



národní
úložiště
šedé
literatury

National Technical Library – Library of Technical Universities

Svoboda, Martin
2009

Dostupný z <http://www.nusl.cz/ntk/nusl-113876>

Dílo je chráněno podle autorského zákona č. 121/2000 Sb.

Licence Creative Commons Uveďte autora-Neužívejte dílo komerčně-Zachovejte licenci
3.0 Česko

Tento dokument byl stažen z Národního úložiště šedé literatury (NUŠL).

Datum stažení: 28.09.2024

Další dokumenty můžete najít prostřednictvím vyhledávacího rozhraní nusl.cz .

NTK

50°6'14.083"N, 14°23'26.365"E

Národní technická knihovna
National Technical Library

210 mm

National Technical Library – Library of Technical Universities

Martin Svoboda

Director of the State Technical Library

m.svoboda@stk.cz



Synopsis

210 mm

- History, the “before”
- Project
 - Vision
 - Goals
 - Dates
 - Facts & Figures
 - Lessons learned
 - Pictures
- Conclusion

History

210 mm

- **1718** – Former military engineer **Willenberg** gets Imperial accreditation to teach „Ingenieurkunst“ and gets **300 florins** to buy books, models and instruments
- **1831** – The founder of Royal Czech Estates School F. J. Gerstner charges later professor of fermentation chemistry and rector of the Polytechnic **K. J. N. Balling** with the concentration of books to an indexed, subject arranged collection – advent of the library
- **1869** – after the split of the school to the Czech and German ones, the Library remains a common one, financed from the Country budget
- **1935** – an up-to-date library is built for the Library of Technical Universities (Czech and German) in the eastern wing of Clementinum
- **1960** – Library separated from Technical Universities
- **1991** – back under aegis of Ministry of Education
- **2009** – back to Technical Universities to the Dejvice campus

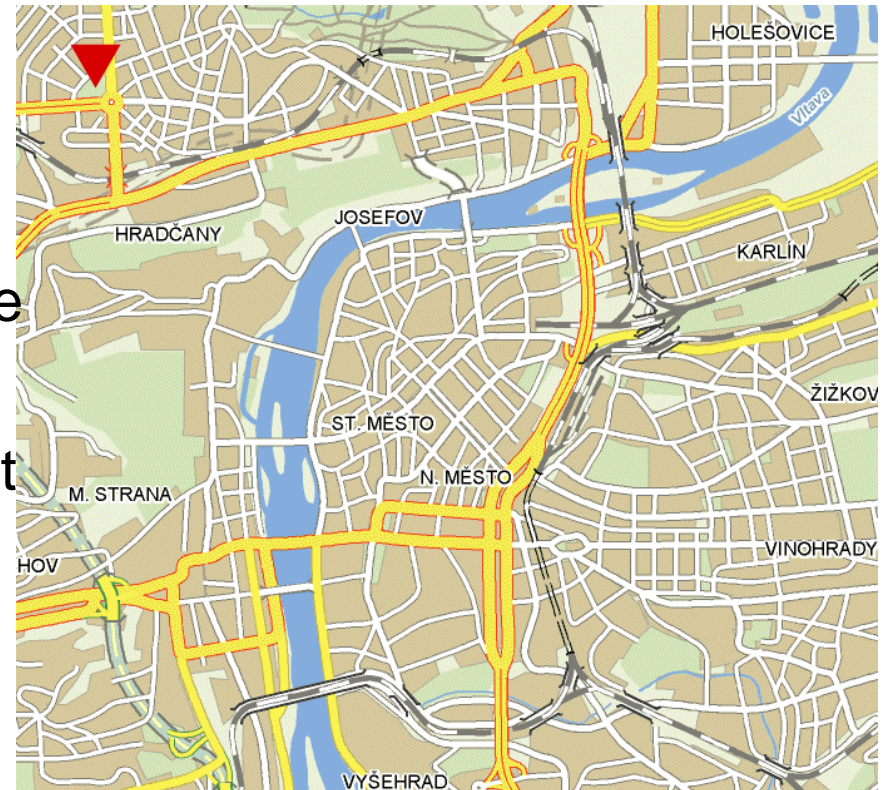


History of the project

210 mm

- 1963 **Maniny**
- 1974 head of Nusle bridge
- 1992 **Rohanský isle**
- 1995 Dejvice – Vítězné square
- 1999 heart of the Dejvice
campus – Technická street

- campus
- library



Vision of the new library

210 mm

- transparent, permeable, understandable, flexible
- open, friendly, affable, inviting
- low energy and low operating costs house
- moderate use of hi-tech
- interior design – part of the overall building design
- materialised textbook of contemporary architecture, civil engineering and technology

Project goals

210 mm

- Modern central common library serving universities, R&D and public in the technology and applied science area
 - national information infrastructure node for technology and related disciplines (e-resources licensing, national repository of grey literature, digitisation, EDD, ISSN centre, ...)
 - R&D laboratory of network technologies for library and information services
 - transform the library back to universities
 - release space in Clementinum for the National Library

Project dates

210 mm

- 2000/07** – Gov't Resolution - Project NTL approved
- 2001/01** – Architectural contest - Projektil 
- 2001/07** – Memorandum of Agreement ČVUT-STK-VŠCHT
- 2004/02** – Gov't Resolution - budget 
- 2004/10** – project design started
- 2006/06** – permits acquired, supplier tender
- 2006/10** – the first dig 
- 2008/12** – take-over
- 09/09/09** – opening of NTK to public

Costs

210 mm

| | |
|-------------------------|-------------|
| Overall project cost | 76.17 mio £ |
| <i>out of it</i> | |
| building – carcass | 38.75 mio £ |
| technologies except IT | 17.73 mio £ |
| IT | 4.20 mio £ |
| interior – mobiliary | 4.16 mio £ |
| project management | 2.37 mio £ |
| project documentation | 2.50 mio £ |
| engineering supervision | 3.87 mio £ |
| financial services | 5.98 mio £ |

exchange rate as of 6 Sept 2009

Library spaces, volumes

210 mm

- 1 **322** study seats, mostly w/ network access + WiFi ubiquitous
- 562** relaxation seats
 - 29** individual study rooms (of it **2** for physically disabled and **2** multimedia study rooms suitable for visually impaired)
 - 18** group study rooms for 8-10 people
 - 4** computer study rooms (**1*30**, **3*50** seats)
 - 1** night / complementary reading room
 - 1** journals reading room, **>2000** journals + **15000** e-journals
 - 34** OPAC terminals + user PCs throughout the building
- >350 000** volumes in open stacks arranged by LCC
 - + ~ **150** e-textbooks
 - + **1.2** million volumes capacity in closed stacks underground

Other functions

210 mm

- social functions for the campus in the ground-floor:
 - conference hall 230 seats
 - exhibition hall 370+410 m² (90+50 seats)
 - café/restaurant 150 seats
 - municipal library branch Praha 6 (32 seats, 25 000 vol's)
 - university bookstore; IT store & accessories
- training centre @ 30 seats in variable setup
- drink and snack machines on each storey
- baby changing boards
- + first-aid room in the basement
- 300 parking places, 200 bike stands
- 900 000 clients/year

Building

210 mm

53 820 sq ft **building plot area**, of it

44 280 sq ft built-up area

6 083 234 cu ft **total building volume**, of it

4 055 501 cu ft above ground

2 027 733 cu ft under ground

416 143 sq ft **useful area** of all storeys

9 storeys, of it 6 above ground, 3 under ground

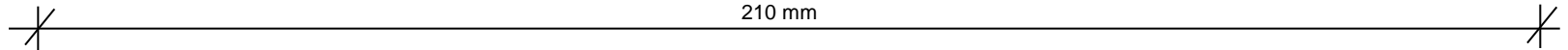
6 elevators and 5 staircases throughout the whole building

8,025.36 Mbtu expected **annual energy consumption**, of it

4,292.47 Mbtu heating

3,732.88 Mbtu cooling

Construction



- 1 743 838 cu ft of earth excavated
- 55 711 t weight of load-bearing structure, of it
 - 102 t steel structures
 - 38 t steel roof of the atrium
- 51 628 t concrete without armature
- 400 t tendons
- 25 mi pre-stressing channels
- 600 t pre-fabricated stair wings
- 5 399 sq ft outer shell – glass form-pieces
- 6 320 sq ft outer shell – sheet glass

„Guinness book“ figures

210 mm

- 118 mi light-current cabling
- 1,100,000 cable clips
- 1346 automated combustion gas detectors
- 256 acoustic motion detectors
- 117 cameras
- 28.6 mi heating/cooling piping in floor slabs
- 38 750 sq ft floor heating in ground floor
- 233 254 sq ft rubber flooring
- 44 401 sq ft bituterazzo in the ground floor
- 27 986 sq ft sound absorbing lining
- 12.43 mi pipes of high pressure extinguishing system
- 4 110 nozzles of high pressure extinguishing system
- 1 345 ft automatic smoke & heat screens

Lessons learned

210 mm

- **P**lot – fundamental, otherwise risky business
- **P**ecunia – not just the volume, the certainty is what counts
- **P**artnership – in-house, governing body, architects, designers, contractor, ...
- **P**erspective – design for the [unknown] future
- **P**hlexibility – both in project and in decisions

People

210 mm

Everything described above, that is the idea, the design and a construction of the new building, in parallel with the working “old library” shaping up for the reincarnation in the new environment; this all starting with authors of the initial idea, through archeologists, architects, artists, assemblymen, building team, businessmen, designers, developers, draughtsman, economists, gate-keepers, IT people, lawyers, librarians, managers, organisers, suppliers, quantity & quality surveyors, trustees, etc. is a result of a collaboration of tens and tens of people.

I would like to thank all who endeavoured to accomplish this Gesamtkunstwerk.

Some pictures

210 mm



NTK

50°6'14.083"N, 14°23'26.365"E
Národní technická knihovna
National Technical Library





MEDIUM TELEFONI





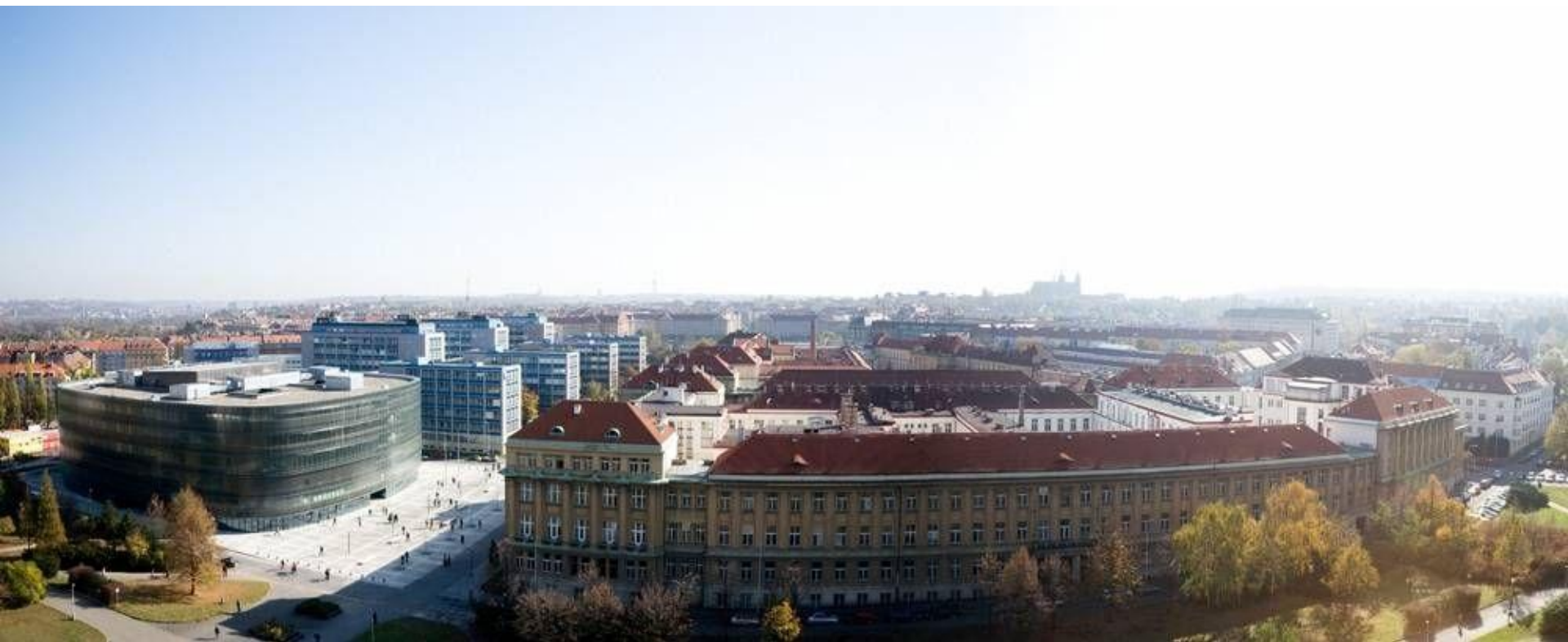




Jan 2007

NTK

50°6'14.083"N, 14°23'26.365"E
Národní technická knihovna
National Technical Library





PAMĚTNÍ LISTINA

PŘI PŘÍLEŽITOSTI SLAVENOSTNÍHO
POKLEPU NA STAŘÍ
NÁRODNÍ TECHNICKÉ KNIHOVNY
V PRAZE A DEJVICÍCH

V TOUTO příležitostí se uskloňuje ke 100. výročí narození
prof. Ing. Jaroslava Dvořáka, který byl významným
inženýrem a vynálezcem. Jeho dílo bylo
prospěšné pro naši zemi a svět. Vzpomínám si na
dobu, kdy jsem byl jeho žákem na vysoké škole. Toho
dobu jsem si dobře pamatuji. Jeho dílo bylo
prospěšné pro naši zemi a svět. Vzpomínám si na
dobu, kdy jsem byl jeho žákem na vysoké škole. Toho
dobu jsem si dobře pamatuji.



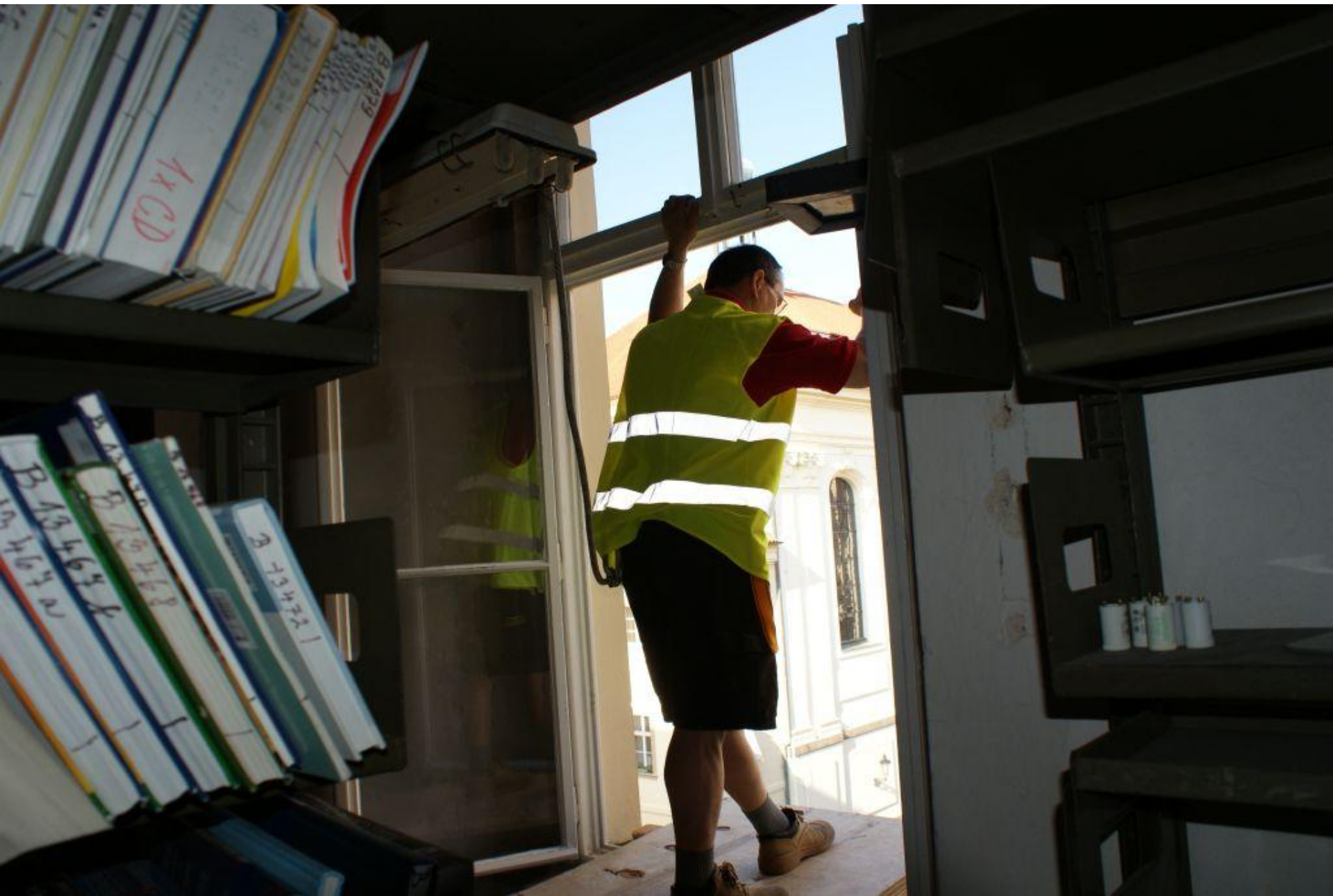
SLUŽBY STÁTNÍ TECHNICKÉ KNIHOVNY
REFERENČNÍ STŘEDISKO

- konzultační služby
- řešení služby
- přístup k elektronickým zdrojům
- přenosné studium: normy, zákony

Autor tubusu:

Telefonní číslo do budoucnosti:
+ 420 775 669 504







NTK

50°6'14.083"N, 14°23'26.365"E
Národní technická knihovna
National Technical Library



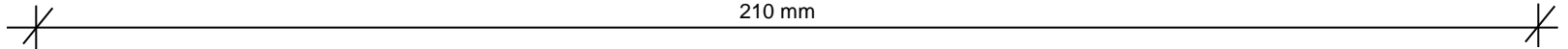
NTK

50°6'14.083"N, 14°23'26.365"E
Národní technická knihovna
National Technical Library









Thank you for your attention
Martin Svoboda
martin.svoboda@techlib.cz

Sir Tim Berners-Lee

for Nobel prize !