# **NEVILLE** PRECISION ENGINEERING LTD COMPLETE SOLUTIONS FOR LONG LENGTH



### WE OFFER A DIVERSE RANGE OF SERVICES:

- ~ ALUMINIUM EXTRUSION DESIGN, SOURCING AND STOCKHOLDING
- ~ 4&5 AXIS CNC MACHINING, FABRICATION AND ASSEMBLY
- ~ 3D MODELLING DESIGN SERVICES AND PROTOTYPES
- ~ 3.7MT (12FT) FAROARM 'EDGE' CMM INSPECTION
- ~ STATISTICAL PROCESS CONTROL (SPC)
- ~ ANODISED OR PAINTED PRODUCTS
- ~ PARTS FROM 50MM TO 8000MM+

WHETHER YOU ARE LOOKING FOR STANDARD OR CUSTOMISED ALUMINIUM PROFILES WE CAN PROVIDE THE RIGHT SOLUTION.

> ISO 9001 ISO 14001 OHSAS 18001



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Neville Precision has been established for over 7 years, with a family manufacturing history stretching back over 100 years. We have recently moved to new larger premises to accommodate our growing business, which is conveniently situated in the heart of the UK very near to the M1-J28. We have over 15 years experience in the machining of aluminium extrusions, and our growth is based on technical strength, our people, the quality of our products and the reliability of our service.

We specialise in the CNC machining of aluminium extruded components large or small. We can machine parts up to 8,000mm (3 Axis) and 7,400mm (4 Axis) in one operation without the need to re-index the material. This enables us to provide a consistent accuracy along the length and maintain a higher quality standard. We have 8 CNC milling machines and 4 CNC double mitre saws for accurately cutting sections to any length or angle. We work both as a subcontractor on free issue material, or source material directly on behalf of our customers providing full turnkey solutions for finished aluminium extruded components.

Sector Experience :

Aerospace Components Architectural Systems Automotive Components Coach Building : Bodyshell & Interiors Commercial Transport Construction Industry & Cladding Systems Electronics Industry Heating & Ventilation Systems Leisure Industry Military Vehicles & Bunkers Motorsport Industry Railway Carriages : Bodyshell & Interiors Shop Fittings & Interiors Specialist Aluminium Lighting Telecommunications







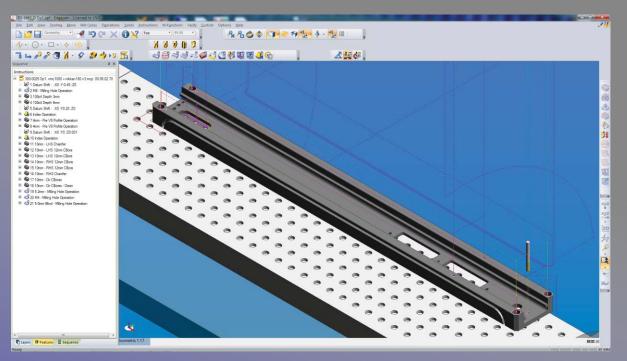




## 3D AUTODESK INVENTOR® SERIES 2D AUTODESK AUTOCAD®



Autodesk Inventor delivers a high-performance software for mechanical engineering and design to help accelerate our design cycles. By simplifying our data management, this makes our product development more affordable than ever, which helps us turn our design cycles into a competitive advantage. AutoCAD® software is the 2D drafting and detailing tool used by more designers worldwide than any other CAD software.



### EDGECAM



Edgecam combines the power of sophisticated toolpath generation with seamless CAD integration, enabling us to directly import and work with the customers original drawings. A simple 2D or complex 3D part can be resolved with ease, quickly recognising features to generate accurate NC code. This enables us to give precise estimates using simulations, which dramatically reduces the lead time from drawing to manufacture.



## **NEVILLE FAMILY HISTORY**

#### NEVILLE TRANSPORT CO. LTD - COMMERCIAL TIPPER BODY MANUFACTURERS.

George Neville commenced in business in 1907 at the age of 20, contracting for the transport of post office mail between Mansfield & Nottingham by horse drawn transport. It was in the capacity of a mail contractor that George Neville first started body building to provide his own horse van bodies. His son George E. Neville pioneered the 'tilt cab' known then as the Neville Cab and hailed as "the most progressive step in commercial vehicle cab design". He also invented an automatic sheeting system which could be operated either manually or electronically, for which he was awarded the Design Council Award in 1977. This sheeting system was, and still is, used on both Rail and Road transportation vehicles to the present day.



The first recorded photograph of George Neville with his fleet of horses.



The original Hoveringham Gravels fleet included 5 'Neville Cabs'.

#### NEVILLE RAIL PROJECTS LTD - RAILWAY COMPONENT & FABRICATION MANUFACTURERS.

Michael Neville, grandson of the founder, took the family business forward into the railway industry in 1986, as the result of winning a contract from Metro-Cammell Ltd to manufacture complete Roof & Underframe assemblies for their Kowloon Canton Railway contract. This was then followed by contracts from the first BREL London Underground refurbishment work on the Central Line, which led to prototype and development work for every major rail contractor.



Roof assembly under construction.



Roof assembly ready for delivery.

#### **NEVILLE PRECISION ENGINEERING LTD** - CNC Machined Aluminum Extrusions

Following the demise of British made components for rolling stock, the large organisation which was Neville Rail Projects was scaled down during 2006 into two new companies. One of these new companies is Neville Precision Engineering, which saw a need in the market for a company to specialise exclusively in the CNC machining of aluminium extrusions. Neville Precision took with it over 15 years of experience in this field, and has invested close to £1M in new premises and machinery over the past 6 years. Early 2012 saw the company move from its original rented premises, to a much larger and newly renovated location in Pinxton. This has provided a solid foundation for future expansion and enables the company to explore opportunities in potential new markets.



Machining aluminium extrusions, it's what we do best !

## **Family History** Extract Taken From "Nottingham Memories"~ Published By True North Books

# **Neville Precision Engineering**

## Made in the Midlands

which a family manufacturing history stretching back over 100 years, Neville Precision Engineering Ltd offers specialist services for CNC machined aluminium extruded components.



Based in Pinxton, Nottinghamshire, the company's growth is based on a robust technical strength, its people, the quality of its products and the reliability of service - all allowing Neville Precision to successfully work with a varied and innovative customer base, spreading over many sectors.

In 1907, Edgar Neville began trading under the family name, contracting for the transport of Post Office mail between Mansfield and Nottingham by horse-drawn transport. His son, George E. Neville, was born in 1913 and he would take the family firm to heights only dreamed of by his father.



Young George became Managing Director of George Neville & Son in 1939 at the age of just 25. By then the firm had long been in the business of buying Vauxhall, Daimler, Renault and Delaunay Belville chassis then building saloon and van bodies on to them. By the late 1930s the firm also had a Bedford truck dealership and a Vauxhall car franchise.

During the war, the firm found itself making oil cooling equipment for Bristol planes, plane seats, access ladders and aileron bearings. An engineering genius, George pioneered the 'tilt cab', known then as the Neville Cab, and hailed at its debut in 1944 as 'the most progressive step in commercial vehicle cab design'. Tilting the whole cab to easily access the



engine improved maintenance times dramatically. Post-war, however, disastrously large death duties payable on the death of Edgar Neville in 1962 led to the sale of the original firm.Six years later, George and his son Michael started again from scratch. George also invented an automatic sheeting system which could be operated either manually or electronically. It was awarded the Design Council Award in 1977, and is still used to the present day. Following in the family tradition of inventors,



Michael also invented a 3 way tipper called the Revolver which was specially designed to tip its load to the side whilst still being driven forward. This was specifically used for laying the new concrete hard standing at Heathrow Terminal 4.

**Top left:** Neville Precision Engineering's Brookhill Industrial Estate, Pinxton, premises. **Left:** The first recorded photograph of George Neville with his fleet of horses. **Bottom:** G. E. Neville & Son Ltd's Vauxhall and Bedford dealership. **Above right:** George Neville's revolutionary tipping cab design. **Above left:** The Revolver 3 way tipper. **Below:** A proud moment for George Neville as he receives his award from the Duke of Edinburgh.





## **Family History**

Extract Taken From "Nottingham Memories"~ Published By True North Books



Michael Neville, grandson of the founder, took the family business forward into the railway industry in 1986. Michael formed Neville Rail Projects after winning a contract to manufacture complete Roof & Underframe assemblies for Metro-Cammell Ltd for the Kowloon Canton Railway Corporation.

This was followed by contracts from BREL for London Underground refurbishment work on the Central Line, which led to the company acquiring prototype and development work for every major rail contractor.

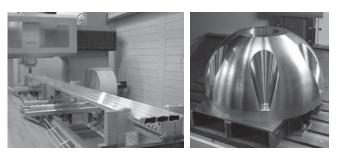


Following the demise of British made components for rolling stock, Neville Rail Projects was scaled down in 2006 into two new companies, one of which was Neville Precision Engineering, which met a need in the market for a company to specialise exclusively in the CNC machining of aluminium extrusions.



Neville Precision Engineering has since built on over 15 years of experience in this specialist field, and has invested over  $\pounds 1M$  in new premises and machinery over the past seven years.

In 2012, the company moved to a much larger and newly renovated location in Pinxton, Nottingham, providing a solid foundation for future expansion and is enabling the company to explore opportunities in potential new markets.



In 2013, Neville Precision secured a 7 year contract to supply door steps for Jaguar Land Rover (JLR) and is looking to acquire similar long term contracts to secure the company's future for many more years.

Today, guided by Managing Director, Edward Neville, the company currently has ten CNC milling machines and four CNC double mitre saws for accurately cutting sections to any length or angle. As a company, the goal of Neville's was never to be the biggest - only the best. However, because of the experience, knowledge and commitment to service of their people, they have continually grown over the past eight



years. There has always been a commitment to invest in new technology to help keep Neville's at the leading edge. Subsequently, their devotion to the CNC machining of aluminium extrusions has given the company one of the largest facilities in the UK to provide complete solutions for aluminium extrusions.

**Top left:** Michael Neville. **Above left:** A view inside Neville Truck Equipment Ltd in the 1960s. **Left:** Rail roof construction in the 1980s. **Top right:** Machining of an aluminium extruded component (left) and a machined ball used to test barrier fencing for F1 motor sport (right). **Above right:** A new door step for Jaguar Land Rover. **Below:** One of two of the company's Mecal Falcon 4 Axis CNC Machining Centre's with fibre optics for ultra high machining speeds to produce work for Jaguar Land Rover. **Above left:** Managing Director, Edward Neville.





## Neville Precision Engineering Stay Ahead Of The Competition By Buying Mecals' First 5-Axis Ariel MC304



Max working space: 7500 x 500 x 300 mm. Fully equipped with digital technology, the data communication is via optical fibre ensuring high transmission speed and a complete absence of interferences caused by external factors. Simultaneous clamp positioning with independent motorisation on each vice, which allows the automatic repositioning of the clamp even during the machining process. High performance 6 pole 11 kW electric spindle with 12 position tool magazine, plus 400mm saw blade.

MC 304 Ariel-5		
Corsa asse X X axis stroke	mm	7500 9500 11500
Velocità di posizionamento asse X max. X axis rapid speed max.	m/1*	80
Corsa asse Y Y axis stroke	mm	1400
Velocità di posizionamento asse Y max. Y axis rapid speed max.	m/1'	60
Corsa asse Z Z axis stroke	mm	700
Velocità di posizionamento asse Z max. Z axis rapid speed max.	m/1'	40
Corsa asse A A axis stroke	deg	± 120°
Corsa asse C C axis stroke	deg	± 220"
Potenza nominale elettromandrino Electrospindle rated power	kW	11
Velocità massima di rotazione Max speed rotation	rpm	20000
Tipo di raffreddamento Cooling system		Liquid
Cono attacco portautensile Type of coupling holder		HSK-F63
Diametro Lama max. Blade diameter max.	mm	400
Diametro Fresa a disco max. Side & Face milling cutter diameter max.	mm	200
Peso Weight	kg	± 6500





#### 0026 CERT NO 11480 ISO 9001 ISO 14001 OHSAS 18001

### **NEVILLE PRECISION ENGINEERING BUY THE WORLDS FASTEST CNC**

4 off On Site

Neville Precision Engineering stay ahead of the competition by buy the world's fastest CNC, the 4-Axis Mecal Falcon. It has just been received at Addison Saws for pre delivery inspection. Neville Precision Engineering is one of the UK's leading aluminium processing specialists. This absolutely state of the art machine has axis speeds nearly twice as fast as its nearest competitor, and employs the very latest technological developments including fibre optic plc communication, and absolute smart servo motor drives for all axis. The material clamps use the same system and are individually motorised for split second re-positioning and ability to move during the working cycle.

#### **NEVILLE PRECISION ENGINEERING BUY THE WORLDS BEST SELLING MEASUREMENT ARM**

Neville Precision Engineering has also invested in the latest FARO arm which will provide extreme customer security in checking tolerances and repeatability of fabricated batches of the same product, thus ensuring our ISO9001 is adhered to. With embedded statistical process control (SPC) methodology, which quickly and easily analyse multiple parts and then accumulates measurement results it give visualized trend charts on all dimensions.

