



2012

INTRODUCING THE COMPANY

Introduction

The foundation of JAKOSA LTD. was based on the former state company called 31.sz Állami Építőipari Vállalat that was specialized in building industrial projects in Hungary and on the Kanadai Magyar Magasépítő Ltd. that was also specialized in steel constructions and covering works. The firm was launched with the technical expertise and trained working power of the above companies.

- Wide span steel halls
- Steel structures of industrial, technologic projects
- Production of frame structures, wood structured roofs and coverings of public buildings, sport halls.

Nevertheless as it is shown on our reference list our company takes on a wide range of building tasks including design and complete execution if required. JAKOSA LTD. is maintaining a persistent relationship with KEVEFÉM LTD. placed in Túrkeve, Hungary. We have been working as connected concerns since the beginning. Our 6000m² factory in Túrkeve is fully equipped with cranes and suitable for producing moving large steel structures counting 70-80 permanent employees. It has the manufacturing capacity of 3000 - 4000 tons of steel structure a year. The factory has all the required machines and tools for production:

- Plate shaping tools: scissors, press machines, bending machines, plate rollers, 2 high performance plasma cutting machines
- Welders: arc-welders, protective atmosphere-welders, flux-welders
- Surface preparing: sand-blasting machine, grinders, polishers

For working on site we have light and mobile scaffoldings for assembling of steel coverings and have all necessary tools and machineries: drill machines, screw driver machines, nail-punch machines both in pneumatic and electric versions. We have our own mobile crane for lifting and trucks for transportation. The factory implemented ISO 9002:2000, ISO 14001:2004 general quality certification and EN ISO 3834-2:2006 and DIN 18800 welding certifications.

The policy of our company is to satisfy our customers with the required excellent quality and with flexible, creative solutions.

2010. Budaörs

Attila Jakosa
managing director

Some of our recent major reference works

| | |
|---|---|
| ALDI Logistics Center, Biatorbágy | Machine holders on roof, various stainless steel locksmith works |
| ALDI shopping stores around Hungary | Foreroof steel constructions and locksmith works for 30 pieces of stores |
| "ÁRKÁD" shopping Center, Győr | Front and side foreroofs, steel pergolas with wooden shading elements, stair railings, roof-railings, all inside and outside niro advertisement holders |
| ASAHI, glass factory, Tatabánya | Production and installation of special steel air distribution system |
| Hotel Silver Resort****, Balatonfüred | Foreroofs, normal and stainless steel locksmith works, railings |
| Budapest Subway IV. Tunnel Drilling project | Concrete segment-holder cassettes, platforms in tunnel and stations |
| "Corvin Átrium" office center, Budapest | Stainless steel and glass railings, steel foreroofs, various locksmith works |
| "Corvin Sétány" office center, Budapest | Steel engine-room construction, sound insulation wall with Renson system |
| CTK Chemical Factory, Tiszaújváros | Machine stand towers, with special surface protection painting system. steel hall, trapezoid-sheet, roof recovery and bridge construction |
| Football Stadium ETO FC, Győr | Foreroof steel construction of the viewing area, various locksmith works |
| Infopark Budapest Technical University | Various building steel constructions on top of building "E" |
| Sugar Manufactory, Kaposvár | Steel stairs around concrete silos |
| Budapest Subway IV. station "Keleti" | Concrete shaft, temporary steel tube supports with over 1000 tons of steel |
| Budapest Subway IV. station "Keleti", parking | Parking shaft, temporary steel tube supports with over 900 tons of steel |
| "KORZÓ" shopping Center, Nyíregyháza | Steel bridge construction, glass-holder roof constructions, locksmith works |
| "KÜRT" office building, Budaörs | Steel building construction, various railings, locksmith works |
| "Lakics" machine production hall | Complete building of 7000m ² concrete-steel halls with foundation, concrete columns, steel roof, sandwich panel coverings, windows, doors etc. |
| Motorway M6 Hungary | Bridge-slider steel construction, various temporary constructions |
| MOL Hungarian Oil Company, Szőreg | Steel pipe-bridge and lighthouse constructions of gas reservoir station |
| Steel formworks for RSB Schalungstechnik AT | Various steel formworks for concreting works, with more than 5000 tons |
| EON powerplant in Datteln, Germany | Steel formwork system for concreting of 180m high cooling tower. 600tons |
| Ebensfeld-Erfurt railway tunnel | Two sets of steel moving formwork cars with mechanical parts. 200 tons |
| Richter Pharmaceutical Company, Budapest | Steel roof construction of Chemical Research Lab with fire protection |
| "VÉRTES" Shopping Center, Tatabánya | Special steel foreroofs, spiral-shaped railings, various locksmith works |
| "ÚJBUDA" Office Center, Budapest | Stainless flower holders, rails for highscalers placed around the building |
| SYMA Event Hall | Steel constructions of the hall and viewing area, seat holders |
| Hungarian Mail Logistic Center, Budaörs | Railings, foreroofs, various locksmith works |
| Casino "Merkúr", Budapest | Stainless steel foreroof with glass covering |
| "SASAD" Residential Community buildings | Railings, various locksmith works |

City Metro IV, Budapest

Our company was a subcontractor of an international joint venture of French, Austrian and German companies and produced the steel lifting frames which is used for lifting, transporting, manipulating and storing the tunnel's concrete segment elements.



The lifting frames (some loaded)



Lifting frames waiting for use



The frame is coming back from tunnel



Crane lifting out from the frame



Frames loaded with concrete segments



Frames loaded with concrete segments

ALDI stores Hungary - foreroofs, stainless steel railings



Typical store out of 27 we worked on



Hot dip galvanized steel cosntruction



Covered foreroof



Stainless steel railings



Stainless steel railings



Stainless steel protective columns

“VÉRTES” Center Tatabánya, Hungary

In Tatabánya our company made mostly all the steel constructions, locksmith works on the shopping center built in 2007. As a spectacular architectural element we made the wide span main foreroof with metal panel covering and all the other foreroofs with glass covering along with the spiral car ramp's perforated sheet railings, roof coverings, floor trapezoid sheet coverings.

Also a roof of the bus stations was built behind the building. We established a varying section roofs with welded beams and roof covering. We also built the facade pergolas, collision protections and the underpass glass railings.

“VÉRTES” Center Tatabánya, Hungary



Wide span foreroof of main entrance



Foreroof of main entrance



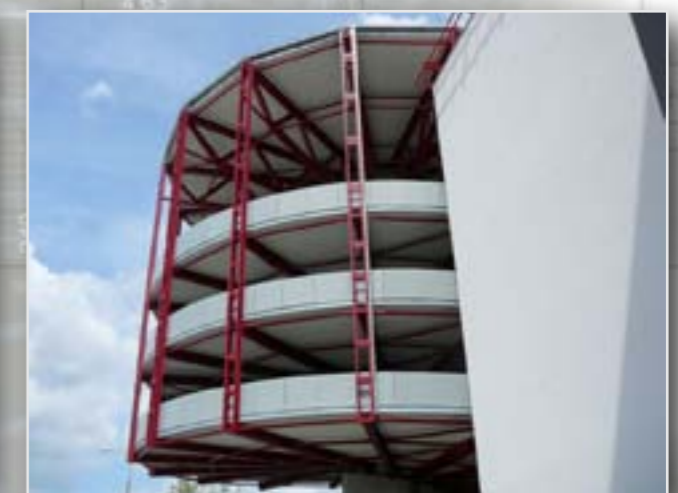
Spiral car ramp from side



Glass foreroof on facade



Foreroof of main entrance from side



Floor sheeting of spiral car ramp



Glass foreroof on facade



Spiral car ramp railing and roof covering



Foreroofs of bus station



Glass foreroof on facade

“ÁRKÁD” Shopping Center Győr, Hungary

Our company has participated in Hungary’s all “Árkád” Shopping Centers built so far in Budapest, Pécs and lately in Győr. Characteristically we made all the foreroofs, advertisement holders, railings, pergolas, flag holders, glass facade holders.



Foreroofs and pergolas of side entrance



Foreroof construction of main entrance



Advertisement holder construction



Nirosa advertisement holders



Steel and wood combined pergola



Steel beams collision protection

“ÁRKÁD” Shopping Center Budapest, Hungary

On one of Budapest’s most decorative shopping centre our company built the facade steel grid shadowing system, the glass and steel sheet covered foreroofs.

Out on the parking part of the building we made 1800m² steel screen grid with hot dip galvanized and sintered surface protection.

In front of the building’s main entrance we made the special “banana”-shaped foreroof with unique design and very special production.

We also made the monumental glass covered foreroof at the south side of the building and the steel grid construction of the advertisement surfaces.



Steel screen grid shadow system on facade



“banana” foreroof of main entrance



“banana” foreroof of main entrance



Glass covered steel foreroof

“KORZÓ” Center Nyíregyháza, Hungary

At Nyíregyháza, Hungary we took a major part in building a shopping centre in the hart of the city. We produced and site assembled the steel construction of a huge multilevel bridge between the two building parts. The bridge consists of huge welded tube profiles which had to be produced very preceisly to make the connections on site with bolts. As there is a two-level deep garage under the bridge the design process and installation task carried the most difficulty. The positioning and organizing of the crane needed a professional engineering work.

On this building we also produced two elliptical-shaped glass holder steel construction, a lot of stainless steel advertisement- and flag holder steel constructions, roof railings, stainless steel decorative stripes on the facade, some foreroofs with steel covering.

“KORZÓ” Center Nyíregyháza, Hungary



Shopping center with bridge



Part of steel bridge



Steel part of bridge construction



Upper part of steel bridge



Advertisement- flag holders, stainless stripe



Bridge construction from inside



Steel construction of one of the elliptical glassholder



Roof-railings



Lower level of bridge



Steel construction of elliptical glass holder

Steel formwork systems, Ebensfeld-Erfurt railway tunnel in Blessberg

For RSB Schalungstechnik GmbH, Austria we produced and site assembled two complete sets of moving steel formwork cars for concreting the tunnel walls including formwork panels, steel-frame, platforms, stairs. For this project we also produced all the mechanical parts needed: screwjacks, bolts, turned elements, wheels, gears etc. The whole system had to be very precise in geometry to keep the exact tunnel shape designed. We managed to produce and install the constructions with maximum deviation of $\pm 3\text{mm}$ from the theoretical shape.

Steel formwork systems, Ebensfeld-Erfurt railway tunnel in Blessberg



One complete, and one half complete construction next to each other



One set of formwork car is almost ready



Base construction with welded square-tube profiles



Ebensfeld-Erfurt railway-line



Formwork panels arriving from Hungary



The formwork panels in assembly



Ready construction



Preassembly of panels



Lower panels

“CAMPONA” Entertainment Center Budapest, Hungary

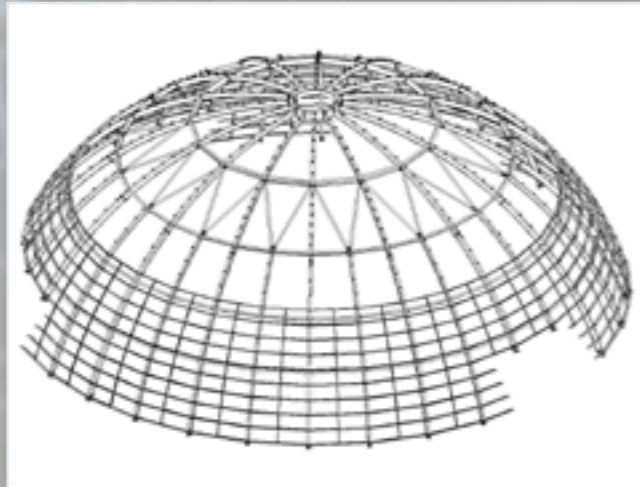
For RTL Television Company we made a 40m diameter entertainment hall. The building was made of steel with a nearly half sphere geometry.

The work required very precise factory production supported by Xsteel element design also made by our company.

For installation we used our own Merlo type lifting machine and scaffolding with a special installation method we designed.



Sphere steel construction



Xsteel model of building



Construction beeing erected



Steel construction from inside

MCC Studio Center, Hungary

In 2006 RTL Television Company have a combined studio and office facility built. Our company carried out various steel constructions and steel facade coverings.

We also made a satelite dish holder platform on the roof along with all the foreroofs with complete covering works, noise blocking walls and inside railings.



The MCC Studio Centre



Main foreroof and covering



Erecting the satelite dish holder



The satelite dish holder platform

LINDAB System warehouse Székesfehérvár, Hungary

At the Székesfehérvár Industrial Park we built a 600m² warehouse for Eurofoam Hungary Ltd. The warehouse's steel construction was planned with Lindab type light-gauge steel framing which has a very decent material use.

The steel beams were painted with fire protection system. The coverings of the roof and walls were also from Lindab system.

We constructed fire protected doors at the hall, industrial door and transom windows.



The hall with an industrial door



The warehouse inside



Transom-windows



The hall under construction

Steel hall VEKA, Moscow

At a steel hall construction that was built for company VEKA in Moscow we produced nearly 500 tons of steel constructions in our factory.

As it was a truss type structure provided with crane holder rails there was a lot of welding work on the construction as well.

We accomplished the contract successfully for the international Austrian-Hungarian joint venture by the provided XSTEEL-based plans.



Endwall of the hall



One span of the multispan structures



Inner part of hall



Fixing of columns with concreting

ASIA CENTER Budapest, Hungary

For one of the biggest business centres in Europe our company designed and made the twin buildings' architectural and functional central element and the two monumental panoramic spiral stairs. We planned, produced and installed the constructions along with the glass and nirosta steel railings. Besides we erected the elliptical panoramic elevator steel construction, more than 3500 m long atic wall coverings with aluminium sheet and 12 000 m² warehouse separation steel wall system in the basements. The panoramic spiral stair was a very unique and challenging task for us. The stair is 15m in diameter and it is held by a spiral-shaped steel tube where the diameter is 508 mm and the thickness is 16mm(!). This holds the steel step constructions. Carrying out these constructions it was crucial to use our high precision numerically controlled sheet cutters. We applied 60 minutes fire protection for the whole construction while we needed to keep the surface to stay nice and smooth after treatment. We also made the glass and steel railings on the spiral stair.



Front part of panoramic stair



Steel tube construction of panoramic stair



Panoramic elevator inside the spiral stair

ASIA CENTER Budapest, Hungary



Railing of panoramic stair



Panoramic elevator - Protection against reaching-in



Tube construction of panoramic stair



Panoramic stair - Protection against reaching-in



Laminated wood stair construction



Steel wall system of warehouse separation

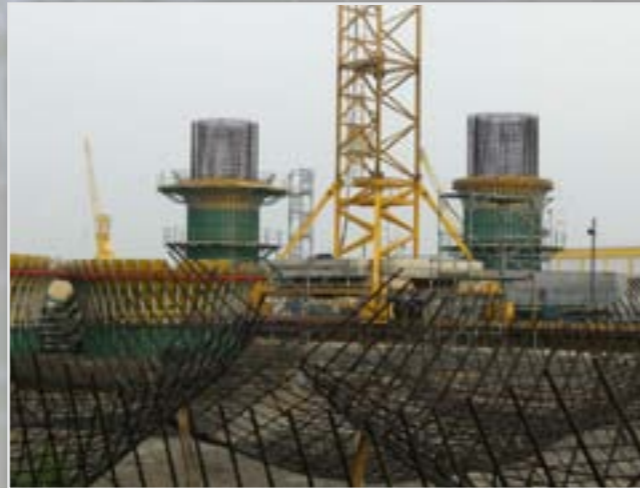
Wind power-plant foundations, Sweeden

Our company as a subcontractor of an Austrian-German joint venture produced steel siding panels for making the foundations of several windmills established in Sweeden.

The production required a very precise work because the diamater and shape needed to be kept exactly without any gaps between the panels.



Siding panels in work



Preassembled formwork before concreting



Tension elements in Factory



Fixing of columns with concreting

RICHTER Chemical Research Center, Hungary

For Richter Pharmaceutical Company we produced and assembled the steel roof constrtuctions of the research building.

The frame construction is made of hot rolled steel profiles. The purlin system consists of light weight cold rolled, hot dip galvanized beams.



The frame construction



Connection of concrete wall and purlins



Overlapping of cold rolled profiles



Corner construction

MOL Strategic Gas Storage Plant Szőreg - pipe bridges

As a sub-contractor of Alterra Hungary we produced and site assembled various steel constructions for the Hungarian oil company MOL's strategic gas storage plant in Hungary including more than a hundred meters of pipe-, cable bridges and 10 complete light towers. The surface protection of the constructions were made with a special painting system with the total of 240 micron thick layers. The system provides more than 15 years of protection for the constructions. The total weight of the constructions were ca. 450 tons.



One section of the pipe bridges



Pipe bridge with light tower



Column fixing detail

SPORT CENTER Tiszaújváros, Hungary

For the City Sport Center of Tiszaújváros we built the wooden roof structure along with the steel connection elements and also carried out the site installation works.

We also built the roof coverings with wood underconstruction and thermal insulation.



The swimming bath of the sport centre



Installation of the wooden roof structure



The roof structure is ready



Installation of the wooden roof structure

Lakics Machine Factory buildings Kaposvár, Hungary

These halls were built with European Union support. We undertook the complete building task for these halls from the concrete foundation to the concrete columns and steel truss-beam roof with sandwich-panel covering. We also provided the windows, doors, gates and lighting system here.



Truss-beams and purlins of "Skoda" hall



Two hall-sections next to each other



Assembling of the smaller hall



Steel sandwich panel covering



Concrete columns with steel truss-beams

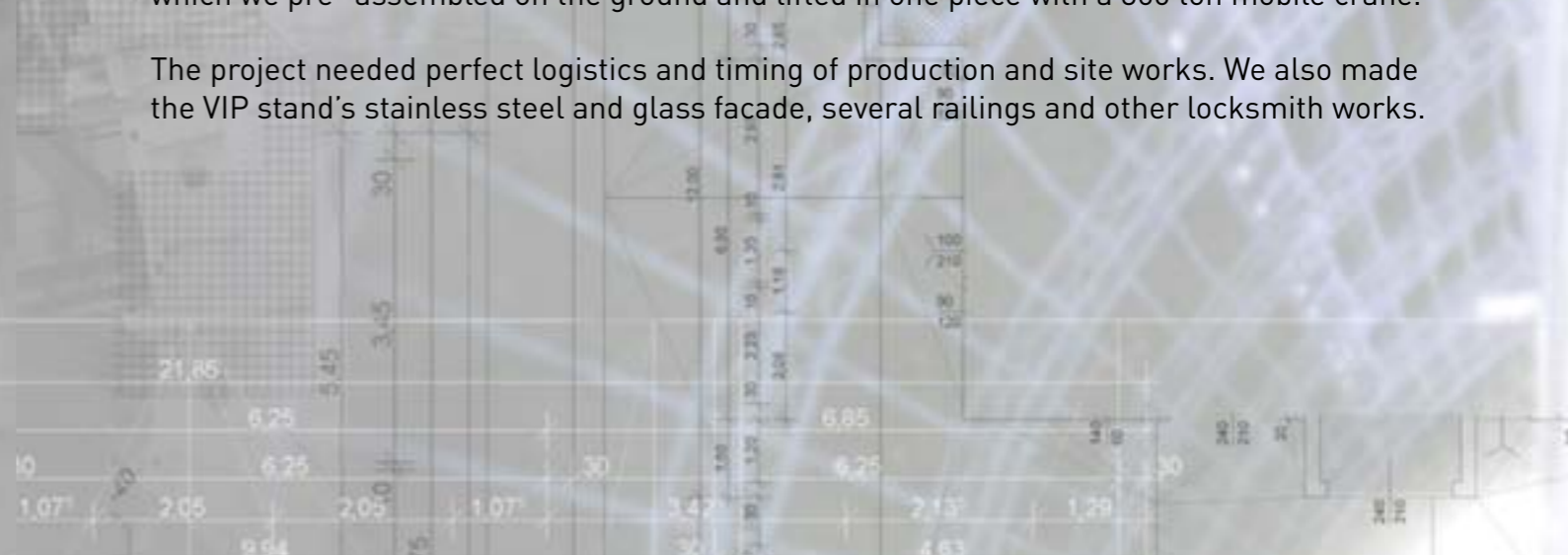


Concrete columns with steel truss-beams

Football stadium foreroof steel construction, Hungary

For Quaestor Hungary we produced and site assembled the steel construction of football club Győri ETO's stadium's foreroof. The construction consists of 12 pieces of huge truss beams which we pre-assembled on the ground and lifted in one piece with a 300 ton mobile crane.

The project needed perfect logistics and timing of production and site works. We also made the VIP stand's stainless steel and glass facade, several railings and other locksmith works.



The stadium with the new foreroof



Huge truss-beams holding the roof



Assembling of the truss beams



Lifting the truss beams in one piece

EON Poweplant Datteln, Germany - Cooling tower steel formworks

For Rundstahlbau GmbH, Austria we produced a special steel formwork system including the working platforms and moving towers for making the 180m high concrete cooling tower for new EON power plant in Datteln Germany. The constructions were made with an increased technical and quality control to make a 100% safe working system for the workers on site. The total weight of the constructions was ca. 600 tons.

Some other various works from past



Concrete tower building in progress



Pre-assembling the lifting steel towers, platforms



Ready to start concreting



Steel platforms from the top



Eastern Railway Station Budapest



Special scaffolding at railway station



Sport Center Roof construction Mór, Hungary



Glass railing at "Dorottya" Office Center, Budapest



70m wide span steel hall Vác, Hungary



Marketing building of Asia Center



H-2040, Budaörs, Ebner, köz II/2

Tel.: +36 23 414 370, Fax: +36 23 500 808

Web: www.jakosakft.hu

Email: titkarsag@jakosakft.hu

Design by **Whitesand**
www.whitesand.hu