

Управление образования и науки Тамбовской области
Тамбовское областное государственное автономное образовательное учреждение
среднего профессионального образования
"Промышленно- технологический колледж"

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**Учебное пособие по выполнению контрольных работ
по английскому языку
студентами технических специальностей**

Мичуринск- 2013

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ПРОМЫШЛЕННЫХ И ГРАЖДАНСКИХ ЗДАНИЙ»

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ТРАНСПОРТА»

Печатается по решению предметно-цикловой комиссии общего гуманитарного, социально-экономического, математического и естественнонаучного цикла. Одобрено научно-методическим советом ТОГАОУ СПО "Промышленно-технологический колледж"

Учебное пособие по выполнению контрольных работ по английскому языку. Учебное пособие/ Логунова Н.В. ТОГАОУ СПО "Промышленно-технологический колледж", Мичуринск, 2013.

Пособие состоит из теоретической и практической части. Представляет собой справочник по английскому языку и методические рекомендации по выполнению контрольных работ по дисциплине. Каждая контрольная работа содержит задание по техническому переводу текста, упражнения по специальной терминологии и грамматике английского языка.

Предназначено для самостоятельного выполнения в межсессионный период студентами специальностей "Техническое обслуживание и ремонт автомобильного транспорта", "Монтаж, наладка и эксплуатация электрооборудования промышленных и гражданских зданий" контрольных работ по английскому языку. Рекомендовано преподавателям, ведущим дисциплину "Иностранный язык (английский)" в учреждениях НПО и СПО для использования в качестве итогового контроля знаний студентов по специальности.

Оглавление

1. Содержание.
2. Введение.
3. Особенности технического перевода. Основные технические термины.
4. Рекомендации по выполнению контрольных работ
5. Варианты контрольных работ.
6. Список литературы.

Содержание

Основной целью изучения иностранного языка в учреждениях среднего профессионального образования является практическое владение иностранным языком для использования его в общении при решении бытовых, учебных и социокультурных задач.

Цель пособия - ввести студентов в область иноязычного письменного общения по специальности и помочь усвоению минимума содержания программы и в выполнении ими контрольных работ.

Изучение иностранного языка предполагает самостоятельную работу студентов в межсессионный период. Преподаватель выполняет функции консультанта и осуществляет контроль и оценку знаний.

Пособие предназначено для студентов, обучающихся по специальностям "Техническое обслуживание и ремонт автомобильного транспорта", "Монтаж, наладка и эксплуатация электрооборудования промышленных и гражданских зданий" и охватывает краткие теоретические и практические курсы английского языка по грамматике и общеразговорной лексике. Предусматривает основные сведения по теории общего и специального (научно-технического) перевода трудности и языковые явления характерные в технических переводах и предлагает перечень необходимой справочной литературы, 14 контрольных работ. Данное пособие используется также в качестве итогового контроля знаний по специальности. Пособие приводит примеры правильного технического перевода. Сформулированы и рекомендованы правила и порядок выполнения контрольных работ, контрольные работы с техническими текстами и упражнениями к ним, грамматическими заданиями.

Введение

Перевод - выражение средствами другого языка всего того, что уже выражено или выражается средствами языка оригинала.

Овладеть же переводом можно только на базе чтения, письма, аудирования и говорения.

Для письменного перевода с русского на английский надо уметь писать по-английский. Для письменного перевода текста с английского языка на русский надо уметь читать по-английски.

Для устного перевода английской речи на русский надо уметь аудировать, т.е. воспринимать английскую речь на слух.

Для устного перевода с русского на английский надо уметь говорить по-английски.

Отсюда следует очень важный вывод: недостаточное владение любым другим видом языковой деятельности неизбежно отразится на качестве перевода. И с другой стороны, в процессе овладения переводом и тренировки в нем неизбежно улучшается качество владения всеми другими видами языковой деятельности, т.е. качество владения иностранным языком.

Письменный технический перевод с иностранного языка на русский или с русского на иностранный выполняется с использованием словарей, общих и специальных, справочников и специальной литературы на русском и иностранном языках, что значительно облегчает труд переводчика.

Если переводить английское предложение с его твердым порядком слов без перегруппировки, то получается так называемый

дословный перевод. Дословный перевод может быть правильным, если все английские слова в предложении имеют эквиваленты в русском языке и структура предложения имеет полное соответствие в русском языке.

Но дословный перевод возможен не всегда, и от дословного перевода, однако следует отличать недопустимый в практике перевода буквальный перевод, т.е. простой механический перевод слов иностранного текста без учета их грамматических и логических связей.

Технические термины

Термин - это слово или словосочетание, которое может иметь отличное от обычного значение в зависимости от области науки и техники, в которой оно употребляется. Термин может быть простым, состоящим из одного слова *switch* «выключатель» и сложным термином словосочетанием *automatic-switch* «автоматический выключатель». Например, слово *face* как существительное имеет обычное значение «лицо»; широкое техническое значение его - «поверхность»; в геометрии его значение - «грань»; в строительном деле «фасад», «облицовка»; в горном деле «забой», «лава». Но как это естественно для английского языка то, же слово *face* может выступать и как глагол; в этом случае основное значение его обычное значение - «стоять напротив чего-либо»; в металлообработке это термин, означающий «шлифовать»; в строительном деле - «отделывать», «облицовывать», «покрывать».

Соблюдение следующих правил может быть при переводе терминов:

1. В специальном тексте каждое слово, даже очень хорошо знакомое, может оказаться термином. Так. В морском деле *man-of-war* значит не «солдат», а «военный корабль»; в тексте по механике *no play is admitted* надо переводить не «играть нельзя», а «люфт не допускается»; в тексте по экономике выражение *staple sorts*, даже если речь идет о сырье о текстильной промышленности, I может значить не «штапельные сорта», а «основные экспортные сорта»: *shoe* «колодка» в описаний тормозной системы, для электропоезда - «лыжа токоприемника», для гусеницы - «звено»: *dead* - это «обесточенный» в электромеханике, «глухой», т.е. «несквозной» в машиностроении и строительстве; «использованный», когда речь идет о растворах, газе и т.п. Переводя литературу, особенно о малознакомой тематике, надо всегда помнить об этой многозначности. Отсюда следует второе правило:

2. Пользуйтесь при переводе специальными техническими словарями. Следует считать неразумной попытку переводить без словаря; это выглядело бы также странно, как если бы мастер пытался научиться работать без инструмента. Как бы ни была велика память переводчика, он может натолкнуться на незнакомый или

малознакомый термин или известный ему термин в совершенно новом значении. При многозначности слова следует брать то его значение, которое принадлежит соответствующей области техники.

3. Может оказаться, что ни одно из значений слова, найденных вами в словаре, не подходит. Это значит, что некоторые значения слова не зафиксированы в словаре. В таком случае вывести из затруднения может хорошее чувство языка, так называемая языковая догадка, но в первую очередь - понимание того, о чем идет речь. Поэтому знакомство с соответствующей отраслью техники, хотя бы по популярным пособиям, или консультация специалиста, имеет огромное значение для правильного перевода.

Транслитерация.

Метод транслитерации передача букв английского языка посредством букв русского языка находит широкое распространение в физике, химии, медицине, космонавтике: *радар. голография, грейдер*

Создание новых терминов путем конверсии.

а) примеры	превращения	существительных	в	глаголы:
<i>Существительное</i>		<i>Глагол</i>		<i>Новое значение</i>
Doctor – врач		to doctor		ремонттировать
Motor - двигатель		to motor		1. механизировать
				2. работать как двигатель

б) примеры	превращения	глаголов	в	существительные:
<i>Глагол</i>		<i>Существительное</i>		<i>Новое значение</i>
To spin off - раскрутить		spinoff		сопутствующий (побочный) результат
To throw away – выбросить		throwaway		бесплатная рекламная брошюра

Создание новых терминов при помощи префиксов и суффиксов

- а) префиксы
- | | | |
|---------|-------------|-----------------------|
| inter-: | interaction | взаимодействие |
| | interface | интерфейс, сопряжение |
- б) новые суффиксы -ry, -ship, -wise:

circuitry	схемное решение, комплекс схем
workmanship	мастерство. квалификация
percentagewise	считая в процентах

Создание новых терминов при помощи словосложения *motel* - мотель (автомашина+гостиница) = *motor+hotel*: *escalator* - эскалатор (поднимающий элеватор) = *escalating elevator*.

Методические указания по выполнению контрольной работы

Для того чтобы выполнить контрольные задания нужно:

1. Усвоить специальный лексический материал, перевести технический текст (с английского языка на русский) при помощи политехнического словаря и конспектов сделанных во время семинаров;
2. Ответить на вопросы после текста, которые задаются с целью проверки понимания;
3. Выполнить упражнения:
 - а) на повторение грамматического материала;
 - б) на перевод с русского языка на английский язык;
4. Каждая работа выполняется в отдельной тетради школьного формата. Следует пронумеровать страницы и оставить на них поля не менее 3 см. для замечаний преподавателя.
5. На обложке тетради должен быть титульный лист утвержденного образца, аккуратно записаны все данные титульного листа: шифр, специальность, если она не отражена в шифре, фамилия, отчество студента, предмет и номер работы.
6. Решение задач желательно располагать в порядке номеров, указанных в задании, номера задач следует указывать перед условием.
7. Условия заданий должны переписываться полностью в контрольную тетрадь.
8. Если в работе допущены недочёты и ошибки, то студент должен выполнить все указания преподавателя, сделанные в рецензии.
9. Контрольные работы должны быть выполнены в срок (в соответствии с учебным планом-графиком). В период сессии работы на проверку не принимаются.
10. Работа, выполненная не по своему варианту, не учитывается и возвращается студенту без оценки.

Контрольная работа №1

I. Translate the text.

The nature of electricity

The ancient Greeks knew that when a piece of amber is rubbed with wool or fur it achieves the power of attracting light objects. Later on the phenomenon was studied, and, the word *electric*, after the Greek word 'electron', meaning amber was used. Many scientists investigated electric phenomena, and during the nineteenth century many discoveries about the nature of electricity, and of magnetism, which is closely related to electricity, were made. It was found that if a sealing-wax rod is rubbed with a woolen cloth, and, a rod of glass is rubbed with a silken cloth; an electric spark will pass between the sealing-wax rod and the glass rod when they are brought near one another. Moreover, it was found that a force of attraction operates between them. An electrified sealing-wax is repelled, however, by a wax rod, and also an electrified glass rod is repelled, by a similar glass rod.

The ideas were developed that there are two kinds of electricity, which were called resinous electricity, and that opposite kinds of electricity attract one another, whereas similar kinds repel one another.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Answer the following questions:

1. When was found electric phenomena?
2. What does a force of attraction mean?
3. What kinds of electricity are there?

IV. Supply *some, any, no*, where required

1. ... pupils went to the river, ... to the woods.
2. ... of my friends live in Moscow.
3. ...Have you ... English dictionaries?
4. Is there ... ink in the inkstand? Yes, there is...
5. Bring ...chalk, please.
6. There is ... chalk in the box.
7. Is there ... milk in the jug? Yes, there is

V. Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. We ... to a lecture yesterday at ten o'clock. listen
2. She ... the piano from 11 till 12 o'clock. play
3. When he ... in, I ... my exercises. come, do
4. What ... you yesterday at 8 o'clock? do
5. Yesterday when I ... the newspaper, my sister ... to a concert over the radio. read, listen

6. She ... out of the window when I ... her. look, see
 7. I ... along the street with my friend when the car ... by. walk

VI. Choose the correct variant

1. Before you _____, don't forget to lock the door.
 -are leaving -will leave -leave -shall leave
2. Please do not speak to anyone before the police _____ .
 -come -are coming -'ll come, came
3. His parents will be very glad if she _____ the university.
 -enter -'ll enter - enters - entered
4. When you _____ my brother, you _____ him.
 -'ll see; - won't recognize; - see won't recognize; -saw, recognize; -'ll see, don't recognize
5. We won't discuss the matter until the headmaster _____ .
 -'ll arrive - won't arrive - doesn't arrive- -arrives

Контрольная работа №2

I. Translate the text:

What is electricity?

Have you ever gotten a shock when you touched a doorknob, or seen sparks fly when you combed your hair? That's electricity.

Electricity is a type of energy that gives things the power to work. This energy comes from electrons. Scientists have learned how to use electrons to produce electricity. I.

Classes of electricity.

The study of electricity may be divided into three classes or branches: magnetism, electrostatics, and electrodynamics. Magnetism is the property of the molecules of iron and certain other substances through which they store energy in a field of force because of the arrangement movement of the electrons in their atoms. Electrostatics is the study of electricity at rest, or static electricity. Examples of this type of electricity are charges on condenser plates. Rubbing glass with silk produces static electricity. Electrodynamics is the study of electricity in motion, or dynamic electricity. The electricity which flows through wires for light and power purposes is a good example of latter type of electricity.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text:

Оборудования работающего на основе использования возобновляемых источников энергии для автономного тепло- и электроснабжения частных домов и зданий. С его помощью можно частично или полностью покрыть энергозатраты практически любого объекта.

- солнечные вакуумные водонагреватели для круглогодичного производства горячей воды
- ветрогенераторы для выработки электроэнергии.
- солнечные фотоэлектрические батареи и товары на их основе – зарядные устройства, фонари.
- энергоэффективные светодиодные лампы

IV. Fill in the blanks with the articles *a, an, the*, where necessary.

We live in ... nice flat ... new house near ... park. ... flat is on ... second floor. There are ... two rooms in it. We have also ... kitchen and ... bathroom. ... kitchen is ... big enough. As ... rule, my mother cooks for us. We spend ... lot of ... time together in ... kitchen. There is ... TV set in ... corner of ... kitchen, and we often watch ... TV there.

V. Replace the infinitives given in brackets by the Future Progressive or the Present Simple:

1. The delegation (to start) for London as soon as they (to receive) their visas.
2. At the travel bureau they (to tell) you exactly when the train (to leave).
3. Ask the Smith if it (to take) him long to make a duplicate of this key.
4. I (not to think) I (to be able to) call on them and (to say) good-bye before I (to go) abroad.
5. If you (not to want) to climb the tree you can shake it and the apples (to fall) down to the ground.
6. If I (to go) to Moscow I usually (to stay) at my friends.
7. Ask him when he (to finish) packing.

VI. Переведите предложения. Определите, какое значение приобретают выделенные слова в контексте следующих предложений.

1. The soldier is now at his **post**.
2. The man did his best to get a better **post**.
3. I will send you the book by **post**.
4. The wooden gate was supported by two metal **posts**.

Контрольная работа № 3

I. Translate the text.

Electroscope

An electroscope is a sensitive instrument for detecting small electric charges. It consists of a glass-jar closed with a stopper of insulating material in which is fitted a varnished glass-tube. A rod passes through the tube. At the top of the rod there is a metal ball or disc at the bottom of the rod two pieces of gold leaf are suspended. When a charge is brought near the electroscope, a charge of opposite sign is induced on the metal ball, and a charge of the same sign appears on the two of the gold leaves. Since, the two pieces of gold leaf now have charges of like sign they repel each other.

As an example a negatively charged glass rod is brought to the electroscope. A positive charge is induced on the ball and a negative charge appears on the two pieces of gold leaf.

The polarity of a charge may be determined by means of an electroscope. We charge the electroscope negatively by touching the ball with the rod of hard rubber which is rubbed with flannel or silk. If the unknown charge is brought to the electroscope it will induce on the ball a charge of opposite polarity and on the gold leaves a charge of the same polarity as that of the unknown charge. Therefore, if the unknown charge is negative, the gold leaves will repel each other; if it is positive, they will attract.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

ЭЛЕКТРОСКОП, прибор для обнаружения электрического заряда. Наиболее распространен электроскоп с золотыми листочками, в котором две золотые пластинки, прикрепленные к проводнику, помещены в изолированный корпус. Если к стержню проводника подвести электрический заряд, пластинки разойдутся, и степень расхождения указывает на величину заряда.

IV. Fill in the pronouns.

When Mary came to the dining room ... took off ... coat and sat down. The waitress soon brought ... some soup. When Mary finished ... dinner ... looked at ... watch, put on ... coat and went out. (Now Mary tells her little brother John what he must do when he goes to the dining room): ... must take off ... coat and sit down. Then the waitress will bring ... some soup. When ... finish ... dinner ... must put on ... coat and go out.

V. Use the Present Indefinite, the Present Perfect or the Past Indefinite.

1. You ever (to be) to the picture gallery? - Yes, I (to be). I (to visit) it once when I was a youth and the pictures (to make) a great impression on me. Since then I (not to be) here.
2. You already (to see) the new Indian film? - Yes, I (to see) it. I (to manage) to see it yesterday. I (to go) to the cinema in the evening and (to get) two tickets easily.
3. You always (to take) books from our library? - Yes, as a rule, I (to take).

4. I (not to see) Jane lately. When you (to see) her last? -I (to meet) her two days ago. I (to think) that she (to change) very much.
5. You (to have) dinner already? -No, not yet. The waitress (to take) my order fifteen minutes ago and (not to bring) me anything yet.
6. Where you (to get) this fine new bicycle from? - My parents (to give) it to me as a birthday present.

VI. Choose the correct variant

1. I want to go shopping but if you _____ to come, you
 -want, need -not want, needn't -don't want, needn't -do want, needn't
2. If you _____ on this tram it'll take you to the downtown.
 - 'll get - have got - got -get
3. He _____ to the country tomorrow if the weather is fine.
 - go -goes - 'll go -'d go
4. You'll understand nothing unless you _____ the book yourself.
 - read -won't read -don't read - 'll read
5. You'll understand this rule after your teacher _____ it to you.
 - 'll explain - explain -explains - don't explain

Контрольная работа №4

I. Translate the text.

Electric currents and their properties

Conduction is the name normally given to a movement or flow of charges. The charges are usually electrons, but may also be ions when the conduction takes place in gaseous or liquid conductors, in which the ions are mobile.

How does the current flow through a wire? A metal is made up of tiny crystals which are visible under a microscope. A crystal is a regular and orderly arrangement of atoms. As it was explained, an atom is a complex particle in which tiny electrons move around nucleus. When the atoms are tightly packed as they are in a metallic solid, some of the electrons move freely between the atoms. These are called free electrons. Ordinarily, the free electrons move at random through the metal. There must be some driving force to cause the electrons to move through the metal conductor. This driving force tending to produce the motion of electrons through a circuit is called an electromotive force or e.m. f. that moves electric charges from one point in the circuit to another.

When an electromotive force is applied to the ends of a wire the free electrons move in one direction. It is the movement of the free electrons in a conductor that induces an electric current. The greater the number of participating electrons, the greater is the flow of current.

No one has ever seen analectic current. We only know of the existence of a current by its effects. A current can heat a conductor, it can have a chemical action when passing through a solution, or it can produce a magnetic effect. We can measure currents by observing their heating, their chemical, or their magnetic effects.

There are some kinds of current, namely: a direct current (d. c, for short), an alternating current (a. c.) a pulsating current

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Галогенные лампы стали применять и в быту, так как оказались достаточно экономичными и удобными в эксплуатации. Галогенная лампа, в сущности, является лампой накаливания, только вместо вакуума в ней находится специальная смесь, как правило, содержащая бром или йод, которая повышает светоотдачу лампы. При той же мощности, что и лампа накаливания, галогенная лампа имеет меньшие размеры, светит более ярко.

IV. Fill in the prepositions:

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu ... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. "I'm sorry", said the waitress. "It will only be ready ... half an hour".

V. Put these sentences in the Future and in the Past:

1. The tourists are shown many places of interest in our town.
2. The Moscow University is greatly admired by everybody.
3. New metro station is built in our town.
4. The poem is recited in our group.
5. We are told to wait outside.

VI. Use the Past Indefinite or the Past Perfect:

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.

4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months, before.
6. They (to be) friends for some ten years before I (to meet) them.

Контрольная работа №5.

I. Translate the text.

Conductors, insulators, semiconductors Conductors are materials that have a large number of loosely bound valence-ring electrons; these electrons are easily knocked out of their orbit and are then referred to as free electrons. Insulators are materials in which the valence-ring electrons are tightly bound to the nucleus. In between the limits of these two major categories is a third general class of materials called semiconductors.

Capacity

When two insulated conductors, one of which is charged, are brought into contact, the charge spreads over both conductors. The uncharged conductor becomes charged. A larger conductor receives a larger part of the charge. The potential of the two conductors becomes the same as soon as they are brought into contact, but the quantity of electricity is not the same on each. The larger portion of the charge is on the larger conductor.

We say that the conductors have not the same capacity for electricity. The capacity of the conductor depends upon its size.

The capacity of the conductor is measured by the quantity of electricity which must be given to it in order to raise its potential to a given amount.

From this definition it is seen that if the capacity of a conductor increases while the quantity of electricity on it remains constant, its potential will become less.

Condenser

Any arrangement by which the capacity of a conductor is increased artificially is called a condenser.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Вполне возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше

приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV. Fill in the blanks with the articles *a, an, the* where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Use the Present Indefinite or the Present Perfect.

1. As a rule I (to have) ham and eggs for breakfast, but this time I (to order) an omelet.
2. This is the house where I (to live). I (to live) here since childhood.
3. Once in a week I (to write) letters home, but I (not to write) one this week, so my next letter must be particularly long.
4. Where (to be) your monitor? "She (to go)" to the library.
5. I regularly (to see) him every morning at the tram stop, but I (not to see) him these two or three days.
6. It (to be) cold in winter in Moscow as a rule? - Yes, generally it (to be), but this winter (to be) exceptionally warm.
7. Why you (not to shave) in the morning?-I (to shave) every other day.

VI. Use the Passive Voice.

A guide will show the visitors the new buildings.

Someone told him to make a report on ancient architecture.

Mr. Smith taught her Greek and gave her a dictionary.

The teacher told John to learn the alphabet.

I will tell you another fable next time.

They invited the rest of us to go sightseeing.

The guide showed the American the Houses of Parliament.

Контрольная работа №6

I. Translate the text.

Potential and difference of potential

Two bodies oppositely charged have a difference of potential or voltage is measured by the work required to carry a unit of positive charge from one body to another against the force of attraction or

repulsion. The magnitude of the difference of potential depends upon the concentration of the charge and not on the amount of the charge.

If a positively charged body and a negatively charged body are brought in contact, electrons from the body with negative charge will move over to the body having the positive charge until an equilibrium of charge has taken place.

There is a very instructive analogy between the use of the word "potential" in electricity and "pressure" in hydrostatics. Just as water tends to flow from points of higher hydrostatic pressure to points of lower hydrostatic pressure, so electricity tends to flow from points of higher electrical pressure, or potential, to points of lower electrical pressure, or potential.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate technical terms and phrases.

Аналоговые электроизмерительные приборы

Амперметры, ваттметры, вольтметры, измерительные преобразователи, индукционные, счетчики, контрольно-измерительные приборы, магнитодинамические приборы, магнитоэлектрические приборы, мультиметры, омметры, приборы выпрямительного типа, термоэлектрические приборы, фазометры, ферродинамические приборы, частотомеры, цифровые электроизмерительные приборы, электрические счётчики, электромагнитные приборы, электростатические приборы.

IV. Supply *many, much* or *little, a little*.

When we came to the dining-room there were ... people there already. We sat down at a table, took the menu-card and began to read it. "I shall not eat ... today", said. "... soup, some milk and ... cake-nothing else". "I never eat very ... said Mary. "But today I am hungry, and I want to eat as ... as I can: soup, meat, fish and potatoes". "But it will take a lot of time", said Peter, "and we have very ... time, you know. We have ... things to do before the lecture begins".

V. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life. ... the beginning of the year they made a trading expedition ... Africa. Crusoe, left ... saying good-bye to anyone. ... his way ... London he had his first experience ... a shipwreck. The ship ran ... a rock and broke ... pieces. The sailors were swallowed ... the sea.

VI. Use the Present Continuous instead of the infinitives given in brackets:

1. Look the sun (to rise). It is (to shine) brightly.
2. John (to polish) his boots and his sister (to press) her dress.
3. It (to rain)? Yes, it (to rain) very hard. 6. The delegation (to leave) Moscow tomorrow.
4. What you (to read) now? I (to read) stories by Maugham.
5. 10 The weather is fine. The sun (to shine) and the birds (to sing).
6. Why you (to speak) so fast?
7. Who you (to wait) for? I (to wait) for my sister.

Контрольная работа №7

- I. Translate the text.

Unit of electrical current and current measurement

The electron is an extremely small unit, and for thus reason it is not a convenient unit to use in the measurement of electric current or of quantity of electricity. The presence of an electric current in a circuit may be detected and its strength may be measured by a number of different methods. Each method is based upon some effect which the current produces under given conditions.

One of these effects is known as electrolytic dissociation. The properties of most conducting liquids are such that when a direct current is maintained in them, the constituent elements of the liquid are separated. For example, when two copper plates are dipped in a solution of copper sulphate and a direct current is maintained in a liquid entering at one plate, the anode, and leaving at the other, the cathode, metallic copper leaves the solution and is deposited on the cathode.

- II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

- III. Translate the text.

Техника безопасности:

Чтобы обезопасить себя от воздействия электричества, принято работать в резиновых перчатках или стоять на резиновом коврикe. Электрики (как, впрочем, и не электрики) берутся починить розетку или другой электрический прибор, не отключая ток. В таком случае они обязаны выполнять только одно правило: не замыкать собой электрическую цепь. Поэтому они не должны касаться каких-нибудь проводников электричества, а также обоих контактов электрического провода одновременно.

- IV. Fill in the blanks with the preposition required. Translate the sentences into Russian.

... week-days we work. We rest ... Sundays. I get up ... the morning. We sleep ... night. She promised to do this work ... time. We have our vacation ... January. We live ... the twentieth century. We tell the ... a clock or a watch. Our child is in the fresh air ... morning ... night. My father comes home ... noon.

V. Use the Present Simple or the Present Progressive:

1. Why you (walk) so fast today? You usually (walk) quite slowly.-1 (hurry). I am afraid to miss the train.
2. Cuckoos (not to build) nests. They (to use) the nests of other birds. 3. I always (to buy) lottery tickets, but I seldom (to win)
4. You cannot (to have) the book now because my brother (to read) it.
5. Some people (to do) everything with their left hand.
6. Who (to make) that terrible noise?-It is my son.
7. How you (to feel)?

VI. Use an adjective or a proverb.

1. What is the (proper) answer to this question?
2. If you read this joke (proper) you will understand it.
3. It was a (gay) song and she sang it (gay).
4. She spoke very (good) and everybody wondered where she had learnt to speak so fluently
5. She was (kind) to him and he was (happy).
6. The children were running among the trees laughing (happy).
7. He is a very (careful) driver.

Контрольные работы для студентов специальности техник-механик

Контрольная работа №1

I. Translate the text.

Types of Loading

As to the manner in which loads are applied or transmitted to a structure of machine they may be considered as static loads, repeated loads, impact and energy loads.

1. In static, steady or dead loads are forces that are applied slowly and remain nearly constant after being applied to the body such as the loads on most buildings or the load applied to a bar in the usual type of testing machine.

2. Repeated loads are forces that are applied a very large number of times causing a stress in the material that is continually changing, usually through some definite range. Such are the loads applied to the connecting rod of an engine is running, the wheel loads on a railroad rail as a train passes over the rail and similar ones.

3. Impact loads are forces that are applied to the resisting body in a relatively short period of time. An impact load, in general, is applied by a moving body when it comes in contact with the resisting body. The force exerted by the moving body and the period during which it acts in general cannot be determined. For this reason in some problems it is more satisfactory to calculate the stress and strain produced by an impact load from the energy delivered to the resisting body by the moving body.

Other Classifications of Loads.-Loads may be classified as distributed loads and concentrated loads. A distributed load may be uniformly distributed or non-uniformly distributed. A concentrated load is one whose area of contact with the resisting body is negligible in comparison with the area of the resisting body.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Зимние шины не рекомендуется эксплуатировать при температуре выше +5 по Цельсию. Они мало того, что становятся мягче и буквально «плаваются», но кроме того еще и не выполняют в полной мере своих функций, устойчивость автомобиля на дороге при этом становится большим вопросом.

IV. Supply *some, any, no*, where required

1. ... pupils went to the river ... to the woods. 2. ... of my friends live in Moscow. 3. ... have you ... English dictionaries? 4. Is there ... ink in the inkstand? Yes, there is ... 5. Bring ... chalk, please. 6. There is ... chalk in the box. 7. Is there ... milk in the jug? Yes, there is....

V. Choose the correct variant

1. Before you ____, don't forget to lock the door.

-are leaving -will leave -leave -shall leave

2. Please do not speak to anyone before the police ____ .

-come -are coming -'ll come, came

3. His parents will be very glad if she ____ the university.

-enter -'ll enter - enters - entered

4. When you ____ my brother, you ____ him.

-'ll see; - won't recognize; - see won't recognize; -saw, recognize; -'ll see, don't recognize

5. We won't discuss the matter until the headmaster _____ .

-'ll arrive - won't arrive - doesn't arrive- -arrives

VI . Replace the infinitives given in brackets by the Past Simple:

- 1 That boy (break) my window.
- 2 I (drive) to work every day last year.
- 3 Laura (hit) that boy.
- 4 James (keep) the book about films.
- 5 We (meet) them at the same place every week.
- 6 You (put) that there.
- 7 We (sit) at the same desks.
- 8 An American (win) Wimbledon last year.

Контрольная работа №2

I. Translate the text.

Four-stroke engine

The internal combustion engine is a machine that develops power from the combustion of fuel within a cylinder. The cycle of operation is as follows:

a) Suction Stroke- Just before the piston reaches the inner dead-centre, a valve, usually of the "poppet" type, is opened.

On its outward stroke, the piston draws into the cylinder an explosive mixture of air and fuel vapour.

Shortly before the piston reaches the outer dead-centre, the inlet valve is closed and the compression stroke begins.

b) Compression stroke- During this stroke, the whole of the gas in the cylinder is compressed into the free space at the head of the cylinder.

c) Explosion, or Working Stroke- When the compression stroke is almost complete, the explosive mixture is ignited by an electric spark or by other suitable means. The gases reach their maximum pressure almost immediately, and work is done until the piston has again reached a position just before the outer dead- centre, when a second exhaust valve is opened.

If the ignition takes place too late, the piston begins its outward journey before the maximum pressure is developed and power is lost.

If, on the other hand, the explosive mixture is ignited too early, the maximum pressure is reached before the piston has completed its inward journey, and engine is slowed down or even stopped.

d) Exhaust Stroke- The burnt gases are driven out in front of the and its return until the inlet valve again opens, when the cycle is repeated.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Летняя резина, при приближении температуры воздуха к «нулю» твердеет и становится абсолютно «дубовой», что существенно повышает вероятность заноса (даже на относительно сухом покрытии), а также вероятность разрыва колеса при обычном проколе.

IV. Put in *a/an* or *the* where necessary

1. I wrote to her but ... letter never arrived.
2. Britain is ... island.
3. What is ... name of this village?
4. Jane is ... very nice person. You must meet her.
5. Montreal is ... large city in ... Canada.
6. What is ... largest city in ... Canada?
7. "What time is it?" "I don't know. I haven't got ... watch."

V. Replace the infinitives given in brackets by the Future Progressive or the Present Simple:

1. The delegation (to start) for London as soon as they (to receive) their visas.
2. At the travel bureau they (to tell) you exactly when the train (to leave).
3. Ask the Smith if it (to take) him long to make a duplicate of this key.
4. I (not to think) I (to be able to) call on them and (to say) good-bye before I (to go) abroad.
5. If you (not to want) to climb the tree you can shake it and the apples (to fall) down to the ground.
6. If I (to go) to Moscow I usually (to stay) at my friends.
7. Ask him when he (to finish) packing.

VI. Определите, какое значение приобретают выделенные слова в контексте следующих предложений. Переведите предложения.

1. The soldier is now at his post.
2. The man did his best to get a better post.
3. I will send you the book by post.
4. The wooden gate was supported by two metal posts.

Контрольная работа № 3

I. Translate the text.

Two-Stroke engine.

This engine differs from the four-stroke engine in having one working stroke during each complete revolution of the crankshaft.

During the inward stroke of the piston a port leading to the crankcase is uncovered and the explosive mixture of air and fuel is drawn into the crankcase. On beginning its outward stroke, the inlet port is soon covered, and the mixture is compressed in the crankcase to pressure of about 20 lb. per sq. in. As the outer dead- centre is approached the exhaust port is opened, and shortly afterwards another port opens, which allows the partially compressed charge of gas to enter the cylinder, driving out the exhaust gas before it. A baffle in the piston top directs the unburnt charge to the top of the cylinder, thus preventing undue loss through mixing with the exhaust gas.

The gas is compressed on the inward stroke and is exploded as the piston reaches inner dead-centre.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Инджекторный двигатель существенно улучшает эксплуатационные и мощностные показатели автомобиля (динамика разгона, экологические характеристики, расход топлива). Инжекторные двигатели, безусловно, гораздо совершеннее карбюраторных. Отечественные инжекторные двигатели хорошо адаптированы к нашему холодному климату, поэтому неплохо заводятся при очень низкой температуре.

IV. Fill in the pronouns.

When Mary came to the dining room ... took off ... coat and sat down. The waitress soon brought ... some soup. When Mary finished ... dinner ... looked at ... watch, put on ... coat and went out. (Say the same about Peter): When Peter ... (Now Mary speaks about herself): "When I ...". (Now Mary and Peter tell us what they did in the dining room when they went their together): "When we ...".

V. Use the Present Indefinite, the Present Perfect or the Past Indefinite.

1. You ever (to be) to the picture gallery?-Yes, I (to be). I (to visit) it once when I was a youth and the pictures (to make) a great impression on me. Since then I (not to be) here.

2. You already (to see) the new Indian film? - Yes, I (to see) it. I (to manage) to see it yesterday. I (to go) to the cinema in the evening and (to get) two tickets easily.

3. You always (to take) books from our library? - Yes, as a rule, I (to take).

4. I (not to see) Jane lately. When you (to see) her last? -I (to meet) her two days ago. I (to think) that she (to change) very much.

5. You (to have) dinner already? -No, not yet. The Waitress (to take) my order fifteen minutes ago and (not to bring) me anything yet.

6. Where you (to get) this fine new bicycle from? - My parents (to give) it to me as a birthday present.

VI. Choose the correct variant

1. I want to go shopping but if you _____ to come, you
-want, need -not want, needn't -don't want, needn't -do want, needn't
2. If you _____ on this tram it'll take you to the downtown.
- 'll get - have got - got -get
3. He _____ to the country tomorrow if the weather is fine.
- go -goes - 'll go -'d go
4. You'll understand nothing unless you _____ the book yourself.
- read -won't read -don't read - 'll read
5. You'll understand this rule after your teacher _____ it to you.
- 'll explain - explain -explains - don't explain

Контрольная работа №4

I. Translate the text.

Basic elements of hydraulic systems

The basic elements of hydraulic systems are:

1. The fluid.
2. The generator element (pump).
3. The transmission element (pipes and connections).
4. The control element (valve or restrictor).
5. The motor element (jack or continuous motor).
6. Tank and filter.

It can only function as a pump while the piston is moving into the cylinder and acts as a motor while the piston moves back. If non-return valves are added, the inlet valve is connected to a tank and the piston is given a to-and-fro motion, the device, becomes a source of continuous supply of liquid, except for interruptions during the suction stroke, which can be avoided by having two or more cylinders and pistons. Thus we obtain continuous pump.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Find in the text English equivalents:

IV. Fill in the prepositions.

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu ... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. "I'm sorry", said the waitress. "It will only

be ready ... half an hour". So they took some milk, paid ... their dinner, and went out ... the street. John then went ... the library, Peter went home.

V. Put these sentences in the Future and in the Past

1. The tourists are shown many places of interest in our town.
2. The Moscow University is greatly admired by everybody.
3. New metro station is built in our town.
4. The poem is recited in our group.
5. We are told to wait outside.

VI. Use the Past Indefinite or the Past Perfect.

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months before.
6. They (to be) friends for some ten years before I (to meet) them.
7. No sooner she (to open) the drawer than she (to find) the photo which she (to think) she (to lose) long before.
8. I (to refuse) to give a definite answer before I (to receive) a letter from him.

Контрольная работа №5.

I. Translate the text.

Elementary Hydraulic Systems

The simplest hydraulic system is perhaps the hydraulic shock absorber which consists of a pump (piston) and resistance. Another elementary type of system is the hydraulic weighing machine, which consists of a non-continuous pump element (piston or diaphragm) and a pressure gauge.

Other elementary systems consists of a jack, transmission line, and a pump of the non-continuous type without control gear, although valves may still be present for secondary purposes. Systems of this type are used for remote transmission of manual or pedal effort or motion, or for remote transmission of instrument indication.

The simplest best known system of this type hydraulic brake.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Основные параметры подшипников:

Максимальные динамическая и статическая нагрузка (радиальная и осевая).

Максимальная скорость (оборотов в минуту для радиальных подшипников).

Посадочные размеры.

Класс точности подшипников.

Требования к смазке.

Ресурс подшипника до появления признаков усталости, в оборотах.

Шумы подшипника

IV. Fill in the blanks with the articles *a, an, the* where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Use the Present Indefinite or the Present Perfect.

1. No wonder he (to look) tired after the strain under which he (to be) lately.
2. She just (to ask) a porter to carry her as they (to be) too heavy for her.
3. Where (to be) your monitor? "She (to go)" to the library.
4. I regularly (to see) him every morning at the tram stop, but I (not to see) him these two or three days.
5. It (to be) cold in winter in Moscow as a rule?- Yes, generally it (to be), but this winter (to be) exceptionally warm.
6. Why you (not to shave) in the morning?-I(to shave) every other day.

VI. Use the Passive Voice.

- 1) A guide will show the visitors the new buildings.
- 2) Someone told him to make a report on ancient architecture.
- 3) Mr. Smith taught her Greek and gave her a dictionary.
- 4) The teacher told John to learn the alphabet.
- 5) I will tell you another fable next time.
- 6) They invited the rest of us to go sightseeing.

Контрольная работа №6

I. Translate the text.

Tubing, Tube Connectors, and Flexible Hose

The various units of a hydraulic system are connected with some form of tubing or flexible hose.

Tubes are joined by means of tube connectors, usually of the same material.

Tubing. Some of the factors governing the selection of tubing are corrosion, temperature weight, mechanical strains, abuse and pressures.

Because of its light weight, aluminum-alloy tubing and fittings are used wherever possible.

Fittings are designed to withstand the bursting pressure that the tube of maximum wall thickness will withstand, assuming that the tube and fittings are of similar materials. For general high-pressure installations steel tubes and fittings are recommended.

Flexible Hose. Flexible hose is used to connect hydraulic units between stationary and moving parts. Hoses are made up of varying layers of synthetic rubber, fabric, and wire braid.

In installing flexible hose care must be taken that the hose is free from twists. Under pressure a twist will rotate the hose and loosen the connection, causing failure.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Для разных температурных режимов производители автошин разрабатывают разный химический состав резины для конкретного температурного диапазона. Зимние шины при температуре выше +5 по Цельсию не рекомендуется использовать, они становятся мягче и буквально «плавятся», но кроме того еще и не выполняют в полной мере своих функций, устойчивость автомобиля на дороге при этом становится большим вопросом.

Летняя резина, при приближении температуры воздуха к «нулю» твердеет и становится абсолютно «дубовой», что существенно повышает вероятность заноса (даже на относительно сухом покрытии), а также вероятность разрыва колеса при обычном проколе. Всесезонные шины лучше всего чувствуют себя именно в околонулевой температуре, скажем, от -5 до +10 градусов.

IV. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life.

... the beginning of the year they made a trading expedition ... Africa. Crusoe left ... saying good-bye to anyone. ...his way ... London he had his first experience ... a shipwreck.

V. Заполните пропуски словами many, much или little, a little:

When we came to the dining-room there were ... people there already. We sat down at a table, took the menu-card and began to read it. "I shall not eat ... today", said, "... soup, some milk and ... cake-no thing else".

"I never eat very ... said Mary". But today I am hungry, and I want to eat as ... as I can: soup, meat, fish and potatoes". "But it will take a lot of time", said Peter, "and we have very ...time, you know. We have ... things to do before the lecture begins".

VI. Use the Present Continuous instead of the infinitives given in brackets:

1. It (to rain)? Yes, it (to rain) very hard.
2. The delegation (to leave) Moscow tomorrow.
3. Somebody (to talk) the next room.

4. Who (to make) such a noise?
5. What you (to read) now? I (to read) stories by Maugham.
6. Somebody (to knock) at the door.
7. You (to go) anywhere tonight.

Контрольная работа №7

I. Translate the text.

Machine Elements

Screw fastenings

Machine parts are held together by parts:

- a) working in tension,
- b) working in shear,
- c) creating friction, and
- d) using both shear and friction forces.

Types of Fastenings-All fastenings can be divided into two classes- disconnectable fastenings and permanent joints.

Disconnectable fastenings, in turn are effected by:

- a) bolts and screws
- b) wedges
- c) dowel pins
- d) keys

Permanent joints are obtained by means of:

- a) press fits
- b) shrink fits
- c) rivets
- d) welding, brazing, and soldering
- e) casting

Forms of Threads. Screw fastenings are used for holding two or more machine parts together or for adjusting one part with relation to another. In screw fastenings the threads are made in several forms but are always of triangular-type single thread.

Screw threads are made right-hand and left-hand.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Свеча зажигания — устройство для воспламенения топливно-воздушной смеси в самых разнообразных тепловых двигателях. Бывают искровые, дуговые, накаливания, каталитические. В бензиновых двигателях внутреннего сгорания используются искровые свечи.

IV. Fill in the blanks with the preposition required. Translate the sentences into Russian.
... week-days we work. We rest ... Sundays. I get up ... the morning. We sleep ... night. She promised to do this work ... time. We have our vacation ... January. We live ... the twentieth century. We tell the ... a clock or a watch. Our child is in the fresh air ... morning ... night. My father comes home ... noon.

V. Use the Present Simple or the Present Progressive:

1. Why you (walk) so fast today? You usually (walk) quite slowly.-I (hurry). I am afraid to miss the train.
2. Cuckoos (not to build) nests. They (to use) the nests of other birds.
3. I always (to buy) lottery tickets, but I seldom (to win)
4. You cannot (to have) the book now because my brother (to read) it.
5. Some people (to do) everything with their left hand.
6. Who (to make) that terrible noise?-It is my son.
7. How you (to feel)?

VI. Use an adjective or a proverb.

1. If you read this joke (proper) you will understand it.
2. It was a (gay) song and she sang it (gay).
3. She spoke very (good) and everybody wondered where she had learnt to speak so fluently
4. She was (kind) to him and he was (happy).
5. The children were running among the trees laughing (happy).
6. (Usual) I get up (early) but that Sunday I got up (late).
7. The work must be done (careful).

Notes and commentary

As to the manner-что касается образа (способа)

Loads are applied to-нагрузки прилагаются к

Static load -статическая нагрузка

Repeated loads -переменная (периодически повторяющаяся) нагрузка.

Energy Load-динамическая (ударная) нагрузка

To remain constant-оставаться постоянным

A very large number of times-большое количество раз

A connecting rod-шатун

When the engine is running-когда двигатель работает

A relatively short period of time-относительно небольшой отрезок времени

To come in contact with-соприкасаться

For this reason-по этой причине

Is expressed in foot-pounds-выражается в фунтах

Uniformly distributed or non-uniformly distributed-равномерно распределённый или неравномерно распределённый

In comparison with-по сравнению

Within a cylinder-внутри цилиндра

Inner dead-centre-нижняя мёртвая точка

The "poppet type-тарельчатый тип

Outward stroke-ход всасывания, ход впуска

Shortly before-незадолго до того как

Outer dead-centre-верхняя мёртвая точка

Is compressed into the free space-сжимается в свободном пространстве

On the other hand-с другой стороны

Is slowed down-замедляется

During each complete revolution of the crankshaft-во время каждого оборота коленчатого вала

Lb. per. Sq. in.-фунт на квадратный дюйм

Charge of gas-порция газа

On the piston top-на головке поршня

Thus preventing undue loss through mixing with the exhaust gas- исключая таким образом чрезмерные потери из-за смешивания с выхлопным газом (отработанным)

Non-return valve-обратный клапан

To-and-fro motion-возвратно-поступательное движение

To function as to act as -функционировать, действовать в качестве

Pressure gauge-манометр

Remote transmission-дистанционная передача (действующая на расстоянии)

Manual or pedal effort-ручного или ножного усилия

Tubing-трубы

Flexible hose-гибкий шланг

Joined by means of-соединены посредством

The factors governing the selection-факторы, определяющие выборы

Because of-из-за

Whenever possible- где только возможно

The bursting pressure-разрывающее давление

Assuming that-принимая во внимание

Stationary and moving parts-неподвижные и подвижные

Are made up of-сделаны из

In installing flexible hose care must be taken that the hose is free from twist- при установке гибкого шланга следует принять меры против скручивания шланга.

Are held together by parts-удерживаются детали

Parts working in tension-детальями, работающими на растяжение

Parts working in shear-детальями, работающим на сдвиг (срез)

Parts creating friction-детальями, создающими трение

Parts using both...and-детальями, испытываемыми как...так и

Disconnectible fastenings-разъёмные соединения

Permanent joint-неподвижное соединение

In turn-в свою очередь

Are effected by - осуществляются

Dowel pins-установочный штифт

Are obtained by means of-осуществляются посредством

Press fits-прессовая посадка

Shrink fits-горячая посадка

With relation to another-относительно другой детали

Triangular-type single thread-треугольная однозаходная резьба

Right-hand thread-правая резьба

Left-hand thread-левая резьба

Are subjected to-подвергаются

Which are mostly in shear but sometimes in bending-которые чаще бывают срезаемыми, а иногда изгибаемыми

Either ... or – или ... или

Is to (+inf.)- состоит в том, чтобы

In most cases- в большинстве случаев

Feather or spline key-направляющая или призматическая шпонка

In spite of-несмотря на

In use-применяемых

According to-согласно

Dovetailed key-шпонка в виде ласточкина хвоста

Chamfered round key-цилиндрическая шпонка или шпонка со скошенным ребром

Disk-shaped key- дискообразная шпонка

Radial and tangential key-радиальная или тангенциальная шпонка

For light and for heavy duty- для малых и больших нагрузок

A press joint-прессовая посадка

Is obtained by forcing a shaft into hole-получается при впрессовывании вала в отверстие

Which produces the grip that holds the hub and shaft together-который зажимает и удерживает втулку и вал вместе.

A shrink joint-горячая посадка

The hub is heated to expand its bore and to slip it on the shaft-втулка нагревается, чтобы расширить её внутренний диаметр и посадить её на вал

By means of-посредством

Tie rod-соединительная тяга

The conical shape of the shaft end and the shaft bore-конической формы конца вала и отверстия втулки

The pull of a nut-затяжка гайки

As in the case-как и в случае

On the other hand-с другой стороны

More than three times-более чем в три раза

Is due to-обусловлена

When they are subjected to-когда они подвергаются

Is heated to a red glow-нагревается до красна

Is held firmly against the plate-прижимается плотно к пластинке

Is formed into a second head-формируется во вторую головку

A set-обжимка

Which are driven cold-которые клепаются в холодном состоянии

So much that-до такой степени что

They should be used only when unavoidable- применяются только, когда это неизбежно

At right angles to the shaft axis- под прямыми углами к оси вала

In the direction of the shaft axis-по направлению к оси вала

A rocking motion-качающееся движение

Wrist pin-поршневой палец

Rotary motion-качающееся движение

In time-во время

Hard metal bearing-подшипник из твёрдого металла

Is lined with a metal-покрыт внутри металлом

Such as are taking place-или такими которые имеют место

Endurance limit-предел выносливости

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