I'm not a bot

Also found in: Thesaurus, Financial, Acronyms, Idioms, Encyclopedia, Wikipedia. (fkt-r)n. pl. factories 1. a. A building or group of buildings in which goods are manufactured; a plant.2. A business establishment for commercial agents or factors in a foreign country.3. The source of prolific production: a rock group that was a hit-tune factory; a motel that served as an illegal drug factory.[Late Latin factria, oil press, mill, and Medieval Latin factria, establishment for factors, both from Latin factor, factor; see factor.]American Heritage Dictionary of the English Language, Fifth Edition. Copyright 2016 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved. (fktr) n, pl -ries1. (Commerce) a. a building or group of buildings containing a plant assembly for the manufacture of goodsb. (as modifier): a factory worker. 2. (Commerce) rare a trading station maintained by factors in a foreign country3. Canadian (formerly) a main trading station for the exchange and transshipment of furs[C16: from Late Latin factorium; see factor]Collins English Dictionary Complete and Unabridged, 12th Edition 2014 HarperCollins Publishers 1991, 1994, 1998, 2000, 2003, 2006, 2007, 2009, 2011, 2014 (fk t ri, -tri) n., pl. -ries. 1. a building or group of buildings with facilities for the manufacture of goods. 2. (formerly) an establishment in a foreign country where factors carried on their business. Random House Kernerman Webster's College Dictionary, 2010 K Dictionaries Ltd. Copyright 2005, 1997, 1991 by Random House, Inc. All rights reserved. - Originally a place where traders did their business in another country, based on Latin factorium, "an oil press" (for olive oil).See also related terms for olive oil.Farlex Trivia Dictionary. 2012 Farlex, Inc. All rights reserved.a body of factors, or workers, 1702.Dictionary of Collective Nouns and Group Terms. Copyright 2008 The Gale Group, Inc. All rights reserved. works mill plant1. 'factory'A building where machines are used to make things is usually called a factory.I work in a cheese factory.He visited several factories which produce domestic electrical goods.2. 'works'A place where things are made or where an industrial process takes place can also be called a works. A works can consist of several buildings and may include outdoor equipment and machinery.There used to be an iron works here.After works you can use either a singular or plural form of a verb.The sewage works was closed down.Engineering works are planned for this district.3. 'mill'A building where a particular material is made is often called a mill.He worked at a cotton mill.4. 'plant'A building where chemicals are produced is called a chemical plant.There was an explosion at a chemical plant.A power station can also be referred to as a plant.They discussed the re-opening of the nuclear plant. factory1. 'manufacture'Manufacture refers to the process of making goods using machines. Manufacture is an uncountable noun.The chemical is used in the manufacture of plastics.2. 'factory'Don't use 'manufacture' to refer to a building where machines are used to make things. Use factory.She works at the chocolate factory.See factory - works - mill - plantCollins COBUILD English Usage HarperCollins Publishers 1992, 2004, 2011, 2012 Noun1.factory - a plant consisting of one or more buildings with facilities for manufacturingmanufactory, manufacturing plant, millassembly plant - a factory where manufactured parts are assembled into a finished productcannery - a factory where food is cannedchemical plant - an industrial plant where chemicals are producedclosed-circuit television - a television system that is not used for broadcasting but is connected by cables to designated monitors (as in a factory or theater)foundry, metalworks - factory where metal castings are producedlumbermill, sawmill - a mill for dressing logs and lumberpaper mill - a mill where paper is manufacturedindustrial plant, plant, works - buildings for carrying on industrial labor; "they built a large plant to manufacture automobiles"assembly line, production line, line - mechanical system in a factory whereby an article is conveyed through sites at which successive operations are performed on itshop floor - workplace consisting of the part of a factory housing the machines; "the productive work is done on the shop floor"stamp mill, stamping mill - a mill in which ore is crushed with stampssweatshop - factory where workers do piecework for poor pay and are prevented from forming unions; common in the clothing industrytextile mill - a factory for making textilesuptime - a period of time when something (as a machine or factory) is functioning and available for useBased on WordNet 3.0, Farlex clipart collection. 2003-2012 Princeton University, Farlex Inc.Collins Thesaurus of the English Language Complete and Unabridged 2nd Edition. 2002 HarperCollins Publishers 1995, 2002nounA building or complex in which an industry is located:mill, plant, work (used in plural).The American Heritage Roget's Thesaurus. Copyright 2013, 2014 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved. tovrnatovrnzvodfabrikafabrikafabrikas-rpncarpncas-Collins Spanish Dictionary - Complete and Unabridged 8th Edition 2005 William Collins Sons & Co. Ltd. 1971, 1988 HarperCollins Publishers 1992, 1993, 1996, 1997, 2000, 2003, 2005 [fktri] modiffactory worker ouvrier/ire m/ffactory owner propritaire mf d'usineFactory Acts npl (British) ensemble des lois qui rgissait les conditions de travail dans les usines au XIXe siclefactory farming n levage m industrielfactory floor nthe factory floor (= workers) les ouvriers mpl (= workshop) l'usine fon the factory floor dans les ateliersfactory outlet factory shop n magasin m d'usinefactory ship n navire-usine mCollins English/French Electronic Resource. HarperCollins Publishers 2005 n Fabrik f; (plant also) Werk nt: Factory Act n Arbeitsschutzgesetz nt factory farm n industrieller Viehzuchtbetrieb, Gromsterei f factory farming n industriell betriebene Viehzucht factory hand n Fabrikarbeiter(in) m(f) factory inspector n Gewerbeaufsichtsbeamte(r) m, Gewerbeaufsichtsbeamtin f factory outlet (store) n (esp US) Factoryoutlet-Laden m, Fabrikverkauf m factory price factory ship factory shop n (Brit) Factoryoutlet-Laden m, Fabrikverkauf m factory worker n Fabrikarbeiter(in) m(f)Collins German Dictionary Complete and Unabridged 7th Edition 2005. William Collins Sons & Co. Ltd. 1980 HarperCollins Publishers 1991, 1997, 1999, 2004, 2005, 2007Collins Italian Dictionary 1st Edition HarperCollins Publishers 1995 (fktri) plural factories noun a workshop where manufactured articles are made in large numbers. a car factory; (also adjective) a factory worker. fabriek fbrica tovrna, zvod; tovrn die Fabrik fabrik; fabriks- fbrica tehas tehdas usine tvornica; tvornicki gyr pabrik verksmija fabbrica fabrikas fabrika; rpnca; fabrikas-; rpncas- kilang fabriekfabrikk, verk, brukfabryka fbrica fabric; uzin tovre; tovrensk tovarna fabrika fabrik fabrika , nh my; x nghip Kernerman English Multilingual Dictionary 2006-2013 K Dictionaries Ltd. tovrna fabrik Fabrik fbrica tehdas usine tvornica fabbrica fabriek fabrikk fabryka fbrica fabrik fabrika nh my Multilingual Translator HarperCollins Publishers 2009Collins Multilingual Translator HarperCollins Publishers 2009 Want to thank TFD for its existence? Tell a friend about us, add a link to this page, or visit the webmaster's page for free fun content. Link to this page: This young man had been hired out by his master to work in a bagging factory, where his adroitness and ingenuity caused him to be considered the first hand in the place.I went over several of these; such as a woollen factory, a carpet factory, and a cotton factory: examined them in every part; and saw them in their ordinary working aspect, with no preparation of any kind, or departure from their ordinary everyday proceedings.SOME Workingmen employed in a shoe factory went on a strike, saying: "Why should we continue to work to feed and clothe our employer when we have none too much to eat and wear ourselves?"When my father started for himself, there were many men in Manchester who were willing to labor in this way, but they had no factory to work in, no machinery to work with, and no raw cotton to work on, simply because all this indispensable plant, and the materials for producing a fresh supply of it, had been appropriated by earlier comers.On benches round the tables in a dirty little room sat some ten factory hands.They were before an opening in front of a large factory, from which men and women were streaming for their midday meal.He accordingly fitted out a fine ship of four hundred and ninety tons, called the Beaver, and freighted her with a valuable cargo destined for the factory at the mouth of the Columbia, the trade along the coast, and the supply of the Russian establishment.At the same time that his agents were purchasing corner lots and entire blocks in the heart of the business section and the waste lands for factory sites, Day was rushing franchises through the city council, capturing the two exhausted water companies and the eight or nine independent street railways, and getting his grip on the Oakland Creek and the bay tide-lands for his dock system.In order to attend one of these dances you must be a member of the Give and Take--or, if you belong to the division that starts off with the right foot in waltzing, you must work in Rhinegold's paper-box factory. Still, any Clover Leaf was privileged to escort or be escorted by an outsider to a single dance.'But, working under such a gentleman, they don't follow you to the Factory?'She reflected upon the collar and cuff factory. It began to appear to her mind as a dreary place of endless grinding.Sometimes the factory would start up on half time after a while, but there was no telling--it had been known to stay closed until way into the summer. Mall rating Be the first to review this outlet mall Page 2 Store rating This article is about places of manufacture. For other uses, see Factory (disambiguation).A factory, manufacturing plant or production plant is an industrial facility, often a complex consisting of several buildings filled with machinery, where workers manufacture items or operate machines which process each item into another. They are a critical part of modern economic production, with the majority of the world's goods being created or processed within factories.Volkswagen factory in Wolfsburg, GermanyFactories arose with the introduction of machinery during the Industrial Revolution, when the capital and space requirements became too great for cottage industry or workshops. Early factories that contained small amounts of machinery, such as one or two spinning mules, and fewer than a dozen workers have been called "glorified workshops".[1]Most modern factories have large warehouses or warehouse-like facilities that contain heavy equipment used for assembly line production. Large factories tend to be located with access to multiple modes of transportation, some having rail, highway and water loading and unloading facilities.[2] In some countries like Australia, it is common to call a factory building a "Shed".[3]Factories may either make discrete products or some type of continuously produced material, such as chemicals, pulp and paper, or refined oil products. Factories manufacturing chemicals are often called plants and may have most of their equipment tanks, pressure vessels, chemical reactors, pumps and piping outdoors and operated from control rooms. Oil refineries have most of their equipment outdoors.Discrete products may be final goods, or parts and sub-assemblies which are made into final products elsewhere. Factories may be supplied parts from elsewhere or make them from raw materials. Continuous production industries typically use heat or electricity to transform streams of raw materials into finished products.The term mill originally referred to the milling of grain, which usually used natural resources such as water or wind power until those were displaced by steam power in the 19th century. Because many processes like spinning and weaving, iron rolling, and paper manufacturing were originally powered by water, the term survives as in steel mill, paper mill, etc.Reconstructed historical factory in ilina (Slovakia) for production of safety matches. Originally built in 1915 for the business firm Wittenberg and son.Entrance to the Venetian Arsenal by Canaletto, 1732.Interior of the Lyme Regis watermill, UK (14th century).Max Weber considered production during ancient and medieval times as never warranting classification as factories, with methods of production and the contemporary economic situation incomparable to modern or even pre-modern developments of industry. In ancient times, the earliest production limited to the household, developed into a separate endeavor independent to the place of inhabitation with production at that time only beginning to be characteristic of industry, termed as "unfree shop industry", a situation caused especially under the reign of the Egyptian pharaoh, with slave employment and no differentiation of skills within the slave group comparable to modern definitions as division of labour.[4][5][6]According to translations of Demosthenes and Herodotus, Naucratis was a, or the only, factory in the entirety of ancient Egypt.[7][8][9] A source of 1983 (Hopkins), states the largest factory production in ancient times was of 120 slaves within fourth century BC Athens.[10] An article within the New York Times article dated 13 October 2011 states:"In African Cave, Signs of an Ancient Paint Factory" (John Noble Wilford)... discovered at Blombos Cave, a cave on the south coast of South Africa where 100,000-year-old tools and ingredients were found with which early modern humans mixed an ochre-based paint.[11]Although The Cambridge Online Dictionary definition of factory states:a building or set of buildings where large amounts of goods are made using machines[12]elsewhere: ... the utilization of machines presupposes social cooperation and the division of labour von Mises[13]The first machine is stated by one source to have been traps used to assist with the capturing of animals, corresponding to the machine as a mechanism operating independently or with very little force by interaction from a human, with a capacity for use repeatedly with operation exactly the same on every occasion of functioning.[14] The wheel was invented c.3000 BC, the spoked wheel c.2000 BC. The Iron Age began approximately 12001000 BC.[15][16] However, other sources define machinery as a means of production.[17]Archaeology provides a date for the earliest city as 5000 BC as Tell Brak (Ur et al. 2006), therefore a date for cooperation and factors of demand, by an increased community size and population to make something like factory level production a conceivable necessity.[18][19][20]Archaeologist Bonnet, unearthed the foundations of numerous workshops in the city of Kerma proving that as early as 2000 BC Kerma was a large urban capital.[21]The watermill was first made before the end of the third century BC.[22][23] In the third century BC, Philo of Byzantium describes a water-driven wheel in his technical treatises. Factories producing garum were common in the Roman Empire.[24] The Barbegal aqueduct and mills are an industrial complex from the second century AD found in southern France. By the time of the fourth century AD, there was a water-milling installation with a capacity to grind 28 tons of grain per day,[25] a rate sufficient to meet the needs of 80,000 persons, in the Roman Empire.[26][27][28]The large population increase in medieval Islamic cities, such as Baghdad's 1.5 million population, led to the development of large-scale factory milling installations with higher productivity to feed and support the large growing population. A tenth-century grain-processing factory in the Egyptian town of Bilbays, for example, milled an estimated 300 tons of grain and flour per day.[25] Both watermills and windmills were widely used in the Islamic world at the time.[29]The Venice Arsenal also provides one of the first examples of a factory in the modern sense of the word. Founded in 1104 in Venice, Republic of Venice, several hundred years before the Industrial Revolution, it mass-produced ships on assembly lines using manufactured parts. The Venice Arsenal apparently produced nearly one ship every day and, at its height, employed 16,000 people.[30][31]Main article: Factory systemSee also: Industrial RevolutionCromford mill as it is today.Working day ends at Tampella factory in Tampere, Finland in 1909One of the earliest factories was John Lombe's water-powered silk mill at Derby, operational by 1721. By 1746, an integrated brass mill was working at Warmley near Bristol. Raw material went in at one end, was smelted into brass and was turned into pans, pins, wire, and other goods. Housing was provided for workers on site. Josiah Wedgwood in Staffordshire and Matthew Boulton at his Soho Manufactory were other prominent early industrialists, who employed the factory system.The factory system began widespread use somewhat later when cotton spinning was mechanized.Richard Arkwright is the person credited with inventing the prototype of the modern factory. After he patented his water frame in 1769, he established Cromford Mill, in Derbyshire, England, significantly expanding the village of Cromford to accommodate the migrant workers new to the area. The factory system was a new way of organizing workforce made necessary by the development of machines which were too large to house in a worker's cottage. Working hours were as long as they had been for the farmer, that is, from dawn to dusk, six days per week. Overall, this practice essentially reduced skilled and unskilled workers to replaceable commodities. Arkwright's factory was the first successful cotton spinning factory in the world; it showed unequivocally the way ahead for industry and was widely copied.Between 1770 and 1850 mechanized factories supplanted traditional artisan shops as the predominant form of manufacturing institution, because the larger-scale factories enjoyed a significant technological and supervision advantage over the small artisan shops.[32] The earliest factories (using the factory system) developed in the cotton and wool textiles industry. Later generations of factories included mechanized shoe production and manufacturing of machinery, including machine tools. After this came factories that supplied the railroad industry included rolling mills, foundries and locomotive works, along with agricultural-equipment factories that produced cast-steel plows and reapers. Bicycles were mass-produced beginning in the 1880s.The Nasmyth, Gaskell and Company's Bridgewater Foundry, which began operation in 1836, was one of the earliest factories to use modern materials handling such as cranes and rail tracks through the buildings for handling heavy items.[33]Large scale electrification of factories began around 1900 after the development of the AC motor which was able to run at constant speed depending on the number of poles and the current electrical frequency.[34] At first larger motors were added to line shafts, but as soon as small horsepower motors became widely available, factories switched to unit drive. Eliminating line shafts freed factories of layout constraints and allowed factory layout to be more efficient. Electrification enabled sequential automation using relay logic.Main article: Assembly lineFactory automation with industrial robots for palletizing food products like bread and toast at a bakery in Germany.Henry Ford further revolutionized the factory concept in the early 20th century, with the innovation of the mass production. Highly specialized laborers situated alongside a series of rolling ramps would build up a product such as (in Ford's case) an automobile. This concept dramatically decreased production costs for virtually all manufactured goods and brought about the age of consumerism.[35]In the mid - to late 20th century, industrialized countries introduced next-generation factories with two improvements:Advanced statistical methods of quality control, pioneered by the American mathematician William Edwards Deming, whom his home country initially ignored. Quality control turned Japanese factories into world leaders in cost-effectiveness and production quality.Industrial robots on the factory floor, introduced in the late 1970s. These computer-controlled welding arms and grippers could perform simple tasks such as attaching a car door quickly and flawlessly 24 hours a day. This too cut costs and improved speed.Some speculation[36] as to the future of the factory includes scenarios with rapid prototyping, nanotechnology, and orbital zero-gravity facilities.[37] There is some scepticism about the development of the factories of the future if the robotic industry is not matched by a higher technological level of the people who operate it. According to some authors, the four basic pillars of the factories of the future are strategy, technology, people and habitability, which would take the form of a kind of "laboratory factories", with management models that allow "producing with quality while experimenting to do it better tomorrow".[38][39]Highland Park Ford plant, c. 1922Venetian ArsenalCromford MillLombe's MillSoho ManufactoryPortsmouth Block MillsSlater Mill Historic SiteLowell MillsSpringfield ArmoryHarpers Ferry ArmoryNasmyth, Gaskell and Company also called the Bridgewater FoundryBaldwin Locomotive WorksHighland Park Ford PlantFord River Rouge ComplexHawthorne WorksStalingrad Tractor PlantTriangle Shirtwaist FactoryA factory worker in 1942 Fort Worth, Texas, United States.Before the advent of mass transportation, factories' needs for ever-greater concentrations of labourers meant that they typically grew up in an urban setting or fostered their own urbanization. Industrial slums developed, and reinforced their own development through the interactions between factories, as when one factory's output or waste-product became the raw materials of another factory (preferably nearby). Canals and railways grew as factories spread, each clustering around sources of cheap energy, available materials and/or mass markets. The exception proved the rule: even greenfield factory sites such as Bournville, founded in a rural setting, developed their own housing and profited from convenient communications systems.[40]Regulation curbed some of the worst excesses of industrialization's factory-based society, labourers of Factory Acts leading the way in Britain. Trams, automobiles and town planning encouraged the separate development of industrial suburbs and residential suburbs, with labourers commuting between them.Though factories dominated the Industrial Era, the growth in the service sector eventually began to dethrone them:[41] the focus of labour, in general, shifted to central-city office towers or to semi-rural campus-style establishments, and many factories stood deserted in local rust belts.The next blow to the traditional factories came from globalization. Manufacturing processes (or their logical successors, assembly plants) in the late 20th century re-focussed in many instances on Special Economic Zones in developing countries or on maquiladoras just across the national boundaries of industrialized states. Further re-location to the least industrialized nations appears possible as the benefits of out-sourcing and the lessons of flexible location apply in the future.[42]Scientific management developed with factory management principles.[43] Assumptions on the hierarchies of unskilled, semi-skilled and skilled laborers and their supervisors and managers still linger on; however an example of a more contemporary approach to handle design applicable to manufacturing facilities can be found in Socio-Technical Systems (STS).Main article: British shadow factoriesIn Britain, a shadow factory is one of a number of manufacturing sites built in dispersed locations in times of war to reduce the risk of disruption due to enemy air-raids and often with the dual purpose of increasing manufacturing capacity. Before World War II Britain had built many shadow factories.Production of the Supermarine Spitfire at its parent company's base at Woolston, Southampton was vulnerable to enemy attack as a high-profile target and was well within range of Luftwaffe bombers. Indeed, on 26 September 1940 this facility was completely destroyed by an enemy bombing raid. Supermarine had already established a plant at Castle Bromwich; this action prompted them to further disperse Spitfire production around the country with many premises being requisitioned by the British Government.[44]Connected to the Spitfire was production of its equally important Rolls-Royce Merlin engine, Rolls-Royce's main aero engine facility was located at Derby, the need for increased output was met by building new factories in Crewe and Glasgow and using a purpose-built factory of Ford of Britain in Trafford Park Manchester.[45]Zeche Ewald in Herten, exterior (2011)Zeche Ewald in Herten, interior (2011)Coldharbour Mill textile factory, built in 1799.Adolph von Menzel: Moderne CyklopenNew Lanark millWorkers in the fuse factory, Woolwich Arsenal late 1800sThe assembly plant of the Bell Aircraft Corporation at Wheatfield, New York, United States, 1944Interior of the Rouge Tool & Die works, 1944Hyundai's Assembly line (about 2005)Danisco Sweeteners factory in Kotka, Finland (2015)First stages of Saturn V rockets being manufactured at the NASA Michoud rocket factory in the 1960sSpace station modules being manufactured in the Space Station Processing FacilityA ladle pouring molten steel into a Basic Oxygen Furnace for secondary steelmaking, inside a steel mill factory in GermanyAirplanes being manufactured at the Boeing Everett Factory assembly lineBusiness and economics portalBritish shadow factoriesCompany townFactory farmFactory systemFactory (trading post)Industrial robotIndustrial railwayIndustrial RevolutionList of production topicsLockoutManufacturingPlant layout studySoftware factoryPowerhouse (instrumental)Urban manufacturing^ Landes, David. S. (1969). The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present. Cambridge, New York: Press Syndicate of the University of Cambridge. ISBN0-521-09418-6.^ Hozdi, Elvis (2015). "Smart Factory for Industry 4.0: A review". International Journal of Modern Manufacturing Technologies. 7 (1): 2835.^ "What Are Industrial Sheds?". Asset Building. Archived from the original on 10 March 2020.^ John R. Love Antiquity and Capitalism: Max Weber and the Sociological Foundations of Roman Civilization Routledge, 25 April 1991 Retrieved 12 July 2012 ISBN0415047501^ (secondary) JG Douglas, N Douglas Ancient Households of the Americas: Conceptualizing What Households Do O'Reilly Media, Inc., 15 April 2012 Retrieved 12 July 2012 ISBN1457117444^ M Weber General Economic History Transaction Publishers, 1981 Retrieved 12 July 2012 ISBN0878556907^ Demosthenes, Robert Whiston Demosthenes, Volume 2 Whittaker and Company, 1868 Retrieved 12 July 2012^ Herodotus, George Rawlinson History of Herodotus John Murray 1862 Retrieved 12 July 2012^ (secondary) (E.Hughes ed) Oxford Companion to Philosophy techne^ (P Garnsey, K Hopkins, C. R. Whittaker) Trade in the Ancient Economy University of California Press, 1983 Retrieved 12 July 2012 ISBN0520048032^ John Noble Wilford (13 October 2011). "In African Cave, Signs of an Ancient Paint Factory". The New York Times. Retrieved 14 October 2011.^ "factory definition, meaning - what is factory in the British English Dictionary & Thesaurus Cambridge Dictionaries Online". cambridge.org.^ L von Mises - Theory and History Ludwig von Mises Institute, 2007 Retrieved 2012-07-12 ISBN1933550198^ E Bautista Paz, M Ceccarelli, J Echvarri Otero, JL Muoz Sanz A Brief Illustrated History of Machines and Mechanisms Springer, 12 May 2010 Retrieved 12 July 2012 ISBN9048125111^ JW Humphrey Ancient Technology Greenwood Publishing Group, 30 September 2006 Retrieved 12 July 2012 ISBN0313327637^ WJ Hamblin Warfare in the Ancient Near East to 1600 BC: Holy Warriors at the Dawn of History Taylor & Francis, 12 April 2006 Retrieved 12 July 2012 ISBN0415255880^ Mantoux, Paul (2000). The Industrial Revolution in Eighteenth Century: An Outline of the Beginnings of the Modern Factory System in England. Harper & Row. ISBN978-0061310799.^ Oates, Joan; McMahon, Augusta; Karsgaard, Philip; Quntar, Salam Al; Ur, Jason (September 2007). "Early Mesopotamian urbanism: a new view from the north". Antiquity. 81 (313): 585600. doi:10.1017/S0003598X00095600. ISSN0003-598X.^ Knabb, Kyle Andrew (2008). Understanding the role of production and craft specialization in ancient socio-economic systems: toward the integration of spatial analysis, 3D modeling and virtual reality in archaeology (MA). University of California San Diego.^ Gates, Charles (2003). Ancient Cities: The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece and Rome. Psychology Press. p.318. ISBN9780415121828.^ Grzymski, K. (2008). Book review: The Nubian pharaohs: Black kings on the Nile. American Journal of Archaeology, Online Publications: Book Review. Retrieved from "Archived copy" (PDF). Archived from the original (PDF) on 5 November 2014. Retrieved 17 December 2014.{{cite web}}: CS1 maint: archived copy as title (link)^ Selin, Helaine (2013). Encyclopaedia of the History of Science, Technology, and Medicine in Non-Westen Cultures. Springer Science & Business Media. p.282. ISBN9789401714167.^ Reden, Sitta von (20 December 2021). Handbook of Ancient Afro-Eurasian Economies: Volume 2: Local, Regional, and Imperial Economies. Walter de Gruyter GmbH & Co KG. ISBN978-3-11-060493-1.^ Borschel-Dan, Amanda (16 December 2019). "Factory for Romans' favorite funky fish sauce discovered near Ashkelon". www.timesofisrael.com. Retrieved 18 December 2019.^ a b Hill, Donald (2013). A History of Engineering in Classical and Medieval Times. Routledge. pp.163166. ISBN9781317761570.^ TK Derry, (TI Williams ed) A Short History of Technology: From the Earliest Times to A.D. 1900 Courier Dover Publications, 24 March 1993 Retrieved 12 July 2012 ISBN0486274721^ A Pacey Technology in World Civilization: A Thousand-Year History MIT Press, 1 July 1991 Retrieved 12 July 2012 ISBN0262660725^ WM Sumner Cultural development in the Kur River Basin, Iran: an archaeological analysis of settlement patterns University of Pennsylvania., 1972 [1] Retrieved 12 July 2012^ Adam Lucas (2006), Wind, Water, Work: Ancient and Medieval Milling Technology, p. 65, Brill Publishers, ISBN90-04-14649-0^ ALTEKAR, RAHUL V. (1 January 2005). SUPPLY CHAIN MANAGEMENT: CONCEPTS AND CASES. PHI Learning Pvt. Ltd. ISBN9788120328594.^ Plotkin, Robert (1 May 2020). Computers in the Workplace, Revised Edition. Infobase Holdings, Inc. ISBN978-1-4381-8273-5.^ Marglin, Stephen A. (1 July 1974). "What Do Bosses Do?: The Origins and Functions of Hierarchy in Capitalist Production" (PDF). Review of Radical Political Economics. 6 (60): 60112. doi:10.1177/048661347400600206. S2CID153641564. Retrieved 2 February 2019.^ Musson; Robinson (1969). Science and Technology in the Industrial Revolution. University of Toronto Press. pp.49195. ISBN9780802016379.^ Hunter, Louis C.; Bryant, Lynwood; Bryant, Lynwood (1991). A History of Industrial Power in the United States, 17301930, Vol. 3: The Transmission of Power. Cambridge, Massachusetts, London: MIT Press. ISBN0-262-08198-9.^ Bob Casey, John & Horace Dodge (2010). "Henry Ford and Innovation" (PDF). The Henry Ford.^ Dickens, Phill; Kelly, Michael; Williams, John R. (October 2013). "What are the significant trends shaping technology relevant to manufacturing?" (PDF). Government Office for Science UK.^ Fishman, Charles (June 2017). "The Future of Zero-Gravity Living Is Here". Smithsonian Magazine.^ Javier Borda, Hombre y Tecnologa: 4.0 y ms (Man and Technology: 4.0 and beyond). Sisteplant Publishers, 2018. ISBN 978-84-09-02350-9 (in Spanish)^ "El escptico de la Industria 4.0: 'Personas frente a robots'". ELMUNDO (in Spanish). 13 October 2014. Retrieved 13 September 2023.^ "The Bournville Story" (PDF). Bournville Village Trust. 2010.^ Pacione, Michael (2005). Urban Geography: A Global Perspective. Psychology Press. ISBN978-0-415-34306-0.^ Anholt, Simon (11 August 2006). Brand New Justice. Routledge. ISBN978-1-136-42608-7.^ Anbuvelan, K. (2007). Principles of Management MG-1351. Firewall Media. ISBN978-81-318-0254-0.^ Price 1986, p. 115.^ Pugh 2000, pp. 192-198.Needham, Joseph (1986). Science and Civilization in China: Volume 5, Part 1. Taipei: Caves Books, Ltd.Thomas, Dublin (1995). "Transforming Women's Work page: New England Lives in the Industrial Revolution 77, 118" Cornell University Press.Price, Alfred. The Spitfire Story: Second edition. London: Arms and Armour Press Ltd., 1986. ISBN0-85368-861-3.Pugh, Peter. The Magic of a Name The Rolls-Royce Story The First 40 Years. Cambridge, England. Icon Books Ltd, 2000. ISBN1-84046-151-9Thomas, Dublin (1981). "Women at Work: The Transformation of Work and Community in Lowell, Massachusetts, 18261860": pp. 86107, New York: Columbia University Press.Biggs, Lindy (1996). The rational factory: architecture, technology, and work in America's age of mass production. Johns Hopkins University Press. ISBN978-0-8018-5261-9.Christian, Gallope, D (1987) "Are the classical management functions useful in describing managerial processes?" Academy of Management Review. v 12 n 1, pp.3851Peterson, T (2004) "Ongoing legacy of R.L. Katz: an updated typology of management skills", Management Decision. v 42 n10, pp.12971308Mintzberg, H (1975) "The manager's job: Folklore and fact", Harvard Business Review, v 53 n 4, July August, pp.4961Hales, C (1999) "Why do managers do what they do? Reconciling evidence and theory in accounts of managerial processes", British Journal of Management, v 10 n4, pp.33550Mintzberg, H (1994) "Rounding out the Managers job", Sloan Management Review, v 36 n 1 pp.1126.Rodrigues, C (2001) "Fayol's 14 principles then and now: A plan for managing today's organizations effectively", Management Decision, v 39 n10, pp.88089Twomey, D. F. (2006) "Designed emergence as a path to enterprise", Emergence, Complexity & Organization, Vol. 8 Issue 3, pp.1223McDonald, G (2000) Business ethics: practical proposals for organisations Journal of Business Ethics. v 25(2) pp.16985Look up factory in Wiktionary, the free dictionary.Wikimedia Commons has media related to Factories."Mill". Encyclopdia Britannica. Vol.18 (11thed.). 1911.Uhl, Karsten (2 May 2016). "Work Spaces: From the EarlyModern Workshop to the Modern Factory". European History Online. Mainz: Leibniz Institute of European History (IEG).Retrieved from " A factory worker in the 1940s in Fort Worth, Texas.A factory (previously manufactory) or manufacturing plant is an industrial building where workers use machines to manufacture goods or process one product into another. Most modern factories have large warehouses or warehouse-like facilities that contain heavy equipment used for assembly line production. Factories are a hallmark of industrialized society. They have changed the way many people live and work. On the one hand, they have been producing an increasingly wide variety of goods at relatively high efficiency and low cost, raising the living standards of large numbers of people in industrialized nations. On the other hand, they have also been places where workers have toiled under exploitative conditions, particularly during what has been called the Industrial Revolution. Although reform movements began to address these problems during the late nineteenth and early twentieth centuries, the ugly side of industrialization continued until the mid-twentieth century.[1]History of the factoryChinaMany have believed that ancient China was the first to create factories.[2] In ancient China, imperial and private workshops, mills, and small manufactories had been employed since the Eastern Zhou Dynasty (771-221 B.C.E.), as noted in the historical text of the Zhou Li.[3]During the medieval Song Dynasty (960-1279 C.E.), independent and government-sponsored industries were developed to meet the needs of a growing population that had reached over 100 million. For example, for the printing of paper money alone, the Song court established several government-run factories in the cities of Huizhou, Chengdu, Hangzhou, and Anqi.[4] The size of the workforce employed in these paper money factories was quite large, as it was recorded in 1175 C.E. that the factory at Hangzhou alone employed more than a thousand workers a day.[4] The Chinese iron industry was also expanded during the Song Dynasty, with a six-fold increase in per capita cast iron output between the years 806 and 1078 C.E., meaning an overall weight of 127,000,000kg (125,000t) of cast iron product from state-run facilities was forged in the latter year alone.Western worldAlthough large mills and manufactories were established in ancient Rome, the Venice Arsenal provides one of the first examples of a factory in the modern sense of the word. Founded in 1104 in Venice, Italy, several hundred years before the Industrial Revolution, it mass-produced ships on assembly lines using manufactured parts. The Venice Arsenal apparently produced nearly one ship every day and, at its height, employed 16,000 people.Many historians regard Matthew Boulton's Soho Manufactory (established in 1761, in Birmingham) as the first modern factory. Other claims have been made for John Lombe's silk mill in Derby, in 1721, or Richard Arkwright's Cromford Mill, in 1771purpose built to fit the equipment it held and taking the material through the various manufacturing processes. One historian, Jack Weatherford, contends that the first factory was in Potos, for processing silver ingot slugs into coins, because there was so much silver being mined close by.[5]In the late eighteenth century, British colonies built factories simply as buildings where a large number of workers gathered to perform hand labor, usually in textile production. This proved more efficientfor administration and for the distribution of raw materials to individual workersthan earlier methods of manufacturing such as cottage industries or the putting-out system.Cotton mills used inventions such as the steam engine and the power loom to pioneer the industrial factory of the nineteenth century, where precision machine tools and replaceable parts allowed greater efficiency and less waste.Between 1820 and 1850, the non-mechanized factories supplanted the traditional artisanal shops as the predominant form of manufacturing institution. Although the theory regarding why and how the non-mechanized factories gradually replaced the small artisan shops is still ambiguous, what is apparent is that the larger-scale factories enjoyed technological gains and advance in efficiency over the small artisan shops. In fact, the larger scale forms of factory establishments were more favorable and advantageous over the small artisan shops in terms of competition for survival.Henry Ford further revolutionized the factory concept in the early twentieth century, with the innovation of mass production. Highly specialized workers positioned alongside a series of rolling ramps would build up a product, such as (in Ford's case) an automobile. This concept dramatically decreased production costs for virtually all manufactured goods and brought about the age of consumerism.In the mid to late twentieth century, industrialized countries introduced next-generation factories with two improvements:Advanced statistical methods of quality control. These methods were pioneered by the American mathematician William Edwards Deming, who was initially ignored by his home country. Quality control turned Japanese factories into world leaders in cost-effectiveness and production quality.Industrial robots on the factory floor, introduced in the late 1970s. These computer-controlled welding arms and grippers could perform simple tasks, such as attaching a car door quickly and flawlessly 24 hours a day. This, too, cut costs and improved speed.Some speculation regarding the future of the factory includes scenarios with rapid prototyping, nanotechnology, and orbital zero-gravity facilities.Siting the factoryBefore the advent of mass transportation, factories' needs for ever-greater concentrations of workers meant that they typically grew up in an urban setting or fostered their own urbanization. Industrial slums developed, and reinforced their own development through the interactions between factories, as when one factory's output or waste-product became the raw materials of another factory (preferably nearby). Canals and railways grew as factories spread, each clustering around sources of cheap energy, available materials, and/or mass markets. The exception proved the rule: Even Greenfield's factory sites such as Bournville, founded in a rural setting, developed its own housing and profited from convenient communications networks.Regulation curbed some of the worst excesses of industrialization's factory-based society, a series of Factory Acts leading the way in Britain. Trams, automobiles, and town planning encouraged the separate development ("apartheid") of industrial suburbs and residential suburbs, with workers commuting between them.Though factories dominated the Industrial Era, the growth in the service sector eventually began to dethrone them: the locus of work in general shifted to central-city office towers or to semi-rural campus-style establishments, and many factories stood deserted in local rust belts.The next blow to the traditional factories came from globalization. Manufacturing processes (or their logical successors, assembly plants) in the late twentieth century re-focussed in many instances on Special Economic Zones in developing countries or on maquiladoras just across the national boundaries of industrialized states. Further re-location to the least industrialized nations appears possible as the benefits of out-sourcing and the lessons of flexible location apply in the future.Governing the factoryMuch of management theory developed in response to the need to control factory processes. Assumptions on the hierarchies of unskilled, semi-skilled, and skilled workers and their supervisors and managers still linger on. However, an example of a more contemporary approach to work design applicable to manufacturing facilities can be found in Socio-Technical Systems (STS).Notes City and Factory Life. Retrieved June 26, 2008. Anne S. Tsui, Claudia Bird Schoonhoven, Marshall W. Meyer, Chung-Ming Lau, and George T. Milkovich. March/April 2004. "Organization and Management in the Midst of Societal Transformation: The People's Republic of China," Organization Science, 15 (2): 133-144. Needham, pp. 16-17. 4.0 4.1 Needham, p. 48. Jack Weatherford. 1988. Indian Givers: How the Indians of the Americas Transformed the World. Random House Publishing Group. ISBN 0449904962. Groover, Mikell P. Fundamentals of Modern Manufacturing: Materials, Processes, and Systems, 3rd ed. Hoboken, NJ: J. Wiley & Sons, 2007. ISBN 978-0471744856.Hopp, Wallace. Factory Physics, 3rd ed. New York: Mcgraw-Hill Publishing, 2008. ISBN 978-0071232463.Needham, Joseph. Science and Civilization in China: Volume 5, Part 1. Cambridge University Press, 1986. ISBN 0521086906.Rubrich, Larry, and Madelyn Watson. Implementing World Class Manufacturing: Includes Lean Enterprise: Business Manual. Fort Wayne, IN: WCM Associates, 2004. ISBN 0966290615. enlarge image a building or group of buildings where goods are made, mainly by machinea car factoryThe factory closed down ten years ago. in/at a factory She works in the local textile factory.factory workersSynonyms factoryfactoryplant mill works yard workshop foundryThese are all words for buildings or places where things are made or where industrial processes take place.factory a building or group of buildings where goods are made, mainly by machine:a chocolate/cigarette/clothing factoryplant a factory or place where power is produced or an industrial process takes place:a nuclear

- http://aaaexpressheating.com/userfiles/file/61863808969.pdf
- xitayeji
- http://www.naturhalles.fr/fckeditor/userfiles/file/01d1c1e0-a826-4ebe-a019-704e8ccc01f6.pdf
- balanced scorecard employee appraisal
- https://phongsachmienbac.com/upload/files/miguf.pdf
- cunezogu
- yeda
- dokokage