

## Selected reference projects of FiCoTe Group 2000-2008

We have references from 80` s but in this reference list we have collected the most remarkable projects as well as example typical projects we have carried out during this period. For additional information please don't hesitate to contact us.

FiCoTe Group is consortium of Finnish engineering companies Vahanen Ltd and Projectus Team Ltd.  
 Vahanen Ltd is specializing in Architectural and Structural Design.  
 Projectus Team Ltd is specializing in Building Services Design.  
 The Partner companies jointly own two Russian companies:  
 OOO FiCoTe Consulting in Saint Petersburg, established in 1996 and  
 OOO FiCoTe Engineering in Moscow, established in 2000.  
 Totally the group has stuff some 400 specialists in Design.

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## **PUBLIC BUILDING PROJECTS**

### **Commercial Centres:**

#### **“Stockmann Metropol” - Commercial Centre, Moscow, Russia**

Client: Stockmann Oyj  
Assignment: Working drawings and design approvals for building services  
Duration: 2007

#### **“Stockmann Nevsky” - Commercial Centre, Saint Petersburg, Russia**

Client: Stockmann Oyj  
Assignment: Geological, structural, mechanical, electrical design for Project-phase  
Duration: 2006 - ongoing

*A 7-storey Stockmann department store, located in the historical area of St. Petersburg – at the intersection of Nevsky Prospect and Vosstaniya street, is expected to be open in 2008. There will be presented wide range of stylish shops, including a delicatessen, car park for 550 cars, a food court, speciality cafes, roof-top terrace restaurants.*

#### **“Stockmann Department Store” - Tallinn, Estonia**

Client: Stockmann Oyj  
Assignment: Structural design  
Duration: 2000-2002

#### **“Super Market Prisma” - Lohja, Finland**

Client: Suur-Seudun Osuuskauppa  
Assignment: Structural design  
Duration: 2003-2006

*Hypermarket selling food, clothes, household and free time accessories etc.*

#### **“Iso Omena” - Commercial Centre, Espoo, Finland**

Client: Ilmarinen Pension Fund  
Assignment: Electrical systems and partly HVAC-systems. Quality management services for the building envelope and on site quality testing for structures.  
Duration: 1998-2000

*This trade centre consists of a shopping centre, office facilities and parking building. “The Big Apple” is the second largest commercial centre in Finland with floor area of 200.000 sq.m.*

### **"Sello" - Leppävaara Commercial Centre, Helsinki, Finland**

Client: Joint Venture Leppävaara, Skanska Oy & NCC Finland  
Assignment: Electrical and mechanical systems design, geotechnical design  
Duration: 2001-2006

*The "Sello" trade centre consists of shopping centre, office facilities, public facilities (i.e. library) and a parking building. At the moment the Centre is under construction and when completed it will have floor area about 180.000 sq.m.*

### **Office and Banking Facilities:**

#### **Kalibr - Multifunctional office centre, Moscow, Russia**

Client: Kalibr  
Assignment: Refurbishment design for industrial territory. Concept design.  
Duration: 2006-2007

#### **Ivana Franko - office building, Moscow, Russia**

Client: Parastek  
Assignment: Structural design  
Duration: 2006-2007

#### **Ovchinnikovskaya Enbk 22, Moscow, Russia**

Client: Skanska Olson  
Assignment: Main designer, architectural, structural design  
Duration: 2005-2006

*Business-banking centre in Moscow downtown. Total area about 14.000 sq.m. Two underground parking.*

#### **Russian Headquarters for NESTE, Saint Petersburg, Russia**

Client: Smy-2/ Trust 16 (a Russian contractor)  
Assignment: Structural design  
Duration: 2001-2002

#### **Novinsky Boulevard 31, Moscow, Russia**

Client: Saipu Ltd (mechanical works contractor)  
Assignment: Heating, plumbing, ventilation review and re-design  
Duration: 2003

*The project with a Turkish contractor was stopped in 2001. Two years later Finnish contractors and designers took over the project and completed the weakly done design and works. The total floor area of the development is 77.000 sq.m.*

### **Several Banking Offices of Merita Nordbanken in Finland and the Baltic States**

Client: Merita Nordbanken  
Assignment: Heating, plumbing, ventilation and air-conditioning, fire extinguishing, electrical and building management systems  
Duration: 1992-2001

*Several banking offices in Finland, and all the major banking offices in the Baltic countries for Merita Nordbanken, one of the biggest banks in Scandinavia.*

### **Radiolinja and Kone headquarters, Espoo, Finland**

Client: Indepro Oy  
Assignment: Geotechnical engineering, environmental control and supervision during construction  
Duration: 1999-2001

### **High Tech Centre, Helsinki, Finland**

Client: SRV Viitaset Ltd.  
Assignment: Heating, plumbing, ventilation and air-conditioning, fire extinguishing, electrical and building management systems  
Duration: 1999-2001

*The High Tech Centre consists of five office buildings tailored for the needs of IT and other high-tech technology companies, such as F-Secure Ltd etc. The total building area is 40.000 sq.m.*

### **Rossiski Kredit Bank, Moscow, Russia**

Client: Skanska East Europe Ltd  
Assignment: Heating, plumbing, ventilation and air-conditioning, fire extinguishing, electrical and building management systems.  
Duration: 1996-1997

*A 7-storey office building, located in the very heart of Moscow downtown. Total area is 22.000 sq.m.*

### **SAMSUNG Office Building, Moscow, Russia**

Client: Samsung Engineering & Construction Co. Ltd  
Assignment: Heating, plumbing, ventilation and air-conditioning, fire extinguishing, electrical and building management systems. Geotechnical design.  
Duration: 1995-1996

*A 10-storey office building, including 2-levels parking and socle level.*

## **Administrative Buildings, Hospitals and Logistic Centres**

### **Europe Terminal logistic centre, Moscow region, Russia**

Client: Sponda Oy, Technical client - Pöyry LTD  
Assignment: Structural, geological, mechanical design and architectural design review  
Duration: 2008 - Ongoing

*The A-class logistic centre consists of 4 warehouse blocks (total 84350 brm<sup>2</sup>) and administrative & technical buildings (8 buildings total 2300 brm<sup>2</sup>). Total floor area is approximately 86 650 brm<sup>2</sup> in a 20-hectares plot of land.*

### **Lemcon I-park Kaluga, Russia**

Client: Lemcon Ltd  
Assignment: Assignment Feasibility design  
Duration: 2007 - Ongoing

### **Sheremetyevo-1, Moscow, Russia**

Client: Aeroport  
Assignment: Reconstruction design of departure zone including interior design. All diciplines included.  
Duration: 2005-2006

### **Volvo, service centre, Moscow, Russia**

Client: Volvo Vostok  
Assignment: Preparation of technical assignment for the design of construction  
Duration: 2006

### **Kamppi Trade & Traffic Centre, Downtown Helsinki, Finland**

Client: City of Helsinki/ SRV Viitaset construction company  
Assignment: Building services (electrical, mechanical) and geotechnical & underground design  
Duration: 2003-2006

*The Kamppi Centre is the landmark of modern 450-year capital city of Finland. Located in very centre of Helsinki the 50.000 sq.m office facilities, residences, a shopping centre and underground parking with pedestrian under ways and coach traffic terminal.*

### **Finnish Posti-Logistic Park, Moscow Region, Russia**

Client: Lemcon Oyj  
Assignment: Concept design for warehouse and office facilities  
Duration: 2005

### **Kulon-Logistic Centre, Moscow Region, Russia**

Client: Kulon  
Assignment: Concept design for warehouse and office facilities  
Duration: 2004

### **Sklifosovsky hospital extension, Moscow, Russia**

Client: ARE Ltd (contractor)  
Assignment: Electrical, heating, plumbing, ventilation systems review and change design  
Duration: 2003- 2004

*One of the major Moscow hospitals under modernisation. The building total area is about 22.000 sq.m. Renovation and extensions are carried out in many steps.*

### **The Finnish Embassy, Stockholm, Sweden**

Client: The state of Finland  
Assignment: Geotechnical and environmental design  
Duration: 2001

## **Cultural and Sports Buildings and Buildings for Educational Activities**

### **The New Opera House, Helsinki, Finland**

Client: The National Board of Public Buildings  
Assignment: Structural design, supervision  
Duration: From the initial phases in late 1970 's to completion in 1994

*One of the most demanding public buildings built in Helsinki with pre-tensioned concrete structures, steel structures, demanding acoustics and other modern techniques and constructions.*

### **Training Centre, Moscow, Russia**

Client: Haka Moscow  
Assignment: Main designer services, design of all disciplines for all phases  
Duration: 2006

### **Meeting Houses, several projects in Russia and Ukraine**

Client: An American investor  
Assignment: Architectural, structural, geotechnical, electrical, mechanical and acoustics systems reviews and design. Condition and risk assessments for buildings and lifecycle management services for Real Estates  
Duration: 2003 - ongoing

*A chain of meeting house buildings for educational and recreational purposes.*

### **Museum of Modern Art, Tallinn, Estonia**

Client: State of Estonia  
Assignment: Structural design in joint venture with an Estonian designer  
Duration: 1999-2002

*One of the modern national monuments of Estonia*

### **“Kazan Arena” Multipurpose hall, Kazan, Russia**

Client: Lemcon Oyj  
Assignment: Mechanical and electrical design  
Duration: 2004-2005

*New multifunctional sporting arena with total area 15.000 sq.m.*

### **Helsinki University of Technology, Nanotalo, Espoo, Finland**

Client: Helsinki University of Technology / Senaatti Properties  
Assignment: Electrical and mechanical systems design  
Duration: 2004- 2007

*Research facilities for Low Temperature Laboratory, Laboratory for Optics and Molecular Materials and Laboratory for Advanced Energy Systems.*

### **National Library of Health Sciences, Helsinki, Finland**

Client: HUS-properties Ltd, Helsinki University  
Assignment: ADP center UPS system  
Duration: 2006 - 2007

*The National Library of Health Sciences - Terkko is the research library of the Medical Faculty of the University of Helsinki. It also functions as the scientific library for the Helsinki University Central Hospital. Terkko is the national resource library in medicine and health sciences and has been designated as the WHO Information Service Centre in Finland.*

### **Runeberg Museum, Porvoo, Finland**

Client: City of Porvoo, Runeberg Museum  
Assignment: Electrical design  
Duration: 2002 -2008

*Porvoo Museum is both a historical museum and an art museum. The two buildings in which it is housed date from the 1760s and stand on the edge of the square beside the Old Town Hall in the heart of the oldest part of Porvoo.*

## INDUSTRIAL PROJECTS

### Manufacturing Plants:

#### **RUUKKI GROUP Saw mill production, Russia**

Client: Ruukki Group  
Assignment: Main designer services, design of all disciplines  
Duration: 2008 - ongoing

*The company planes construction of both a sawmill and a chemi-mechanical market pulp mill within the European part of Russia bordered by the Ural mountain range. The annual production capacity of the sawmill is estimated to be around 300,000 cubic meters.*

#### **Maxit/ Ekamix Dry Mortar Production Plant, Ekaterinburg, Russia**

Client: OOO Maxit Ural  
Assignment: Main designer services, design of all disciplines  
Duration: 2007 - ongoing

#### **RUUKKI metal service plant, Saint Petersburg, Russia**

Client: Lemcon RUS  
Assignment: Main designer services, design of all disciplines  
Duration: 2007 - ongoing

*Project of blank production shop with built-in premises for well-known company Rautaruukki - supplier of metal-based components, systems and integrated systems to the construction and mechanical engineering industries. The plant is located in industrial zone "Parnas", total area is 4.000 sq.m*

#### **Ahlstrom Glass-fiber Tissue Plant, Tver, Russia**

Client: SRV Oyj  
Assignment: Main designer services, design of all disciplines  
Duration: 2006-2007

*Ahlstrom is one of a global leader in the development and manufacture of high performance fiber-bases materials. A new glassfiber tissue production plant consists of a new state-of-the-art glassfiber tissue line, as well as the buildings and necessary infrastructure. The total area of the plant is 13.000 sq.m.*

#### **Fiber-concrete Panel Plant 8 000 sqm, Obninsky, Russia**

Client: LTM Company  
Assignment: Main designer services, design of all disciplines  
Duration: 2006-2007

*LTM Company is a Finnish company that produces facade panels for domestic, commercial and public buildings around the world, in all kinds of climates and environments. To provide the constantly increasing product demand it was decided to build the construction plant in Moscow region. The plant is fitted out with latest equipment on slabs coloration in Europe. Total area of the plant is 8.000 sq.m.*

### **Tsesla Cement Factory, Slantsy, Russia**

Client: Heidelberg Cement  
Assignment: Structural and geotechnical design  
Duration: 2005-2006

*Increase of production capacity of cement.*

### **Chocolate Bar Production Plant and Nut Roasting Plant, Stupino, Russia**

Client: MasterFoods Ltd, Enka Construction Company  
Assignment: Heating, plumbing, ventilation and air-conditioning, compressed air, process cooling, fuel and building management systems  
Duration: 1993-94, extension 2002

*Chocolate bar factory producing "Mars" and "Snickers" bars, a storage building for finished goods, an office building, a waste-water treatment plant and an energy building including steam boiler plant, chilled water plant, compressed air plant and potable water treatment plant. Total building area was 40.000 sq.m. The design project consisted of all the design phases from the first design phase to the preparation of final working documentation. In 2002 our group completed full design package for the 800sqm extension of the plant.*

### **Car Manufacturing Plant, Vzevolozhsk, Russia**

Client: Ford  
Assignment: Main designer services, geotechnical, architectural, structural, mechanical and electrical design  
Duration: 2005-2006

*Extension of existent warehouse for finished production that led to increase of production capacity of cars.*

### **Maxit/ Arzamix Dry Mortar Production Plant, Arzamas, Russia**

Client: Phase I, Lemcon Ltd, Phase II Optiroc Ltd  
Assignment: Full design from Greenfield to complete including Main Designer responsibilities  
Duration: 2003-2004

*The new dry-mortar production plant in Russia for famous "Vetonit" trademarks.*

### **Onninen, office and storage building, Vsevolozhsk, Russia**

Client: Hartela Oy  
Assignment: Geotechnical design  
Duration: 2004

### **Elcoteq Electrical Factory , Saint Petersburg, Russia**

Client: Elcoteq Oy  
Assignment: Geotechnical design  
Duration: 2004

### **Dry Pet-food Factory, Moscow, Russia**

Client: Nestle  
Assignment: Design of all disciplines for Project-phase  
Duration: 2004-2005

### **PLM Aluminium Can Factory, Naro-Fominsk, Russia**

Client: PLM Ltd  
Assignment: Heating, plumbing, ventilation and air-conditioning, compressed air, process cooling, fuel and building management systems. Plane marking and geodetic monitoring, including infrastructure for contractor NCC Puolimatka building  
Duration: 1996 - 1998

*The biggest factory in Russia for production of aluminium cans for soft drinks with total area 56.000 sq.m. Project documentation was developed for all stages: from preliminary design till working documentation.*

### **Gillette Razorblade Factory, Saint Petersburg, Russia**

Client: Skanska East Europe Ltd  
Assignment: Heating, plumbing, ventilation and air-conditioning, compressed air, process cooling, fuel and building management systems. Geotechnical and ecological design.  
Duration: 1997 - 1999

*Factory including finished-products storage area, office building and boiler house. Total area of the factory - 20.000 sq.m.*

## **Our co-operation partner "AIP Surveying" has carried out Industrial Machinery Installation Surveys**

We have performed installation surveys at the following paper mills during the last four years:

**Dipwol**, South-Korea

**UPM- Kymmene Kymi Paper Oy, Artti-project**, Kuusankoski, Finland

**Solikamsk**, Russia

**Dowos**, Horgen, Switzerland

**Asian Pulp and Paper**, Dagang, China

**Leipa**, Schwedt, Germany

**Hallsta Paper**, Hallstavik, Sweden

**MoDo Paper Ab**, Husum, Sweden

**UPM- Kymmene, Papermill of Kangas**, Jyväskylä, Finland

**Myllykoski Oy**, Anjalankoski, Finland

**UPM Kymmene**, Rauma, Finland

**AssiDomän**, Frövi, Sweden

**Mondi Kraft Papermill**, Richards Bay, South Africa

**Mondi Kraft Papermill**, Piet Retief, South Africa

## **INFRASTRUCTURE PROJECTS**

### **Water Treatment**

#### **South West Wastewater Treatment Plant, Saint Petersburg, Russia**

Client: Plancenter Ltd (process consult in the project)  
Assignment: Condition survey and renovation design of the structures  
Duration: 1999-2001

Client: SWTP Construction Ltd (JV of contractors Skanska, YIT, NCC)  
Assignment: Geotechnical and structural renovation and completion design for several new buildings in the area and water purification facilities  
Duration: 2002-2005

*One of the most significant environmental projects in the Baltic region in recent years. Construction of the plant begun in the days of former Soviet Union, and postponed due to lack of funds. Current project has been financed from variety of Western European and Scandinavian sources. The plant has an average daily capacity of 330,000 m<sup>3</sup> and treat the wastewater from 720,000 of St. Petersburg's 5 million inhabitants.*

## **Underground Works and Parking**

### **Coal transporting tunnel, Helsinki, Finland**

Client: Helsinki energy  
Assignment: Tunnel design, rock engineering design and supervision  
Duration: 1996-2000

### **Arabia parking, underground parking facilities, Helsinki, Finland**

Client: Joint Venture Arabia, Skanska Oy and AA Palmberg Oy  
Assignment: Geotechnical- and rock engineering and supervision  
Duration: 2001-2003

*There have been several underground parking developments in Helsinki during the past decade.*

## **Roads, Bridges and Tracks**

### **Renovation of the main railway between Helsinki and Tampere, Finland**

Client: Finnish National Railroad Administration  
Assignment: Geotechnical design and supervision of several underpasses and improvement of regions  
Duration: 1996-2000

*The most used railway in Finland.*

*Several other infrastructure projects carried out in Finland, Estonia and Russia.*

*Mainly condition assessments, renovation design, supervision and quality control for concrete and waterproofing structures. For example control of around 100 bridges for The City of Helsinki, The Finnish Railroads etc.*

## HOUSING PROJECTS

### **Residential Complex "Kolomagi" Saint Petersburg, Russia**

Client: YIT-Lentek  
Assignment: Main designer services and full design  
Duration: 2006-2008

*Several multi-storey (up to 25 floors) dwelling houses of totally 110.000 sq.m.*

### **Residential Complex "Papula" Vyborg, Russia**

Client: SRV Russia  
Assignment: Main designer services, geotechnical, structural, mechanical and electrical design  
Duration: 2006-2008

*High class dwelling house-area with multi-storey and one-storey houses total 35.000 sq.m.*

### **Residential Complex, Shuvalovo, Saint Petersburg, Russia**

Client: YIT-Lentek  
Assignment: Main Designer Services and full design  
Duration: 2005-2007

*Multi-storey dwelling houses with western technology adapted to the Russian market. Total building area is 22.000 sq.m.*

### **Residential Complex, Morisa Toreza, Saint Petersburg, Russia**

Client: YIT-Lentek  
Assignment: Main designer services and geotechnical design  
Duration: 2005-2007

*Multi-storey dwelling house with western technology. Total building area is 28.000 sq.m.*

### **Dwelling houses in Vilnius, Lithuania and Tallinn Estonia**

Client: Several  
Assignment: Assignment: Geotechnical and environmental design  
Duration: 1993-2003

## MAJOR RENOVATION PROJECTS

### Hotel Leningradskaya, Moscow, Russia

Client: Sadko Hotel  
Assignment: Design of all disciplines for Project-phase  
Duration: 2006

### Sinebrychoff headquarters, Helsinki, Finland

Client: Engel Oy  
Assignment: Foundation renovation, environmental control  
Duration: 2000-2001

*The famous Finnish brewery firm.*

### Snellmanninkatu 18, Helsinki centre, Finland

Client: The Central Bank of Finland  
Assignment: Foundation renovation, a deep excavation below existing foundations design and supervision during construction  
Duration: 2000-2001

### "STAKES" office building, Helsinki, Finland

Client: A State owned Real Estate Facility Manager  
Assignment: Condition assessment of the existing industrial building, renovation design and structural design for the new part. Mapping for planning purposes, dimensions control, set out and monitoring during construction for contractor SRV Viitaset Ltd. Surveying supervision.  
Duration: 2000-2001

*Renovation of old industrial building into high-class office complex, completed with a new office wing extension. The total area of the renovation part was 11 300sqm, and the total area of the whole project was 36.000 sq.m.*

### Olympic Stadium, Helsinki, Finland

Client: City of Helsinki  
Assignment: Condition assessment prior to the initial design phase. Structural, physical and materials design, supervision, monitoring and quality control during the works  
Duration: 1990-1994, new weather shelter static calculations 2003

*A landmark of Helsinki. The arena for 1952 Olympic Games. Total renovation for the stadium was carried out for the European Championship Games in 1994. The stand was covered with open shelter for the World Championship Games in Helsinki 2004.*

### **Finnish National Museum, Helsinki, Finland**

Client: Ministry of Education  
Assignment: Heating, plumbing, ventilation and air-conditioning, electrical and building management systems  
Duration: 1995-1997

*A national treasure of Finland from Jugend period. Total building area is 8.000 sq.m.*

### **Finnish National Theatre, Helsinki, Finland**

Client: Finnish National Theatre Ltd  
Assignment: Condition assessment of existing building prior to initial renovation design phase. Structural, building physical, heating, plumbing, ventilation and air-conditioning, electrical and building management systems design.  
Technical quality supervision and monitoring on site.  
Supervisory survey, monitoring of structural movement during construction  
Duration: 1997-2002

*Architecturally and technically a most challenging project including new foundation for the building with cement injected piles, renewal of the stage technical facilities and other latest technical solutions. The building was originally built about 100 years ago and now it is one of the national monuments of Finland. Total building area is 14.000 sq.m.*

### **Pulkovo Airport Terminal №II, Saint Petersburg, Russia**

Client: SMU-2, TRUST 16  
Assignment: Condition assessment of the terminal building and driving ramp, structural design for the renovation, supervision and quality control  
Duration: 1997-2000

*Terminal for Domestic flights originally was built in 1973. After this renovation the ramp was first time made waterproof preventing water leakages to luggage claim and other underneath premises.*

### **Finnish National Gallery of Arts, "Ateneum", Helsinki, Finland**

Client: National Board of Public Building  
Assignment: Heating, plumbing, ventilation and air-conditioning, electrical and building management systems.  
Duration: 1983-90

*One of the most remarkable renovation projects in the heart of Helsinki for a culturally valuable building.*

## **TECHNICAL LIFE-SPAN MONITORING AND DESIGN**

**Several projects have been carried out and are in process in Finland for housing, office buildings, public buildings and industry. This is one of the latest and most rapidly growing fields of our expertise. In existing buildings the service include real estate strategy discussions and objectives set up with the owner, condition appraisal, condition surveys, drawing up data-base of the building with long-term plan for life-span costs, design and monitoring, maintenance design, auditing of suppliers etc. In this field we have works in process for the clients like Fortum, the state owned energy conglomerate and City of Helsinki.**