

## Chapter 1 : Michael Worthington-Williams (Author of The Scottish Motor Industry)

*In pictures: Scotland's lost motor industry. the Scottish sports car never really competed with contemporary rivals such as the Porsche or Ferrari GTB and was a commercial flop.*

The Norsemen came to Scotland from the 9th to 11th centuries and settled in the Northern Isles, Western Isles and on the mainland. They had fish as a large part of their diet, and excavations of Viking sites in Orkney and Shetland have found middens kitchen waste areas containing large quantities of fish bones. These bones were mainly of cod, saithe and ling but herring, haddock and whiting bones were also found. They used the line fishing method with hooks and bait. A fleet of Dutch herring busses, c. The boats, called busses, were very large. They lay overnight with the drift nets set to catch the herring and were hauled by hand in the morning. The herring were salted and placed in barrels. These barrels were then transferred to small boats called jagers, which were tenders to the busses. These boats took the fish to the markets. The 18th century saw some Scottish fishermen emulate this Dutch method of fishing. In 1713, the government introduced the bounty system to promote large scale fishing. This meant that the government paid a bounty to the boat owner based on the tonnage of the vessel and would also pay a bounty to anyone for simply building a fishing boat. This continued until 1757 and did much to encourage the growth of the fishery. The fishery was valuable and the fleets often came under attack from French and Spanish privateers. Because of this, armed ships were employed to accompany and defend the fishing boats. The bulk of the Scottish fishery was still using the line and bait method in inshore waters. However, in 1757 the government instituted barrel bounties, which meant that the bounties were payable based on the amount of cured herring produced. This encouraged the herring curers to enter into contracts with the fishermen whereby they would be guaranteed a price for their catch. The 19th century saw the greatest growth in sea fishing on the Scottish east coast. In the early years of that century the boats were very small, made of wood and were either one or two masted. They were not expensive to build and small repairs were carried out by the fishermen themselves. These early boats needed to be light so they could be dragged up the beaches. The fishermen did not venture far from the shore, as these boats were undecked and unstable under stormy conditions. In 1799, a violent storm hit the country and boats were sunk, and fishermen lost their lives. The government appointed Captain John Washington to enquire into the disaster and to make recommendations the Washington Report. He pointed out that the boats were too small and being without decks prone to water inundation. However, not all of the fishermen were happy about larger decked boats. They felt that heavier boats would be harder to row and decks would make it easier for men to be washed overboard. Also beaching the boats would be impossible. But a good many fishermen took a contrary view and felt that the decked boats was a good idea. They realised that the boats could fish further from the shore and would be better in storm conditions. Larger boats could hold more fish and so profits would be greater. The first decked boat was built in Eyemouth in 1799 and this soon became the norm for the Scottish fishing fleet. These sail boats were of three main types: Skaffies, Fifies and Zulus. Common to all three types were the lug sails, which may have given rise to their name - luggers. The need for the larger boats spurred on the building of harbours all along the east coast, in the 1800s and 1850s. This heralded an enormous change in the size of the herring fishery. Initially, the market for the pickled herring was Ireland and the West Indies where it was fed to slaves. The market received a setback in the 1800s following the ending of slavery on British-owned plantations and, from 1845 to 1852 when the Great Irish Famine forced a mass emigration from Ireland. However, improvements in curing techniques produced a superior product and soon meant that new markets opened up in Russia and the Baltic countries. The fishermen, with the support of the curers, invested in larger boats and additional nets. The fleet grew quickly but was still could only fish for herring during the two months when the fish were off the Scottish east coast. By 1850, there were around 7,000 Scottish boats involved in herring fishing so the fishing season needed to be extended. This led to a migration of a sizeable number of boats and curers to the west coast in May and June. By 1850, the numbers of boats fishing the west coast numbered more than 1,000. In the 1850s, Scottish boats were also to be found in East Anglian waters for the Autumn fishing. Initially, Scottish curers were not present in any great numbers in this fishery but by the end of the 19th century large numbers were

represented in Great Yarmouth and Lowestoft. By this time, the Scottish fleet actually outnumbered the local one. The curers soon turned their attention to Shetland for the early summer fishing causing the local Shetland fishermen to adopt the drift net and larger boats. By the early 20th century, more than 1, boats fished the Shetland waters. In the herring industry faced a crisis. The curers wanted an end to the contract system because they could not balance quantity and costs with market conditions and so wanted a move to an auction process. Fishermen wanted the status quo but reluctantly agreed and from the herring were auctioned. The peak of the herring fishery industry and also its main decline came between and the First World War. Steam-powered fishing boats appeared towards the end of the 19th century and it was steam drifters that would take the volume of the catch to new heights. The powered winches allowed longer nets to be deployed and their speed enabled the boats to get to market quickly and to return to sea. In those early years of the 20th century, the Scottish catch reached 2 million barrels annually. After the war, however, Germany was racked by inflation and was impoverished. Russia underwent the Revolution and civil war. Other European countries started to compete strongly with the British fleets and for twenty years the industry went into a steep decline. The beginnings of the seine net fishing began in Scotland in but the use of the large inefficient steam boats greatly hindered this new whitefish fishery. After the Second World War , the Scottish east coast fleet, with government assistance, was totally regenerated becoming mainly a whitefish industry. This in turn declined in the s and s due to overfishing and the subsequent imposition of quotas by the European Union. The herring industry continued to shrink. From the s, trawling and purse-netting were the main methods of pelagic fishing, which not only includes herring but also mackerel. Although a quota is placed on the total herring catch and with no limit on mackerel, this sector is now the healthiest in the Scottish fleet. Fishing boat development[ edit ] The Scandinavian influence[ edit ] Viking boat showing clinker planking The Norsemen were skilled seamen and boat builders and their boat designs depended on their needs. Trading vessels were wide, to allow large cargo storage, while raiding boats were long and narrow and very fast. They all used the clinker fashion of planking, i. The boats used for fishing were scaled-down versions of their cargo boats. The Scandinavian influence affected boat building long after the Viking period came to an end. Yoles from the Orkney island of Stroma were built in the same way as the Norse boats. Early Scottish boat builders copied the Scandinavian designs with their clinker planking and characteristic sharp stems and sterns. The Skaffie[ edit ] From the beginning of the 19th century a class of boat called the Skaffie appeared. These were favoured mainly in the Moray Firth region. The early skaffie boats were small with rounded stems and raked sterns. They were two-masted with a tall dipping lugsail and a mizzen sail. Their short keel gave them good manoeuvrability in good weather, but they tended to be unstable in bad weather. They were usually crewed by around six people. Above all, though, they were light enough to be hauled up on to the beaches. The boats were un-decked and provided no shelter for the crew. Because of the vulnerability of the boats, they stayed only a few miles out to sea in full view of the land. This came about because the harbours that were constructed from the mid to late19th century meant that the boats no longer needed to be beached. Skaffies were not built in any great numbers after Fifie Fifie sail drifter - Reaper The "Fifie" then became the predominant fishing boat on the Scottish east coast. They were used from the s until well into the 20th century. Fifies had a vertical stem and stern with a broad beam, which made them very stable. Their long keel was a disadvantage, especially manoeuvring in confined spaces. These boats were two masted with a main dipping lugsail and a mizzen sail. The masts were set quite far forward and aft to release a good working space. Fifies built from onwards were all decked, and from the s onwards the bigger boats were built with carvel planking, i. The Zulu[ edit ] A Zulu at Catterline. In , Lossiemouth fisherman, William "Dad" Campbell came up with a radical design for his new boat. It had the vertical stem of the Fifie and the steeply raked stern of the Skaffie, and he called this boat Nonesuch, registration number INS The Nonesuch had her registration closed on 12 January after having been broken up. The Zulu War raging in South Africa at the time gave the name to this new class of boat. The Zulu boats were built to the carvel method of planking.

## Chapter 2 : Category:Motor vehicle manufacturers of Scotland - Wikipedia

*Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.*

This list of major automotive industry companies includes the largest and most profitable automotive industry businesses, corporations, agencies, vendors and firms in the world. If you are wondering what the biggest automotive industry companies are, then this list has you covered. This list includes names of both small and big automotive industry businesses. This list answers the questions, "What are the biggest automotive industry companies in the world? Its logo is a shield with a stylized scorpion on a red and yellow background. The range consisted of a It used an hp cc 4-cylinder Dorman engine and a 3-speed gearbox. Automotive industry AC Cars Ltd. The company began in when the British Hewitt had helped Sir Hiram Maxim to build a large steam plane in It is based in Caxias do Sul, in the state of Rio Grande Aisin is a Fortune Global company, The origin of the name is reputed to be derived from a play on the name of It was owned by The company was founded by George Johnston, formerly of Arrol-Johnston, primarily for the manufacture Allard and George Pilkington as cycle makers. In the company produced a 3-wheel The cars were sold under the Alldays name. The company also built an early British built tractor, The company was founded in , and produced motorcars licensed from the British Austin Motor Company from Operating more than production facilities and service centers throughout the United States and Canada, Formerly known as Accelerated Composites, the company was based in Oceanside, California. It was one of the leading innovators in British motorcycling, and was part of the Ariel marque. The first model was a two-seater called Arkley SS, designed It was formed in and is best known for the production of luxury motor cars and The first ARO vehicles were produced in , and the last in For a short while, Daihatsu-powered AROs Arola became part of the Aixam group The company also developed the The company is named after Alberto Ascari who was the Founded in , it is the 2nd largest commercial vehicle manufacturer in India, 4th largest manufacturer of It was founded in by Lionel Martin and Robert Bamford. The firm became associated with luxury At GBP it claimed to be the smallest and cheapest Astra was privately founded in in Cagliari, and since Audi oversees worldwide operations from its headquarters in Ingolstadt, In it was merged with Morris Motors Limited in the new holding company

## Chapter 3 : The IMI in Scotland | IMI | Institute of the Motor Industry

*The motor vehicle industry in Scotland was a microcosm of the British industry in the years to Major characteristics of the industry are outlined and the ten major vehicle manufacturers are.*

The building behind the impressive and palatial foot frontage built of red sandstone from Dumfries, Aberdeen granite, and Italian marble, with its clock tower surmounted by a golden dome that could be seen for miles, began life in as offices and workshops for the flourishing Argyll Motors Limited. Smith, and its managing director, Alexander Govan, had joined forces in after Govan had spent several years experimenting with the internal combustion engine. Both were convinced of the great future of the motor car Competition from foreign cars was fierce, but at the Glasgow International Exhibition of their Argyll car went through a five-day trial without losing a mark and achieved the distinction of being the only car in its class to do so. Extension of the Bridgeton works made the production of 25 cars a week possible, but such was the public demand for Argyll cars that a new company had to be formed. A new site of 53 acres was found in Alexandria, an area with an abundance of skilled male labour, most of whom were obliged to travel to Clydebank or Dumbarton for their work, and Argyll Motors Limited was born. At the time of moving to Alexandria the company was in very sound financial shape. They had built up reserves to make their stock a good solid investment. The works were planned on a large scale to enable them to expand their operations at any time. They had previously had to turn down orders of work, including building motor launches, ploughs, motor buses, taxi cabs and vans. Perhaps their greatest achievement was in building safe and reliable cars at reasonable cost suited to the average man who enjoyed motoring. The Scottish motor industry had come into its own. A railway siding with 3 branches to all parts of the site was laid from the Dumbarton and Balloch Joint Railway. This enabled building materials to be brought in quickly, and was later used to ship cars to all parts of the world. Govan designed the works himself, having visited factories throughout Europe and America. Anderson and the contractor G. All spoke highly of the 1, workmen employed in the building of the factory. The bricklayers laid 30, bricks in one day; two roofs, feet by 33 feet, were erected in another day. Half the frontage was built in one week. The painting shop, coach building shop and chassis shop were put up in the space of 6 weeks. At the opening ceremony one of the guests said that the works would stand as a monument to the genius of Alexander Govan. The finished plant covered 12 acres, and was designed to be extended at any time. Surplus land was feued or sold so that the cost of the building and land could be recovered. Several streets of houses were built for the workers, many of whom had transferred from Glasgow. Many of these streets, such as Argyll Street and Govan Drive, had names associated with the company and its founders. Lay-out of the Works The building on Main Street consists of two wings. Over the central entrance is a carving of a nymph on an Argyll car surrounded by artisans and cherubs. At the top of the marble staircase a grand corridor extends almost yards each way. The North Wing housed the offices, board room, drawing office etc. Motoring Heritage Museum Marble Staircase All had large windows or skylights, and most had telephones. Below this corridor the store extended the entire length of the building, giving quick access to all the workshops. These were laid out at right angles to the main building, so they could be added to at any time without disrupting production. Many recreations were encouraged and the works soon had its own orchestra, choir, ambulance class, cycling club, a football club so large it had 35 five-a-side teams, a rifle club, and a magazine. In his speech he said that the Argyll Works were the best equipped in the world and would attract a good class of workmen, and lead to the turning out of a first class article. He was confident in the future of automobilism, and he felt that the establishing of works such as these at Alexandria ensured to our nation the claim to be the great engineering home of the future. By Argyll Motors were producing over cars a year, more than any other manufacturer in Europe. The company employed at least 1, people, and at times as many as 2, Sadly, Alexander Govan died in at the age of only He was succeeded as Managing Director by Colonel J. Matthew, and the cars continued to excel. Successful models included the Torpedo, of streamlined design, the double Phaeton and the Landaulette, a favourite with women drivers. Again the cars were innovative and good value for money. Argylls Ltd and the Single-Sleeve Valve Engine In Colonel Matthew became interested in

developing the single-sleeve valve which had been demonstrated to him by its inventor, a Glasgow engineer called Peter Burt. This was superior to the poppet valve in general use, but it proved difficult and costly to produce. Unfortunately the idea was ahead of its time, and this is where the company began to founder. A Canadian engineer had patented a similar design of valve just ahead of Burt, but the two men were able to meet and thrash out a design between them that was patented in as the Burt-McCollum single-sleeve valve engine. Around the same time, Daimler had adopted the Knight patent for a sleeve-valve engine. From to all new Argyll cars had the new engine plus many other refinements, and continued to set new records for performance. In Daimler took legal action against Argyll Motors Limited over patent infringements. In they went into liquidation, and production ceased early in the summer. The French car manufacturers Darracq tried to take them over as a going concern, but the Bank of Scotland acting for the debenture holders refused the offer. They could not compete for price with other cars then being produced in the English Midlands. Production ended in , and the last Argyll Company was wound up in However, the Burt-McCollum principle in which Colonel Matthew had such faith was finally adopted by the Bristol Aeroplane Company and was a great success in both commercial and military aircraft until the coming of the jet. Subsequent History of the building When war broke out in August , the Admiralty took over the former Argyll Works in Alexandria as a munitions factory, employing many of the car workers. They were sacked by the Admiralty and some found employment on Clydeside. The Munitions Works became known locally as the Gun Works and to the north a building was erected for processing Lyddite for shells. This made the workers come out canary yellow. The munitions were run out of the Works on bogies and stored in Argyll Park. During the depression a silk factory occupied the Works for a short time, but for many years the buildings stood empty. Unemployment in the Vale rose to 68 per cent. Then, in , with the rearmament programme the Royal Navy returned and the Works became a torpedo factory until They closed within a year, intending to move the equipment to Ilford in Essex. The workers occupied the factory and released machinery only on the understanding that the site would be used as an industrial estate. Lyon-Plessey Developments tried to attract new industries to the estate with little success. Nothing was done, and although the council was empowered to carry out the repairs itself and charge the owners, or to put a compulsory purchase order on the building, it was unable to afford to do either, even though the building was raised from B to A listed, which could generate more governmental subsidy. In the Argyll Group Plc expressed an interest in developing the site, converting the offices to luxury flats, renovating the central part for use as a museum and building a supermarket to the rear. Again nothing happened, and time and the weather continued to take their toll. What had once been the pride of the Vale was now an eyesore as it rapidly deteriorated. A local group was formed in the hope of coming up with a plan to save the Argyll building, many believing an industrial museum would be an ideal solution, but it was to be another long wait before a rescue plan became evident. In the late nineties a company called Gilpro took over the restoration of the building and after a considerable amount of work and money had been spent on the project, Loch Lomond Factory Outlets was officially opened to the public in by HRH the Princess Royal. The building only consists of the front-facing part of the building now, with the rear buildings having been demolished some years ago; the copper dome gleams once again and the marble staircase has been completely replaced The basement housed a motoring museum until , exhibiting many original Argyll Motors and telling the full history of this once booming industry. The ground and upper floors now consist of factory outlets and have also at various points housed a creche, a bar and a restaurant, although many of the shops, the creche and the bar have since closed. Many locals fear for the fortunes of the building as many of the outlets have only been filled for short periods at a time and many feel it would be a great pity to see this great example of architecture fall once again into disrepair after such a spectacular restoration. If you have a question that needs an answer, please use our Contact Us section what were you doing?

### Chapter 4 : Exhibition | Scottish Rugby Hospitality

*Pages in category "Motor vehicle manufacturers of Scotland" The following 3 pages are in this category, out of 3 total. This list may not reflect recent changes ().*

## Chapter 5 : Motor Trade Jobs in Scotland - November | [www.nxgvision.com](http://www.nxgvision.com)

*The Scottish Motor Industry (Shire Library) [Michael Worthington-Williams] on [www.nxgvision.com](http://www.nxgvision.com) \*FREE\* shipping on qualifying offers. Language:[www.nxgvision.com](http://www.nxgvision.com) Scottish Motor Industry.*

## Chapter 6 : Argyll Motor Works - West Dunbartonshire Council

*This study examines financial management practice in the early Scottish motor industry to c. , analysing the role it played in the industry's progress and ultimate decline. Three firms dominated the industry during this period, Argyll, Albion and Arrol Johnston, and financial management in each.*

## Chapter 7 : Formats and Editions of The Scottish motor industry. [[www.nxgvision.com](http://www.nxgvision.com)]

*The IMI, which is the Sector Skills Council for the retail motor industry and its professional association for individuals working in the trade, wants 40, 'home grown' apprentices working in the UK's automotive sector by , an increase of % on today's figure.*

## Chapter 8 : Alba Awards | IMI | Institute of the Motor Industry

*The IMI in Scotland The latest in Scotland Guided by our Scottish Employer Forum, made up of leading employers representing our entire footprint, we aim to ensure that our industry's training and education needs are met, raising skill levels and helping to increase the productivity and growth of the sector.*

## Chapter 9 : Business, industry and innovation - [www.nxgvision.com](http://www.nxgvision.com)

*Business in Scotland. Information on Scottish industry and businesses around Scotland. Including government publications, consultations and reports on topics such as Scottish trade, Scottish business developments, Scottish business start ups, Scottish Enterprise, the Highlands and Islands Enterprise, Scottish business funding, Scottish government grants, business rates (including tax) and energy.*