in this video we will describe gas turbine compressor ge maintenance overhauling gas turbine overhaul ge frame 5 gas turbine gas turbine parts and services gas turbine maintenance ge turbine, heavy duty gas turbine the sgt5 8000h offers outstanding performance and high flexibility with a gross power output of 450 mw it is one of the most powerful gas turbines worldwide the turbine is the core component of highly efficient gas fired power plants designed for 665 mw at 61 effi ciency in combined cycle operation, gas turbines working ppt 1 gas turbines 2 gas turbines history a gas turbine is a turbo machine and basically similar to steam turbine regarding its working principle the
The first turbine to produce useful work was probably a windmill where no compression and no combustion exist. Nowadays, gas turbines include a compression process and a combustion process. Joule and Brayton independent reduction of fuel costs was successful using a different, untested fuel in a marine gas turbine. However, maintenance costs increased with the fuel change after 1981. The ships were sold and refitted with diesel engines, which were more economical. Gas turbine models at the heart of combined cycle power plants are the gas turbine. These machines have the power to make a good solution great. Heavy-duty and aeroderivative gas turbines are proven performers in a range of applications capable of achieving world-class efficiency with next-generation capabilities. Capstone Turbine Corporation is the world's leading producer of low-emission microturbine systems. It has minimal maintenance, a wide range of fuels, and operates on gaseous, renewable, and liquid fuels, including natural gas, associated gas, LPG, propane, flare gas, landfill gas, digester gas, diesel aviation fuel, and kerosene. By integrating aeroderivative gas turbines for combined heat and power generation, also called cogeneration, in this configuration, the exhaust heat of the gas turbine is used to produce steam to directly heat a building or industrial process. Aeroderivative gas turbines can convert 40% of fuel energy into electricity when configured for power plants. Gas turbine power plants require expertise in power generation, process expertise, and overall plant expertise. Consulting support based on coherent and cost-effective gas turbine monitoring system is important in the offering stage for customers. High-quality consulting support is necessary for successful development of gas turbine projects. Gas turbine monitoring system is a thesis submitted to Middle East Technical University by Teoman Zemen in partial fulfillment of the requirements for the degree of Master of Science in Aerospace Engineering. The THM 1304 heavy-duty gas turbine family offers an extremely long life with a high level of reliability and availability. The modular design facilitates easy installation and maintenance. Features are designed to realize an optimized cost-to-benefit ratio over the entire lifecycle. MS5001 turbines remain a good investment, even though higher technology turbines are popular in the new unit marketplace. The MS5001 turbine was built simple for dependability with a low pressure ratio and low firing temperature. It has only two turbine stages, both uncooled and dimensionally stable turbine casings. Gas turbine power plant modeling for operation training is another key feature for these applications, which are often located in remote locations far from maintenance facilities. Over 560 industrial RB211 gas turbines are operating in mechanical drive applications, including locations such as North America, Europe, China, India, North Africa, Russia, and Southeast Asia. Energy Sector Management Assistance Program (ESMAP) Technical Paper 122-09 studied equipment prices in the power sector. Maintenance and industrial gas turbines are a critical aspect of the energy sector.
gas turbine is engineered for high cogeneration efficiency and long cycle maintenance intervals which will help Guodian Dianli meet its heating and electricity demands with lower costs. MAN PrimeServ is our service brand for all MAN Energy Solutions products. MAN PrimeServ helps to reach and exceed the expectations our customers have in their gas turbine-based service. Our gas turbine maintenance programme our experienced service teams provide the best solutions and services 24/7/365 days a year. Kawasaki gas turbines, Americas Gas Turbines, Power Generation, Technology & Applications. Gas Turbine GT Technology Overview. Gas Turbine Theory. GPB15 1.5 MW Reliability, Availability, Maintenance, Extended Warranties, Extended Long Term Service Agreements, GT Multi Year Contracts, 4 Year Cycles, GT Availability Guarantees. Maintenance of V94 series of gas turbines. Power Gen Russia Moscow 2010. 1 Russia Power 2010. Turbo Services Maintenance of V94 0, V94 2 series of gas turbines. Dr. Shaun West and SJF Mattheij. MSC Sulzer Turbo Services Slide 1. Gas generator, Power turbine and all auxiliary systems packaged on a single skid. Both 501 KC models packaged on identical skids with same interfaces. Quick field upgrades, simplified maintenance and operation, minimal spare parts inventory, flexible coupling between the power turbine and driven equipment designed to API 671. Our comprehensive portfolio of services provides low life cycle cost and optimum performance throughout the turbines life cycle. Long term programs, LTP overhaul, service field service, spare parts service, exchange remote diagnostic service, and modernization and upgrades with only 17 scheduled maintenance days over a 17 year service cycle. The SGT 600 provides highest operational, benefit from our expertise and experience in industrial power generation. Siemens gas turbines can be used for power generation and cogeneration combined heat and power, CHP in many industries such as the chemical and fiber cement metals and mining as well as other manufacturing industries. Steam turbines, Steam Turbines Manufacturer in India, also pioneers in steam turbine maintenance. Steam turbine solutions Steam turbines spare parts supply. Steam turbines repair and overhauling services. Arne Loft, developer of the gas turbine explains how it works. Gas turbines can use many kinds of fuel to reliably generate electricity or run a compressor. Frame 5 gas turbine diagram explained, fundamentals of gas turbine engines introduction. The gas turbine is an internal combustion engine that uses air as the working fluid. The engine extracts chemical energy from fuel and converts it to mechanical energy using the gaseous energy of the
working fluid air to drive the engine and propeller which in turn propel the airplane, the siemens gas
turbine range has been designed and refined to help the customer meet the challenges of a dynamic
market our 14 models with capacities from 4 to 375 mw are designed with customers profitability in
mind, independent provider of experienced turbine generator engineers specializing in gas and steam
turbine maintenance projects and outages, gas turbine for power generation introduction the use of
gas turbines for generating electricity dates back to 1939 today gas turbines are one of the most
widely used power generating technologies, lm2500 tm2500 lm5000 lm6000 and lms100 gas turbine
engines robert boozer ip turbine two axial stages that drive the lp power turbine lp power turbine five
stage free power turbine 3600 rpm 60 hz and 3000 rpm 50 hz hpc high pressure maintenance levels,
projected capital costs of a typical u s gas turbine power plant in 2008 2010 and 2050 in u s dollars
per kilowatt hour this statistic represents the projected capital costs of a typical gas, turbine and
working tirelessly to achieve success there must have been so many disappointments through all the
trials and efforts but perseverance eventually bore fruits figure 1 illustrates the influence of the
pioneers on the development of the industrial gas turbine with key dates, service maintenance
industriel industrial company education imao ingnerie mcanique assiste par ordinateur motor vehicle
company maintenance industrielle turbine gaz et turboalternateur science technology amp
engineering maintenance et construction mcanique industrial company mcanique, the 8402g fuel
valve system is a balanced rotary valve with an electric stepper motor actuator this high performance
gas turbine fuel control valve with fast operation speed and large turn down ratio is designed for
reliable an efficient control of any gas turbine, a gas turbine train typically consists of two power cars
one at each end of the train and one or more intermediate passenger cars a gas turbine offers some
advantages over a piston engine there are few moving parts decreasing the need for lubrication and
potentially reducing maintenance costs and the power to weight ratio is much higher, h 80 gas turbine
provides a high efficiency power plant for the middle sized power generation sector features reliable
heavy duty design high ef ciency no reduction gear replacement of old gt on site maintenance
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highly efficient gas turbines provide the utility industry with a fourth generation technology that
features numerous benefits and potential applications these include firm power, idea about the gas
turbine design and performance the turbine manufacturers usually supply five main parameters in
their catalogues that are sufficient for installation requirements those are pressure ratio gas turbine
electrical output overall efficiency gas turbine exhaust temperature and exhaust mass flow rate, and
power turbine are mechanically independent of each other which is crucial in respect of rapid
installation and maintenance the design of the thm family combines the advantages of heavy duty
machines with the convenience of low mainte nance from todays aeorderivative tur bines the engines
are of modular de, microturbines are a relatively new distributed generation technology being used
for stationary energy generation applications they are a type of combustion turbine that produces both heat and electricity on a relatively small scale microturbines offer several potential advantages compared to other technologies for small scale power generation including a small number of moving parts, gas turbines and jet engines 5 1 introduction history records over a century and a half of interest in and work on the gas turbine however the history of the gas turbine as a viable energy conversion device began with frank whittles patent award on the jet engine in 1930 and his static test of a jet engine in 1937, combustion engine vs gas turbine part load efficiency and flexibility the performance of power plants at partial load has become a significant operational consideration for electric power grids worldwide, introduction to gas turbines for non engineers published in the global gas turbine news volume 37 1997 no 2 by lee s langston university of connecticut and george opdyke jr dykewood enterprises a turbine is any kind of spinning device that uses the action of a fluid to produce work maintenance cost is relatively low, page 6 ge5 gas turbines package the gas turbine packages were designed with an emphasis on standardization and optimization of factory and field assembly operations the result is a standard package capable of satisfying the needs of a typical user for low installation and maintenance costs, ge power systems gas turbine and combined cycle products ms9001h ms9001fb ms7001fb ms9001fa ms7001fa ms9001e ms7001ea ms6001fa ms6001c heavy duty output heat rate page two eight five six ten eleven seven thirteen fourteen igcc integrated gasification combined cycle overview sixteen small heavy duty and aero turbine products overview, rodger anderson serves and the moderator of the efficiency heat rate gt forum category mr anderson has been manager gas turbine technology at drs power technology incorporated since 2001 where among other duties he consults and provides expert witness review for oems users and insurance companies, gas turbines are aerodynamically designed for optimal performance at base load levels if the gas turbine is not operated at this load level the flow triangles in the compressor and turbine expander stages will differ from design assumptions and more energy will be dissipated other factors influencing gas turbine performance are, gas turbine system scheme of a simple open cycle as well as in gas turbines the maximum net power provided by a microturbine is limited by the temperature the material of the turbine can support associated with the cooling technology and service life required

Gas turbine Compressor GE Maintenance overhauling ???? ??????? ????? ????
April 17th, 2019 - in this video we will describe Gas turbine Compressor GE Maintenance overhauling gas turbine overhaul GE frame 5 gas turbine gas turbine parts and services gas turbine maintenance ge turbine

We power the world with innovative gas turbines
April 13th, 2019 - Heavy duty gas turbine The SGT5 8000H offers outstanding performance and high flexibility. With a gross power output of 450 MW it is one of the most powerful gas turbines worldwide. The turbine is the core component of highly efficient gas fired power plants designed for 665 MW at 61% efficiency in combined cycle operation.

Gas turbines working ppt SlideShare
April 18th, 2019 - Gas turbines working ppt 1 GAS TURBINES 2 GAS TURBINES – HISTORY A Gas turbine is a Turbo machine and basically similar to steam turbine regarding its working principle. The first turbine to produce useful work was probably a windmill where no compression and no combustion exist. Nowadays gas turbine include a compression process and combustion process Joule and brayton indep.

Gas turbine Wikipedia
April 19th, 2019 - Reduction of fuel costs was successful using a different untested fuel in a marine gas turbine but maintenance costs increased with the fuel change. After 1981 the ships were sold and refitted with what at the time was more economical diesel fueled engines but the increased engine size reduced cargo space citation needed.

Aeroderivative and Heavy Duty Gas Turbines GE Power
April 18th, 2019 - GAS TURBINE MODELS At the heart of a combined cycle power plant is the gas turbine. The machine that has the power to make a good solution great. Our heavy duty and aeroderivative gas turbines are proven performers in a range of applications capable of achieving world class efficiency with next generation capabilities.

Capstone Turbine Corporation CPST
April 18th, 2019 - aeroderivative gas turbines for combined heat and power generation also called cogeneration. In this configuration the exhaust heat of the gas turbine is used to produce steam to directly heat a building or industrial process. Aeroderivative gas turbines can convert 40 percent of fuel energy into electricity when configured for.

Gas turbine power plants ABB Ltd
April 17th, 2019 - 4 Gas turbine power plants. Gas turbine power plants in power generation Expertise Process.
expertise and overall plant expertise are the key to a successful development of gas turbine projects. Already in the offering stage, it is important for the Customers to know that high quality consulting support based on coherent and cost-effective solutions is available.

**GAS TURBINE MONITORING SYSTEM A THESIS SUBMITTED TO THE**
April 12th, 2019 - Gas turbine monitoring system a thesis submitted to the graduate school of natural and applied sciences of Middle East Technical University by Teoman Özmen in partial fulfillment of the requirements for the degree of Master of Science in aerospace engineering December 2006 gaz turb ?n ?zleme s?stem

**THM Gas Turbines turbomachinery man es com**
April 10th, 2019 - Heavy duty low maintenance. The THM 1304 heavy duty gas turbine family offers an extremely long life with a high level of reliability and availability. The modular design facilitates easy installation and maintenance features to realize an optimized cost to benefit ratio over the entire lifecycle.

**GER 4196 Performance and Reliability Improvements for**
April 13th, 2019 - MS5001 turbines remain a good investment even though higher technology turbines are popular in the new unit marketplace. The MS5001 turbine was built simple for dependability with a low pressure ratio low firing temperature, only two turbine stages both uncooled and dimensionally stable turbine casings.

**Gas Turbine Power Plant Modelling for Operation Training**
April 17th, 2019 - Gas Turbine Power Plant Modelling for Operation Training Edgardo J Roldán Villasana 1 Yadira Mendoza Alegría 1 Ma Jesús Cardoso G 1 Victor M Jiménez Sánchez 1 and Rafael Cruz Cruz 2 Instituto de Investigaciones Eléctricas Gerencia de Simulación 2 Centro Nacional de Capacitación Ixtapantongo México 1

**Industrial RB211 Gas Turbines Siemens Energy Sector**
April 8th, 2019 - Maintenance is another key feature for these applications which are often located in remote locations far from maintenance facilities. Over 560 Industrial RB211 gas turbines are operating in mechanical drive applications including locations such as North America, Europe, China, India, North Africa, Russia, and South East Asia.

**Study of Equipment Prices in the Power Sector ESMAP**
April 17th, 2019 - Energy Sector Management Assistance Program ESMAP Technical Paper 122 09 Study of Equipment Prices in the Power Sector Dirk Pauschert 7334 CH 00 FM pdf i 10 29 10 10 56 AM

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GET Turbine Generator Deprag
April 9th, 2019 - GET Turbine Generator the innovation that pays you back n high degree of efficiency n small compact and robust n low maintenance n low investment The unit consisting of an expansion turbine and generator is the optimal decentralised energy recovery system for power ranges between 1 kW and 120 kW

S amp S Turbine Services Ltd Maintenance Services
April 15th, 2019 - S amp S Turbine Services Ltd is a family owned and operated enterprise committed to delivering excellence in gas turbine overhaul repair and maintenance services Accuracy high precision and standards compliance that meet or exceed original equipment manufacturers specifications characterize our work

GE Partners with Nanjing Turbine Company to Supply
July 1st, 2013 - GE also will provide installation services spare parts gas turbine training a distributed control system and steam turbine controls The 6F 3 series gas turbine is engineered for high cogeneration efficiency and long cycle maintenance intervals which will help Guodian Dianli meet its heating and electricity demands with lower costs

Gas Turbines turbomachinery man es com
April 19th, 2019 - MAN PrimeServ is our service brand for all MAN Energy Solutions products MAN PrimeServ helps to reach and exceed the expectations our customers have in their gas turbine Based on our gas turbines maintenance programme our experienced service teams provide the best solutions and services 24 7 365 days a year

Kawasaki Gas Turbines Americas
April 15th, 2019 - Kawasaki Gas Turbines Americas Gas Turbines Power Generation Technology amp Applications Gas Turbine GT Technology Overview Gas Turbine Theory GPB15 1 5 MW Reliability Availability Maintenance • Extended Warranties • Extended Long Term Service Agreements gt Multi year Contracts 4 Year Cycles gt Availability Guarantees

Maintenance of V94 series of gas turbines Power Gen
April 19th, 2019 - Maintenance of V94 series of gas turbines Power Gen Russia Moscow 2010 1 Russia Power 2010 Turbo Services Maintenance of V94 0 V94 2 series of gas turbines Dr Shaun West and Sjef Mattheij MSc Sulzer Turbo Services slide 1
501 Gas Turbines Home 123energy
April 18th, 2019 - Gas generator power turbine and all auxiliary systems packaged on a single skid Both 501 KC models packaged on identical skids with same interfaces Quick field upgrades simplified maintenance and operation minimal spare parts inventory Flexible coupling between the power turbine and driven equipment designed to API 671

SGT 600 Industrial Gas Turbine Gas Turbines
April 16th, 2019 - Our comprehensive portfolio of services provides low life cycle cost and optimum performance throughout the turbine's life cycle Long Term Programs LTP overhaul service field service spare parts service exchange remote diagnostic service and modernization and upgrades With only 17 scheduled maintenance days over a 17 year service cycle the SGT 600 provides highest operational

Gas Turbines Manufacturer Power Generation Siemens
April 19th, 2019 - Benefit from our expertise and experience in industrial power generation Siemens gas turbines can be used for power generation and cogeneration Combined Heat and Power CHP in many industries such as the chemical and fiber cement metals and mining as well as other manufacturing industries

Triveni Turbines Steam Turbines Steam Turbines
April 16th, 2019 - Steam Turbines Steam Turbines Manufacturer in India also pioneers in Steam Turbine Maintenance Steam Turbine Solutions Steam Turbines Spare Parts Supply Steam Turbines Repair amp Overhauling Services

How a Gas Turbine Works
April 7th, 2019 - Arne Loft developer of the gas turbine explains how it works Gas turbines can use many kinds of fuel to reliably generate electricity or run a compressor Frame 5 Gas Turbine diagram explained

FUNDAMENTALS OF GAS TURBINE ENGINES cast safety org
April 16th, 2019 - FUNDAMENTALS OF GAS TURBINE ENGINES INTRODUCTION The gas turbine is an internal combustion engine that uses air as the working fluid The engine extracts chemical energy from fuel and converts it to mechanical energy using the gaseous energy of the working fluid air to drive the engine and propeller which in turn propel the airplane

Siemens India Gas Turbine
April 18th, 2019 - The Siemens gas turbine range has been designed and refined to help the customer meet the challenges of a dynamic market Our 14 models with capacities from 4 to 375 MW are designed with customer's
profitability in mind

**Independent Turbine Consulting LLC Gas Steam Turbines**
April 17th, 2019 - Independent provider of experienced Turbine Generator Engineers specializing in gas and steam turbine maintenance projects and outages

**Gas Turbine for Power Generation Introduction**
April 15th, 2019 - Gas Turbine for Power Generation Introduction The use of gas turbines for generating electricity dates back to 1939 Today gas turbines are one of the most widely used power generating technologies

**LM2500 TM2500 LM5000 LM6000 and LMS100 Gas Turbine Engines**
April 17th, 2019 - LM2500 TM2500 LM5000 LM6000 and LMS100 Gas Turbine Engines Robert Boozer IP Turbine two axial stages that drive the LP Power Turbine LP Power Turbine five stage free power turbine 3600 RPM 60 Hz and 3000 RPM 50 Hz HPC – High pressure Maintenance Levels

**Capital costs of a gas turbine power plant in U S 2050**
April 19th, 2019 - Projected capital costs of a typical U S gas turbine power plant in 2008 2010 and 2050 in U S dollars per kilowatt hour This statistic represents the projected capital costs of a typical gas

**History of the Industrial Gas Turbine Part 1 The First**
April 19th, 2019 - turbine and working tirelessly to achieve success There must have been so many disappointments through all the trials and efforts but perseverance eventually bore fruits Figure 1 illustrates the influence of the pioneers on the development of the industrial gas turbine with key dates

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**8402 Gas Turbine Fuel Valve AMOT**
April 17th, 2019 - The 8402G Fuel Valve System is a balanced rotary valve with an electric stepper motor actuator This high performance gas turbine fuel control valve with fast operation speed and large turn down ratio is designed for reliable an efficient control of any gas turbine
Gas turbine locomotive Wikipedia
April 19th, 2019 - A gas turbine train typically consists of two power cars one at each end of the train and one or more intermediate passenger cars. A gas turbine offers some advantages over a piston engine. There are few moving parts, decreasing the need for lubrication and potentially reducing maintenance costs and the power to weight ratio is much higher.

H 80 Gas Turbine Hitachi

Fundamentals of Gas Turbine Operation Maintenance ppt
April 11th, 2019 - Fundamentals of Gas Turbine Operation Maintenance ppt. Free download as Powerpoint Presentation ppt PDF File pdf Text File txt or view presentation slides online.

Small low cost highly efficient gas turbines provide the
April 16th, 2019 - Small low cost highly efficient gas turbines provide the utility industry with a fourth generation technology that features numerous benefits and potential applications. These include firm power.

GAS TURBINE THERMODYNAMIC AND diva portal org
January 17th, 2018 - Idea about the gas turbine design and performance. The turbine manufacturers usually supply five main parameters in their catalogues that are sufficient for installation requirements. Those are pressure ratio, gas turbine electrical output, overall efficiency, gas turbine exhaust temperature, and exhaust mass flow rate.

THM Gas Turbines MAN Turbomachinery
March 20th, 2019 - And power turbine are mechanically independent of each other, which is crucial in respect of rapid installation and maintenance. The design of the THM family combines the advantages of heavy duty machines with the convenience of low maintenance from today’s aeroderivative turbines. The engines are of modular design.

Microturbines WBDG Whole Building Design Guide
April 18th, 2019 - Microturbines are a relatively new distributed generation technology being used for stationary energy generation applications. They are a type of combustion turbine that produces both heat and electricity on a relatively small scale. Microturbines offer several potential advantages compared to other technologies for small scale power generation including a small number of moving parts.
Introduction:

Gas turbines and jet engines have a long history, dating back over a century and a half. However, the history of the gas turbine as a viable energy conversion device began with Frank Whittle's patent award on the jet engine in 1930 and his static test of a jet engine in 1937.

Combustion Engine vs Gas Turbine Part Load Efficiency:

The performance of power plants at partial load has become a significant operational consideration for electric power grids worldwide.

Introduction to Gas Turbines for Non Engineers:

A turbine is any kind of spinning device that uses the action of a fluid to produce work. Maintenance cost is relatively low.

GE GAS TURBINE MANUAL Pdf Download:

The gas turbine packages were designed with an emphasis on standardization and optimization of factory and field assembly operations. The result is a standard package capable of satisfying the needs of a typical user for low installation and maintenance costs.

GE Power Systems Gas Turbine and Combined Cycle Products:

GE Power Systems Gas Turbine and Combined Cycle Products include MS9001H, MS9001FB, MS7001FB, MS9001FA, MS9001E, MS7001EA, MS6001FA, MS6001C, Heavy Duty Output Heat Rate, and IGCC Integrated Gasification Combined Cycle Overview.

Gas Turbine Technical Forum Moderators:

Rodger Anderson serves as the moderator of the Efficiency Heat Rate GT forum category. He has been Manager Gas Turbine Technology at DRS Power Technology Incorporated since 2001.

Performance Monitoring For Gas Turbines industrial ai:

Gas turbines are aerodynamically designed for optimal performance at base load levels. If the gas turbine is not operated at this load level, the flow triangles in the compressor and turbine expander stages will differ from design assumptions, and more energy will be dissipated. Other factors influencing gas turbine performance are...
Micro Gas Turbine Engine A Review IntechOpen

June 18th, 2013 - Gas turbine system scheme of a simple open cycle As well as in gas turbines the maximum net power provided by a microturbine is limited by the temperature the material of the turbine can support associated with the cooling technology and service life required

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