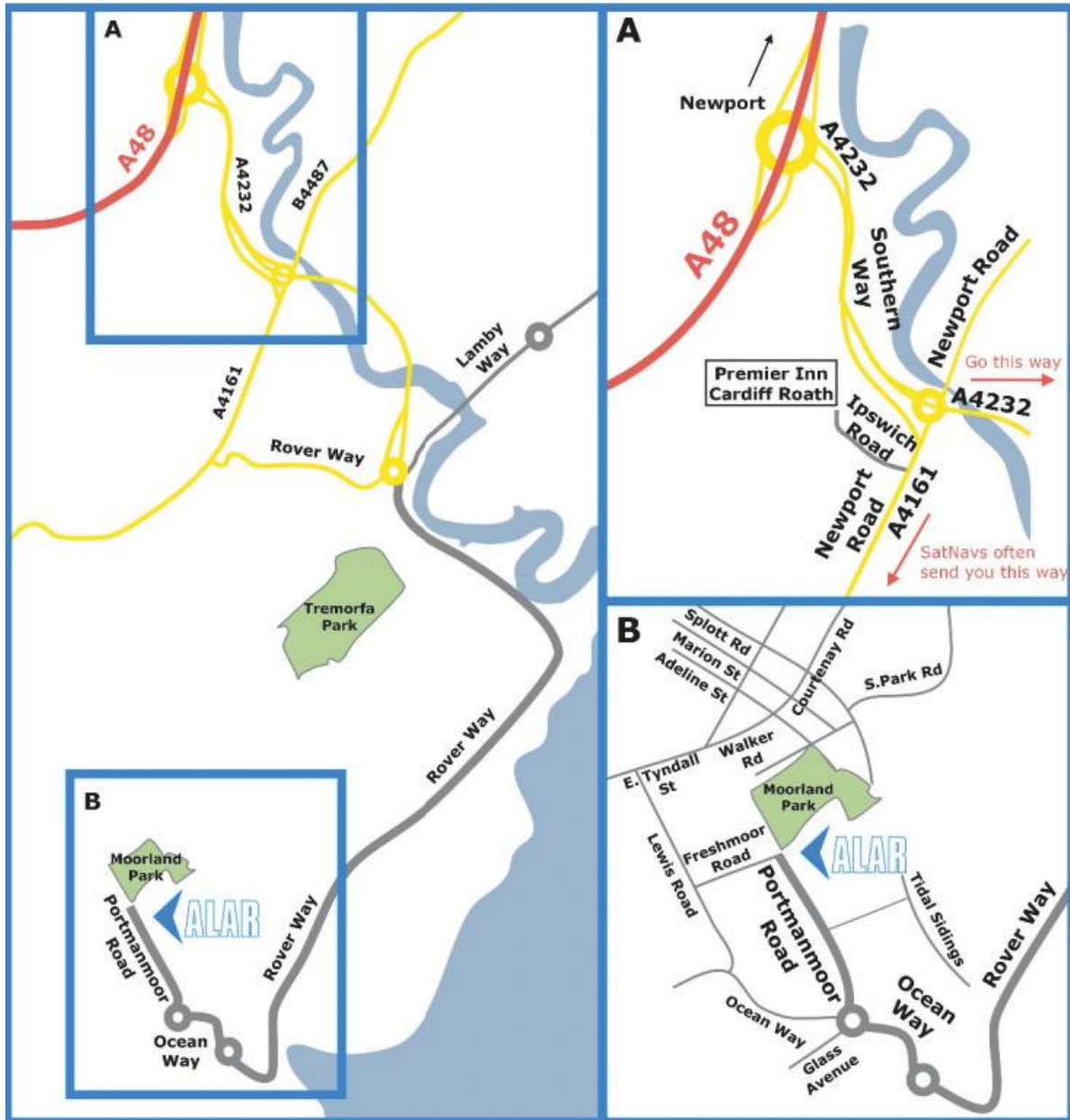
ASSEMBLY

Complete Mechanical Assembly Facilities.

FINISHING

NORDSON Electostatic Powder Coat Line with Twin Gun Booth and Off Line ICI Degreasing facility. Maximum component size: Height 1.0m, Width 0.75m, Length 2m. Silk Screen Printing. Other finishes such as electro plating and alocroming are offered as standard. Alar Engineering also offer the following electroplating plating finishes to the produces that it makes. Clear zinc plate and chromate passivate, colour zinc plate and chromate passivate, range of trivalent passivates, electro tin plate, anodizing in various colours, alocrom 1200, alocrom 1000, Iridite NCP, alodine 160/161, bright and dull nickel, zinc phosphating, nickel and chrome plate.

MAP



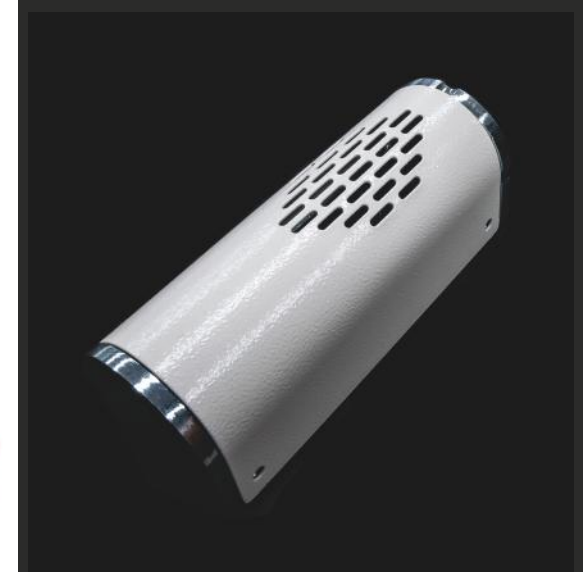
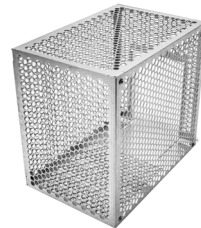
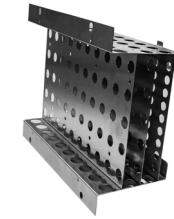
Travelling from Newport / London Take the M4 Junction 29 onto the A48M. Continue onto the A48 and take the A4232 Cardiff East Junction. Move into the right-hand lane and go over the flyover continuing on the A4232. At the next roundabout take the second exit onto Rover Way. Continue along Rover Way past the Tremorfa Works and across two roundabouts. At the next roundabout turn right onto Ocean Way. Go straight across at the next roundabout continuing on Ocean Way. At the next roundabout take the third exit onto Portmanmoor Road. Follow the road to the end ALAR Engineering will be on your right. Please note that SatNavs often direct you West along the A4161 at the flyover instead of onto the A4232, which makes it much more difficult to find us.

Travelling from Swansea Take the M4 Junction 32 onto the A470 southbound. Take the A48 eastbound and leave at the A4232 Cardiff East Junction then follow the remaining directions on the map.

PRECISION SHEET METAL WORK SAMPLES

ALAR Engineering is a subcontract manufacturer of precision sheet metal components, enclosures and electro-mechanical assemblies.

With its CNC punching, CNC laser cutting, CNC forming, full welding, spot welding, and in-house powder coating, ALAR provides a complete service to a wide range of clients.



CONDITIONS OF SALE

GENERAL:

All goods are sold subject to the acceptance of the following terms and conditions.

DAMAGE IN TRANSIT:

Goods delivered short or damaged are to be signed for to that effect on the Consignment Note and immediate notification given to our Head Office. Providing notification is received within 3 days of delivery, the Company will repair or replace free of Charge. The Vendors shall not be under any obligation to replace (though they may do so at their option) goods destroyed, damaged, sunk in transit, or detained by the Queen's Enemies, or (in the case where goods are obtained by the Vendors from works abroad) for the total or partial suspension of deliveries which may be occasioned by any circumstances attributable to war, nor shall the vendors be responsible for any damage caused to the purchaser by the non delivery of any such goods.

PACKING:

There will be no charge for our normal packaging. Any special packing required, packing cases and crates, etc., will be charged for and included in the quoted price.

GUARANTEE:

Any goods returned and admitted by us to be defective in workmanship or material will be replaced free of charge within a period of six months from date of delivery, but we are unable to accept any contingent liability for subsequent labour expenditure or loss. Should any claim arise under this Guarantee, please quote your Order Reference and Consignment Note number. We cannot under any circumstances accept charges from customers who rectify faulty parts supplied by us in their own works, without prior agreement confirmed in writing by the Company.

PRICES:

The Company reserves the right to revise, without notice, the prices or specifications set out in our Price List and Information catalogues and all orders are accepted on the understanding that they will be invoiced at the prices ruling at the time of despatch.

VALIDITY OF QUOTATIONS:

All quotations are valid for 30 days unless otherwise specified and are given without engagement until the order has been offered to and accepted by us.

VARIATIONS:

All Quotations are subject to alteration in accordance with variations which may take place in wage or material rates

ORDERS:

In the interest of Customers, all verbal orders should be confirmed in writing, in order that we may fulfil our desire to give our best service at all times.

SITES:

Where installation or Erections for part of the Quotation or Contract, it is assumed that the Site where the installation or Erection is to take place, shall be level and clear with reasonable access.

PAYMENT:

Terms of Payment STRICTLY NETT MONTHLY ACCOUNT, except in the case of any special discount allowed and confirmed in writing by the Company.

CONTRACTS:

Contracts including erection, the terms of payment are 100% the value of the materials as delivered Nett Monthly Account. and final payment at the end of the month following completion of the contract. Contracts for Export, unless otherwise agreed in writing, are accepted only when accompanied by an irrevocable Letter of Credit or a London Bank: Terms of Payment being Nett Cash against Shipping Documents.

CANCELLATIONS:

Orders may not be cancelled without our agreement in writing. and only on payment of any costs which may have incurred to date of cancellation. In the event of the suspension of any work by the Customers instructions, or lack of instructions, we reserve the right to charge any extra expense thereby incurred by the Company.

DRAWINGS ETC.:

All Descriptive and Forward Specifications, Drawings and other particulars submitted with our Tender are approximate only and the descriptions and illustrations contained in our Catalogues, Price Lists and other advertisement matters are intended merely to present a general idea of the goods described therein, and none of these shall form part of a contract.

RESERVATION OF TITLE:

UNTIL full payment has been received by the Company for ail goods whatsoever supplied (and all services rendered) at any time by the Company to the Buyer:

a) Property in the goods shall remain in the Company.

b) Should the goods (or any of them) be converted into a new product, whether or not such conversion involves the ad mixture of any other goods or thing whatsoever and in whatever proportions, the conversion shall be deemed to have been effected on behalf of the Company and the Company shall have the full legal and beneficial ownership of the new products, but without accepting any liability whatsoever in respect of such converted goods in relation to any third party, and the Buyer hereby indemnifies the Company in relation thereto.

c) Subject to (d) and (e) below, the Buyer shall be at liberty to sell the goods and the new products referred to in (b) above, in the ordinary course of business on the basis that the proceeds of sale shall belong to the Company to whom the Buyer shall account.

d) The Company may at any time revoke the Buyer's power of sale by notice to the Buyer, if the Buyer is in default in the payment of any sum whatsoever due to the Company (whether in respect of the goods or any other goods supplied) or services rendered at any time by the Company to the Buyer or for any other reason whatsoever (or if the Company has bona fide doubts as to the solvency of the Buyer.)

e) The Buyer's power of sale shall automatically cease if a Receiver is appointed over any of the assets, or the undertaking of the Buyer or a winding up order is made against the Buyer, or the Buyer goes into voluntary liquidation (otherwise than for the purpose of reconstruction or amalgamation) or cause a meeting of or makes any arrangement or composition with creditors or commits any act of bankruptcy or allows execution to be levied against its or his goods.

f) Upon determination of the Buyer's power of sale under (d) or (e) above, the Buyer shall place the goods and the new products at the disposal of the Company who shall be entitled, using as is reasonably necessary, to enter upon any premises of the Buyer for the purpose of removing such goods and new products and to remove such goods and new products from the premises (including severance from the realty where necessary.)

32 Portmanmoor Road Industrial Estate
Cardiff, Wales CF24 5HB
Tel: 029 2049 5370
Fax: 029 2049 5518
Email: info@alar.co.uk
Website: www.alar.co.uk

