

sified in ten different types of families. Humans belong to the mammalian family Primates. In this arrangement, humans, along with our extinct close ancestors, and our nearest living relatives, the African apes, are sometimes placed together in the family Hominidae, because of genetic similarities. Two-leg walking seems to be one of the earliest of the major hominine characteristics. In the course of human evolution, the size of the brain has been more than tripled. The increase in brain size may be related to changes in human being behaviour. The third major trend in hominine development is the gradual decrease in the size of the face and teeth. Between 7 and 20 million years ago, primitive apelike animals were widely distributed on the African and on the Eurasian continents. Ancestors of modern humans are divided into the category Australopithecus and Homo. They appeared about 5 million years ago. The history of human being begins with the australopithecines. According to Britannica Encyclopedia, Australopithecus already lived in Kenya about 4 million years ago. This australopithecine had a brain size a little larger than chimpanzees. No tools of any kind have been found with this distant human ancestor. According to Encarta Encyclopedia, Homo erectus lived from about 1,8 million to 30,000 years ago. Until recently, Homo erectus was considered an evolutionary ancestor of modern humans, or Homo sapiens. Homo erectus had a larger brain than earlier hominines. Homo erectus was also taller, with an evenly face and smaller teeth. Homo habilis is the earliest known member of the genus Homo. Homo habilis had a larger brain than australopithecines. Australopithecines had long arms and short legs, similar to those of apes. Homo habilis was taller than australopithecines, but shorter than Homo erectus. The theory of evolution is the most reasonable theory today and is actual living proof that humans did evolve from apes and why the environmental adaptations have made humans the dominant creatures on the earth.

Список литературы

1. Richard Dawkins. The ancestor's tale A pilgrimage to the dawn of evolution. Houghton Mifflin Company: Boston, Massachusetts, USA, 2004. – 673 pp.

ВЫСОКОПРОЧНЫЕ СТАЛИ В МАШИНОСТРОЕНИИ

Наконечный М.А., Кохан О.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnelyyy@mail.ru*

Nowadays high-strength wear-resistant steels are the most promising materials in machine-building production. The application of these steels in Russia dates back to the early 1990-s and they are in great demand.

No doubt there is a close link between the use of new materials and industrial production competitiveness. Manufacturers of various industrial equipment and machines are ever more required to increase production efficiency and extend the service life of the equipment, reduce material consumption, lower operating costs, meet environmental requirements. All this leads to the development and use of the new steel grades with improved properties in industry, in particular – special high-strength steels [1].

The application of high-strength structural steels makes it possible to achieve noticeable cost optimization in the production cycle. There are some advantages in the machine design manufacture of thinner sheets: significantly reduced cost of welding materials, reduced duration of welding, as well as the amount of harmful atmospheric emissions. In addition, transport costs for material moving to the place of products manufacture are lowered, particularly in case of using a large amount of metal. This increases the efficiency of the equipment and reduces

production costs. This steel has rather high impact toughness at lower temperatures, that's why it is extensively employed in equipment fabrication in the North [2].

Список литературы

1. Маркова Ю.В. Английский язык в области машиностроительных технологий и оборудования: учебное пособие / Ю.В. Маркова. – Комсомольск-на-Амуре: ФГБОУ ВПО «КНАГТУ», 2015. – 103 с.
2. Першина, Е.Ю. Английский язык для металлургического и машиностроительного производства: учебное пособие / Е.Ю. Першина. – Комсомольск-на-Амуре: ФГБОУ ВПО «КНАГТУ», 2015. – 156 с.

ПРОФЕССИОНАЛЬНАЯ КОМПЕТЕНЦИЯ БУДУЩЕГО ИНЖЕНЕРА

Рыбко А.М., Клинова Е.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnelyyy@mail.ru*

The modern era is characterized by numerous dynamic social and economic changes, could not affect the processes and professional communication.

Due to the expansion and qualitative change in international relations, the growing influence of Russia in the world economic and cultural space, adequate historical moment the ownership of foreign language communication is becoming one of the conditions of the demand for skilled labor market and, therefore, an essential component of professional competence of the modern profession. In these circumstances, the problem of mastering the future experts by means of foreign language communication becomes the new priorities.

The professional competence of the future specialist important part of training highly qualified specialists. After all, they become participants in intercultural communication. Therefore, many universities have set themselves the task to equip students with a means of communication in a foreign language professional field.

Features of the present stage of development of engineering education in the world are related to a number of factors.

In addition, the global processes of the modern economy, the proximity and accessibility of international experience across the rapidly evolving information technology make to move away from the narrow traditional paths of national training of engineers.

Construction of educational programs aimed at the professional skills of future engineers and social qualities.

The world's under active discussion about the manner in which the parameters include new training educational programs and how to evaluate them later.

Список литературы

1. Першина Е.Ю. Английский язык для экономических специальностей: учеб. пособие. – Комсомольск-на-Амуре: ФГБОУ ВПО «КНАГТУ», 2011. – 109 с.
2. Кохан О.В. Английский язык для студентов-заочников: практика, грамматика, тексты, контрольные задания: учебное пособие. – Комсомольск-на-Амуре: ФГБОУ ВПО «КНАГТУ», 2012. – 170 с.

КОММУНИКАЦИЯ В ПРОФЕССИОНАЛЬНОЙ ОБЛАСТИ

Сергеева Е., Клинова Е.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnelyyy@mail.ru*

With the strengthening of Russia's position on the world arena takes place an integration with foreign partners, what is necessary for the development of the Russian economy. This leads to the improvement of teaching methods. In the advanced universities implemented an innovative approach to higher education. Therefore, the professional level of the modern pro means not only the ability to solve common tasks, but also the ability to improve their own knowledge and technology. Globalization

of economic space affects many areas, including the global energy market. For the modern professional in the field of technical English is not only means of communication but also a source of intellectual, cultural and professional development. Communication with foreign colleagues is becoming commonplace in many areas of professional activity. Your speech should be clear and convincing, you should be able to communicate in meetings and negotiations with customers and suppliers, focusing in professional terminology, to climb the corporate ladder and improve your skills. If you are a researcher and you want to be noticed, you have to say about your works on the conference or to publish an article in a foreign magazine. However, even in your native country the knowledge of English is necessary: it is necessary to read the technical literature, to understand the meaning of the terms. In recent years it is difficult to learn and to compete with other professionals in the leading technical universities in Russia without the knowledge of a foreign language.

Foreign language is important in various fields. If you are an expert who knows the English language, you will be valued doubly. You find it easier to get a job, the prospects of working in foreign companies are opened in front of you. If you want a honor and influence not only in the immediate neighborhood, but also abroad, the knowledge of a foreign language will be an excellent basis for your career development.

Список литературы

1. Ворбец Л.В. Проблема глобализации и распространения глобального языка в межкультурном аспекте / Л.В. Ворбец // Дальний Восток России – историческо-культурное наследие и социо-культурное развитие. Чтения, посвященные памяти проф. Л.Н. Долгова: материалы Междунар. науч.-практ. конф., Комсомольск-на-Амуре, 17 марта 2014 г. / редкол.: Я.С. Иващенко (отв.ред.) [и др.]. – Комсомольск-на-Амуре: ФГБОУ ВПО «КнАГТУ», 2014. – 161 с.

КОКСОВАНИЕ

Тарасов А.Т., Кохан О.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnellyyy@mail.ru*

Coking is applied to produce cracking conditions so that the yields of gas oil and gasoline are increased. Reduced crudes, cracked tars, heavy catalytic cycle oils and asphalts are used as a charge. The products are gas oil, gasoline, gas and coke.

Residual oil from the vacuum distillation unit is pumped into the bottom of the distillation column called the main fractionator. From there it is pumped, along with some injected steam, into the fuel-fired furnace and is heated to its cracking temperature of about 480 °C.

Thermal cracking begins in the pipe between the furnace and the coke drums, and finishes in the coke drum that is on-stream. The injected steam helps to minimize the deposition of coke within the furnace tubes.

The vapours from the coking drum return to the fractionator. Here the gas, gasoline and gas oil are separated and leave the unit. The heavier materials settle in the bottom and are recycled to the coking operation [2].

When one of the coke drum is full of the solidified coke, flow is diverted to another drum so that the furnace operation is continuous. Thus, drums are operated in pairs with one-stream while the other is being dumped. A full coke drum is removed from the process flow, steamed to strip light hydrocarbons from the coke, and cooled by water injection. More recent designs use high pressure water jets to cut the coke from the drum [1].

Список литературы

1. Зозон Н.А. Финская Н.А. Аналитический перевод при профессионально-ориентированном обучении в техническом вузе / Н.А. Зозон, Н.А. Финская // Наука – образованию, производству, экономике. Материалы десятой Международной научно-технической конференции в 4-х т. – Минск: БНТУ, 2012. – Том 4. – С. 348.

2. Delayed coke. – [Электронный ресурс]. – Ресурс доступа: https://en.wikipedia.org/wiki/Delayed_coker (дата обращения: 02.12.2015).

ИСТОРИЯ ИНТЕРНЕТА

Фатеев К.В., Матюшко А.В.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnellyyy@mail.ru*

With the advent of computers in our lives has been added to the Internet, which was once a conventional military LAN. The Internet is a huge network of computers spanning this planet and is now started to bring in the surrounding area like space. Some computers like servers share data, others just surf the web as clients downloading the data. The Internet is very helpful, because it's a huge database of knowledge, from the pictures of family trips to an analysis of quantum mechanics. Everyone should have the Internet because of its near instantaneous communication and huge wealth of knowledge. But how to go on the Internet and do a search for information we need. There are two ways to do it. The first is when you know an internet address of data you need and the second one is when you try to find information you need by using a search program. In the beginning we have got to enter any browser you like. It could be an Internet Explorer, Netscape Navigator or Opera, etc. If we have a broadband connection, we connect to the Internet at once. If not, we have to set up and connect to our dial-up service. Finally, if we want to find some information in the Internet, we are to type an address of this data in the browser we use or simply use the existing search-programs such as the google search program, rambler search program, yandex search program or yahoo search program. They are very simple and popular networks of sites. In these programs we can just type the word or name of thing, we would like to find and then press enter. A search program solves this problem. We get our results in the same window. After we get our results, we simply choose whatever site best matches our query or keep searching.

Besides data, one can get from the Internet, we can also send and receive e-mail or electronic mail. This internet service is cheaper than ordinary mail and much quicker. It is becoming popular day by day. We can get some news from the Internet, because there are many informational servers in the web.

Список литературы

1. Lessons from the History of the Internet, Manuel Castells, in The Internet Galaxy, Ch. 1, pp 9–35, Oxford University Press, 2001.

ТЕРРОРИЗМ КАК МИРОВАЯ ПРОБЛЕМА СОВРЕМЕННОСТИ

Шефер К.В., Финская Н.А.

*Комсомольский-на-Амуре государственный технический университет, Комсомольск-на-Амуре,
e-mail: finnellyyy@mail.ru*

Every morning, turning on the TV we heed with anxiety the newscasts full of reports of terrorist acts. Terrorism has assumed an acute form, it is becoming perhaps a form of protest against everything, starting in pre-crisis and crisis periods of social development.

Growing of social stratification of society, political struggle, unemployment and social insecurity of citizens stimulate legal nihilism, tend to aggravation of interethnic relations. Considerably weakened are prevention efforts of law enforcement bodies and public organizations.

Since the mid-90s a new phenomenon is observed: the increasing activity of the Islamic terrorist groups, which is manifested in the actions of Islamic fundamentalists. Today's «kamikaze» in the camps of Osama are prepared by