

Penta-Klíma Trading and Engineering

INTRODUCTION

Penta-Klíma Kereskedelmi és Szolgáltató Kft. (a limited liability company for trade and services) was founded in 2004 by five individuals who all have been extremely successful for years in the fields of air conditioning and air technology.

They formed the company to combine their strength, talent, hard work and excellent trade skills to satisfy the demands of their partners and customers at the highest standard.

“Comfort without compromising” is the slogan of the highly skilled staff of experts who was facing bravely the challenge of the extremely rapid technical and technological development in the first years of the 21st century. This slogan reflects the dynamism and determination aimed at all company activities.

The company distributes the air conditioning and air technology equipment of manufacturers characterised by an outstanding technical standard, ongoing development swiftly following the changes in market requirements and the widest range of products at competitive prices. In addition to the distribution of various equipment, our company provides wide-ranging engineering services to designers, contractors and partners. Easy-to-handle selection programmes assist the fast identification of the equipment best suiting the needs and the fully detailed technical documents are available to check immediately whether the right decision has been made.

Our development follows the future requirements and it is directed more and more to use renewable energy sources. Our traditional activity is supplying projects with central air conditioning and air technology equipment and in addition we deal with the distribution of lower output direct evaporation air conditioning equipment for residents.

In 2007 we extended our range with air/water heat pumps using ground source energy. From the beginning we sell these units with great success. These products can be used for heating and cooling of private houses, public buildings, hotels, bathes, medical institutes, stores, offices, schools, kindergarten, churches and these are also able to provide them with hot water. With their extremely high energy efficiency and reduced CO₂ emission protect the environment.

Our product range

NIBE Heat pumps

Regarding the field of air/water and water/water heat pumps NIBE is the biggest market leader Swedish producer of the Scandinavian States. These products are perfect for supplying houses or bigger buildings with heating, cooling energy and domestic hot water. Passive and active cooling, pool heating, solar connection can be used. Heating capacity is 5-60 kW,

which cascaded can reach 540-600 kW depending on the operating circumstances. The greatest appreciation is “Nowelty Price” award in Hungarotherm Exhibition 2009, which was won by our inverter, totally automatic GeoHeatpump called Nibe Fighter 1250.

The latest product Nibe Split air/water heatpump was introduced in ISH, Frankfurt 2009 and after that in 2010 the unit was awarded with Construma “Nowelty Price”.

Since 2009 the number of our systems is growing rapidly as 10 supermarkets, wellness hotels, office buildings, schools, kindergartens, health institutions and many private houses have been equipped so far with NIBE heat pumps each capable of producing heating, cooling and domestic hot water to their owners’ satisfaction.

CENTRAL AIR CONDITIONING SYSTEMS

Our MTA chillers and heat pumps are available in outdoor and indoor, compact and split designs in an output ranging from 7 to 1,500kW with air cooled/water cooled condenser or without condenser. If requested an unique design can be carried out. These products with R407C, R410A, R134A, R404A refrigerants are used for the following purposes:

- comfort, CYGNUS, TAURUS, ARIES, PHOENIX, GALAXY, OCEAN, NEPTUN, AQUARIUS, AQUA GENIUS, EOLO, ORION series
- technology, TAEvo series
- energy-saving, ARIES, PHOENIX FREE COOLING series

TECNOCLIMA roof-tops for central heating are available from 20 to 210 kW in direct gas burner design too and for cooling these units are available in an output ranging from 13 to 196 kW with extremely high energy efficiency rates.

TEMPSTAR roof-tops from 10 to 60 kW are useful for cooling and in heat pump design for heating too. Several models are capable to operate in heating mode even if the outdoor temperature is -34°C.

WEGER air handling units distributed by us meet even the highest energy saving, hygienic and environmental requirements in a 1000m³/h to 130000m³/h air supply range.

These units are assembled not in South Tyrol, in Kiens but in Jászárokszallás reducing hereby the transport costs significantly.

SABIANA fan coils and thermo ventilators are characterised by broad assortment, high quality and design standard. The equipment distributed by us called PENTA and have EUROVENT qualification. A full product range and broad output range characterise the ceiling and parapet convectors which can be ordered with centrifugal and tangential fans. This characterization is valid as well as for the concealed cassette-type and furthermore for the duct-type ceiling units and the low height slim equipment used for industrial purposes. Our range also includes high-line air conditioning convectors.

DIRECT EVAPORATION EQUIPMENT

SPLIT TYPE AIR-CONDITIONERS

With extensive knowledge and international experience Panasonic, Mitsubishi Electric produce air-conditioners to satisfy the needs of business (smaller investments) and residential

air-conditioning. In our product range a wide choice is available among simple sidewall splits, multi splits, cassette, ducted, concealed and parapet types with standard or inverter technology. In this range of products, we also have an appropriate selection of so-called variable flow units on the basis of multi splits, CITY MULTI systems. Novelty is Mitsubishi Electric ZUBADAN air/water heatpump which capacity does not decrease by -15 °C outdoor temperature.

SOME REFERENCES

From 2005 we managed to achieve significant references which improve our business well according to our purposes.

The most important references are the following:

- Hotel Panoráma****, Siófok (Samsung 11 DVM systems, 164 rooms)
- NaturMed Hotel Carbona****, Hévíz (MTA chiller 247 kW)
- Hotel Rogner****, Hévíz (MTA chiller 247 kW)
- Hotel Hortobágy**** (MTA chiller 195 kW, TML fan-coils, Weger air handlers)
- For military application: 15 chillers (Iraq)
- SYMA multifunctional hall for 4000 people (17 air handling units, 11 Samsung DVM systems, 2x620 kW chillers)
- INTERSPAR hipermarket (MTA chiller 860 kW)
- Bus station and Jászkunház, Szolnok (MTA chillers 1521 kW, 18 Weger air handlers, fan-coils)
- BÉRES Pharmacy different MTA chillers
- Plastic processing plant, Cserkeszőlő (process cooling, chiller 350 kW)
- VolánBusz bus station, Székesfehérvár (MTA-Aries 167, Weger air handlers, PENTA fan-coils)
- CHRYSLER-Szuna, Székesfehérvár (MTA-Aries 167, PENTA fan-coils)
- Central Hospital and its Institutes, Budapest (cooling of operating room, Weger air handlers 2x6500 m³/h)
- KronoSpan, Mohács (Tempstar roof-tops, 2 pcs 34 kW, 5 pcs of 52 kW)
- Hilex Rétság (MTA Taurus79, PENTA fan-coils)
- Hammerstein, Mór (MTA Neptun 260 kW)
- Imagement, Vác (MTA Taurus 116, PENTA fan-coils)
- Japanese restaurant Sushi-Senshei, Budapest (Samsung DVM system)
- AGROGATE depot, Budakeszi (Samsung system)
- Tropicarium, Campona, Budapest (PENTA fan-coils)
- GLOBENET, Budapest server cooling (Samsung DVM system)
- LOG 20 Industrial estate, Budaörs (MTA Cygnus 301, PENTA fan-coils)
- Stadler Szolnok, Tecnoclima gasburner rooftop
- Segura Szolnok, MTA AS 299, CG 251 chillers
- Cellcomp Tapolca and Celldömök, Industrial Hall, Cooling and Airhandling
- Arena Corner Budapest, 526 pcs of PENTA fan-coil
- Kazahsztan, AGIP, 6 pcs of Temprite rooftop and Weger products
- Exclusive Café, Budapest (MTA Cygnus251, Weger air handlers, PENTA fan-coils)
- Mayor's office of Monor (MTA Cygnus 301, PENTA fan-coils)
- Lurdy shopping centre, Budapest (PENTA fan-coils)
- METRO Budaörs (PENTA fan-coils, 137 pcs)
- Károlyi István residential park, Újpest (Samsung system)
- Kindergarten, Tiszacsege (cascaded NIBE system)
- UNITEF office block, Budapest (cascaded NIBE system)

- Evangelical Charity Home, Gyenesdias (cascaded NIBE system)
- Ice rink, Székesfehérvár (MTA HOC 600 heat pump)
- Auto repair and store, Szada (NIBE system)
- Kindergarten, cultural centre, mayor's office, Újszilvás (cascaded NIBE system)
- Hotel LARIBA****, Wellness hotel, Alsóörs (NIBE system)
- Hotel Kristály****, Wellness hotel, Tata (NIBE system)
- NIBE private houses references: Budapest, Albertirsa, Törökbálint, Kistarcsa, Arad, Gödöllő, Gyenesdiás, Zamárdi, Balatonföldvár, Paks, Sopron, Hajdúszoboszló, Debrecen, Törökszentmiklós, Szolnok, Pápa, Seregélyes, Sósút, Budaörs, Szentendre, Dunaharaszti, Dunakeszi, Domonyvölgy, Nyíregyháza, Szombathely, Kőszeg
- LIDL Supermarkets, Tiszaújváros, Törökszentmiklós, Kiskunhalas, Budapest, Heves, Keszthely, Újfehértó, Sümeg, Marcali (cascaded NIBE heatpumps)
- Tradeschools, Békés, Jászberény (cascaded NIBE system)
- Kaposvár Wellness&Spa (MTA NE heatpump, and AS chiller)
- MITSUBISHI ZUBADAN systems (Budapest, Bekescsaba, Debrecen, Szekesfehervar, Hajduszoboszlo, Veszprem, Siófok, Miskolc, Szombathely, Sárbogárd,)
- Hotel Taverna****, Budapest (MTA Taurus 118, PENTA fan-coils, Weger air handlers)
- Videoton, Kaposvár (MTA chiller, PH0347, 347 kW, Diwer 2822S air handler, 60.000 m³/h)
- ABSC Center Pápa, MTA TA chillers, Weger airhandling units, Tecnoclima rooftops, fan-coils
- Bridgestone Tyres Factory, Tatabánya, Mitsubishi Electric/Weger combination
- Sopron Plusz/Spar Supermarket, Samsung DVM systems
- Hospital Siófok, 361 pcs of PENTA fan-coil
- Medical station, Gönc, Cigánd Mitsubishi CM systems
- DECATHLON Shop, Mitsubishi CM and Weger airhandler system,
- And so on.....

We hope that through this brief introduction we managed to inspire your confidence and to draw your attention to our services.

More details you can find on our webpages: www.pentaklima.hu and www.nibe.hu

Penta-Klíma Kft.
October 2010