#### Welcome to Karolinska

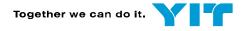


#### Contents

- General information about public sector in Sweden
- Information and facts about Karolinska University Hospital
- Pneumatic pipe system







### Public sector



Municipalities

- Schools
- Senior apartments
- Sport facilities and arenas



**County Council** 

- University hospitals
- Local hospitals
- Emergency hospitals
- Health center
- Universities



Companies

- Airports
- Roads and tunnels
- Railways
- Swedish army
- Museum

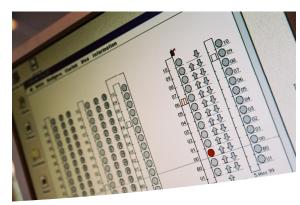


#### Medical facts about Karolinska

- The hospital has 800 beds
- Almost 60,000 health care occasion is being produced every year, of which 3,000 is people from other countries or parts of Sweden.
- Karolinska produces over 800,000 visits, of which 20,000 is people from other countries or parts of Sweden
- About 8,000 employees









#### Technical facts about Karolinska

- The hospital area covers 401,000 m²
- Electricity use: 52,300 MWh per year
- Water: 403,000 M³ per year
- Heating: 52,000 MWh per year
- -~19,000 -20,000 work orders per year





# Pneumatic pipe system at Karolinska

YIT collaborates with Hanter It, Scandinavia's leading producer of pneumatic tube systems







#### Facts

- This pneumatic tube system at Karolinska Hospital was installed in 2006
- It handles daily:
  - medical tests
  - cytostatic
  - blood
  - medicine
  - money (future)
  - drugs etc

Some of the goods are protected, which require competence







#### Facts

- 104 standard stations
- 3 central transfer units
- 1 automatic robot-cell capacity
  180 carrier/h
- 9 km Ø160mm pipes installed
- 600 carriers with transponders in the system
- 2000-2500 transports each day
- 1575 km of transports each day







## Scope of supply - YIT's role

YIT ensures operation 24/7

#### By:

- Monitoring
- Alarms
- Planned maintenance of the system since 2003
- Operation center 24/7
- Fault report possible 24/7
- Telephone-support 24/7, trained technicians
- Repair possible 24/7, most common spare parts in stock





#### Profits

- Transformational profits
  - Daily- & emergency samples, blood transportations, drugs & other smallgoods transports (earlier carried out by transportation service and care staff)
- Nursing profits
  - Higher attendance at the care-units, faster reply to the samples – faster diagnoses/care
- Security
  - Different security classes on different goods
  - Complete overview/track of all transports

- Ergonomics
  - Work load more even flow of transports, prioritization of emergency transports
  - Different type of stations to meet different kind of needs
- Flexibility
  - Easy to adjust the system to the changing needs of the hospital
  - All stations is connected to each other via central transfer units







Together we can do it.