

Modern Ways of Container Handling – CTA Today



HHLA Container Terminals in the Port of Hamburg



Burchardkai (CTB)

Tollerort (TCT)

Altenwerder (CTA)



The Container Terminal Burchardkai



Technical Data

Area:	1,6 million sqm
Draught:	- 16.50 m MLW
Quay length:	2,850 m
Gantry cranes:	18 thereof 9 postpanmax 3 super-postpanmax
Van carrier:	approx. 90
Reefer plugs:	approx. 900
Annual capacity:	2.6 million TEU
To be extended:	4 million TEU
Railway tracks:	11
Railroad siding:	4 km on site
Transtainer:	4
CFS:	68,000 sqm



The Tollerort Container Terminal



Technical Data

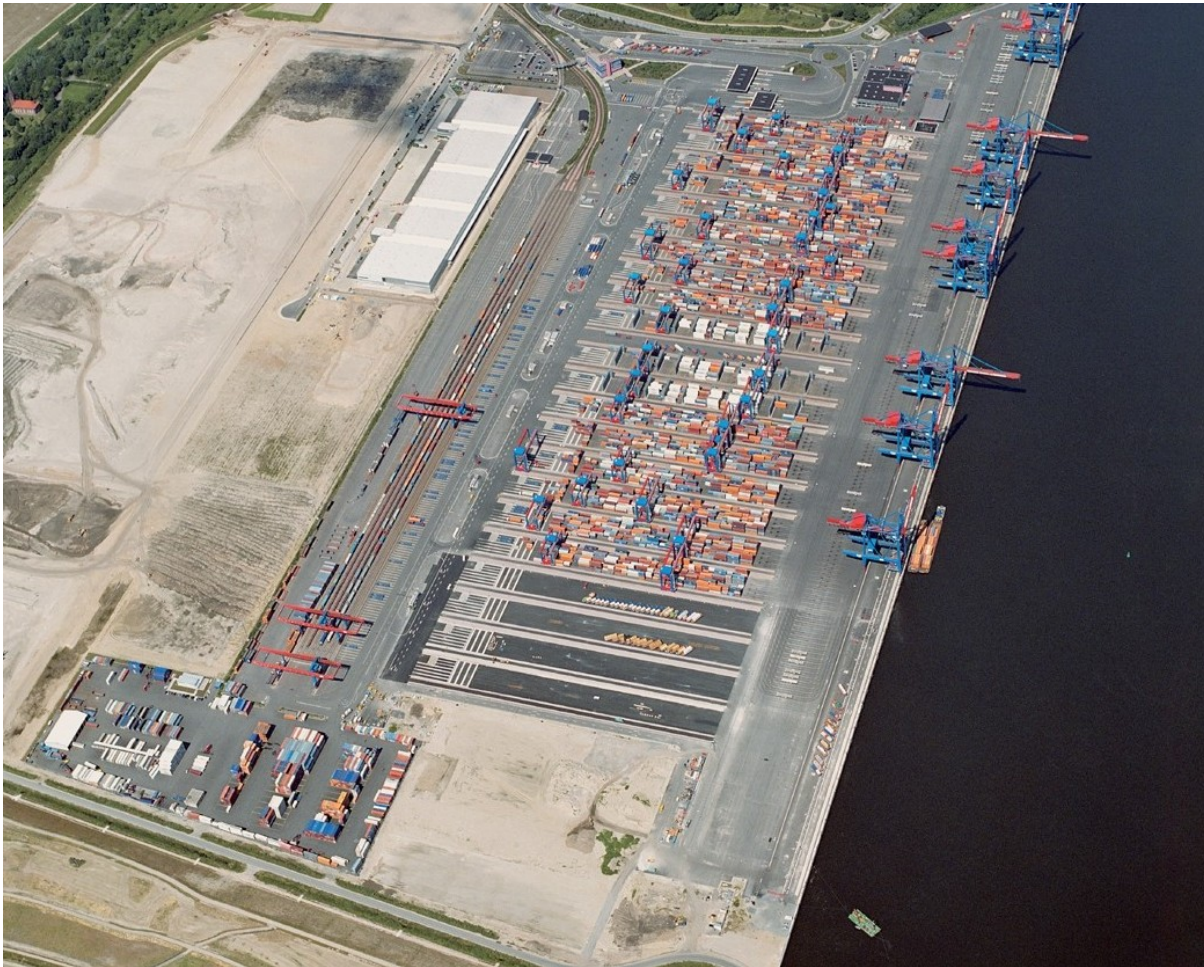
Area:	308,000 sqm (final stage of construction approx. 600,000 sqm)
Berths:	920 m (final stage of construction 1,400m)
Gantries:	7 mostly Postpanmax (8 starting 2003)
Van Carriers:	approx. 30
Railroad-siding:	1.5 km tracks, on site
Reefer points:	120
Annual capacity:	630,000 TEU to be extended: 1.9 million TEU



extension area



The Container Terminal Altenwerder – Bird's Eye View of Phase 2

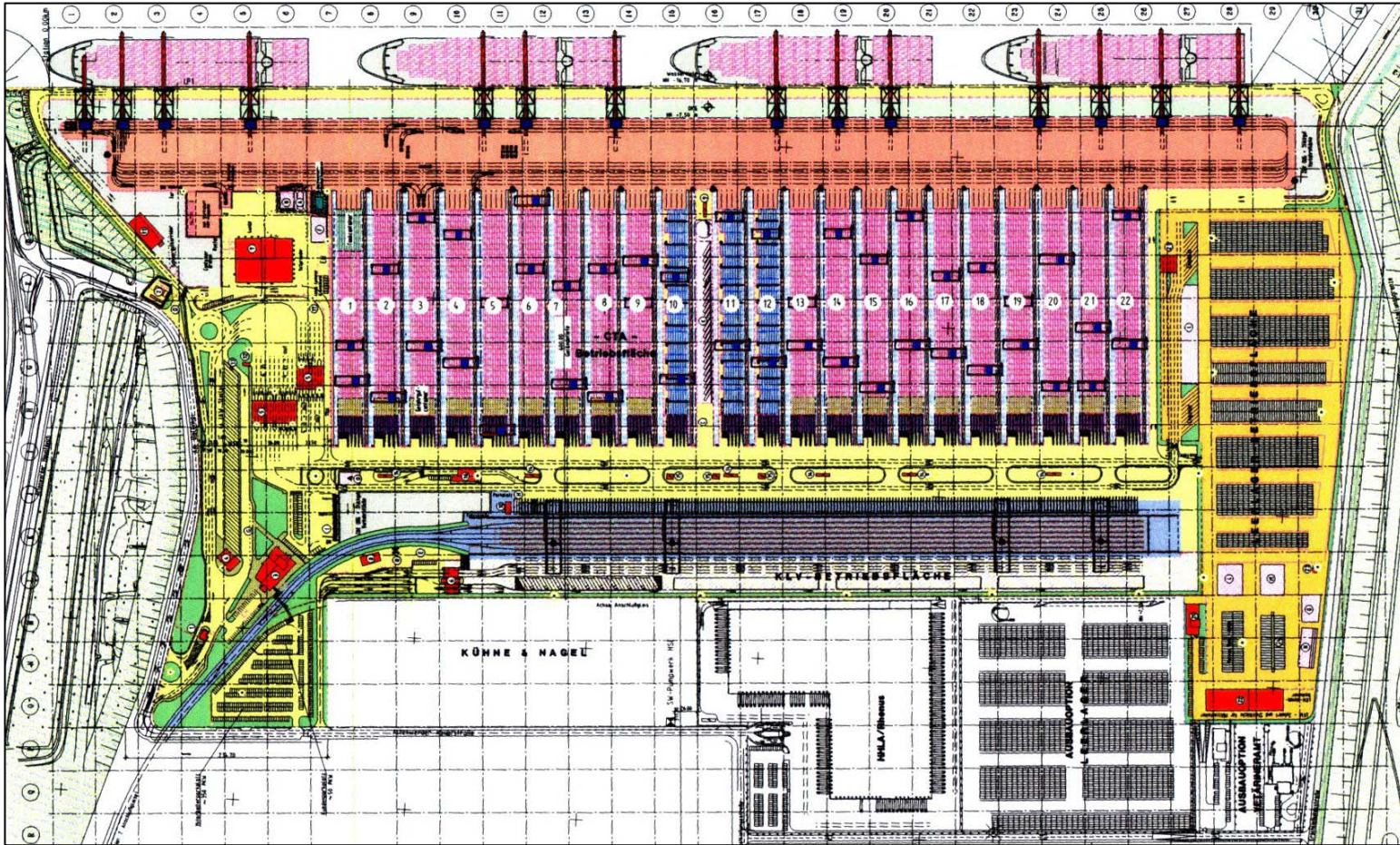


Technical Data for Phase 2 (Phase 3)

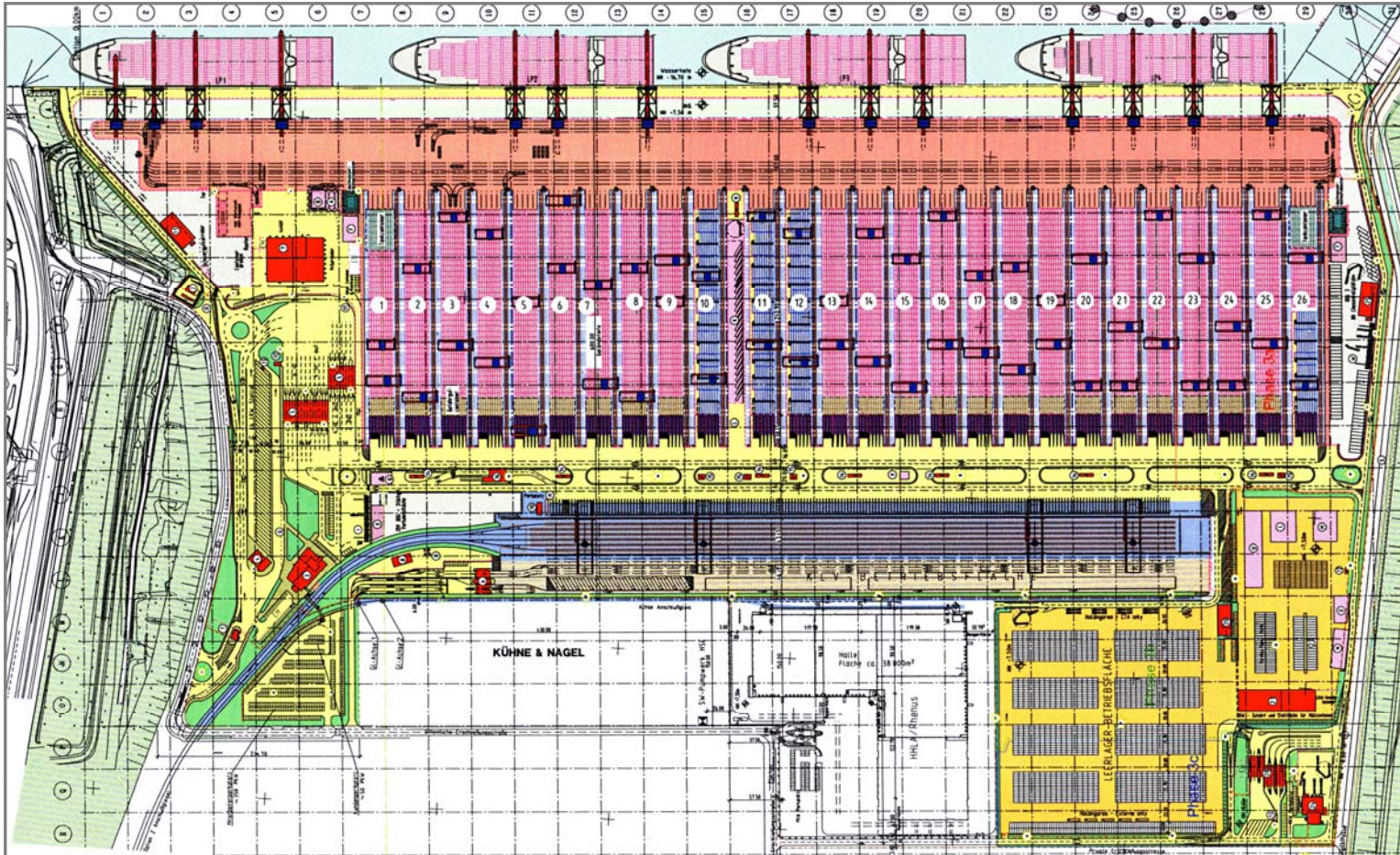
Area:	850,000 (900.000) sqm
Berths:	4
Draught:	- 16.50 m MLW
Quay length:	1,400 m
Gantry cranes:	13 (14) double trolley superpostpanmax add. 1 for feeder operation
Diesel AGV's:	approx. 55-60 unmanned platforms
Yard Operation:	44 (52) automatic portal cranes, 2 per block
Yard space capacity:	appr. 30 (35) kTEU
Reefer plugs:	1,600 (1,800)
Annual capacity:	1.9 million TEU (2.8 milion TEU)
Railway tracks:	6
Railroad siding:	4.5 km
Rail Cranes:	3-4 spanning 6 tracks



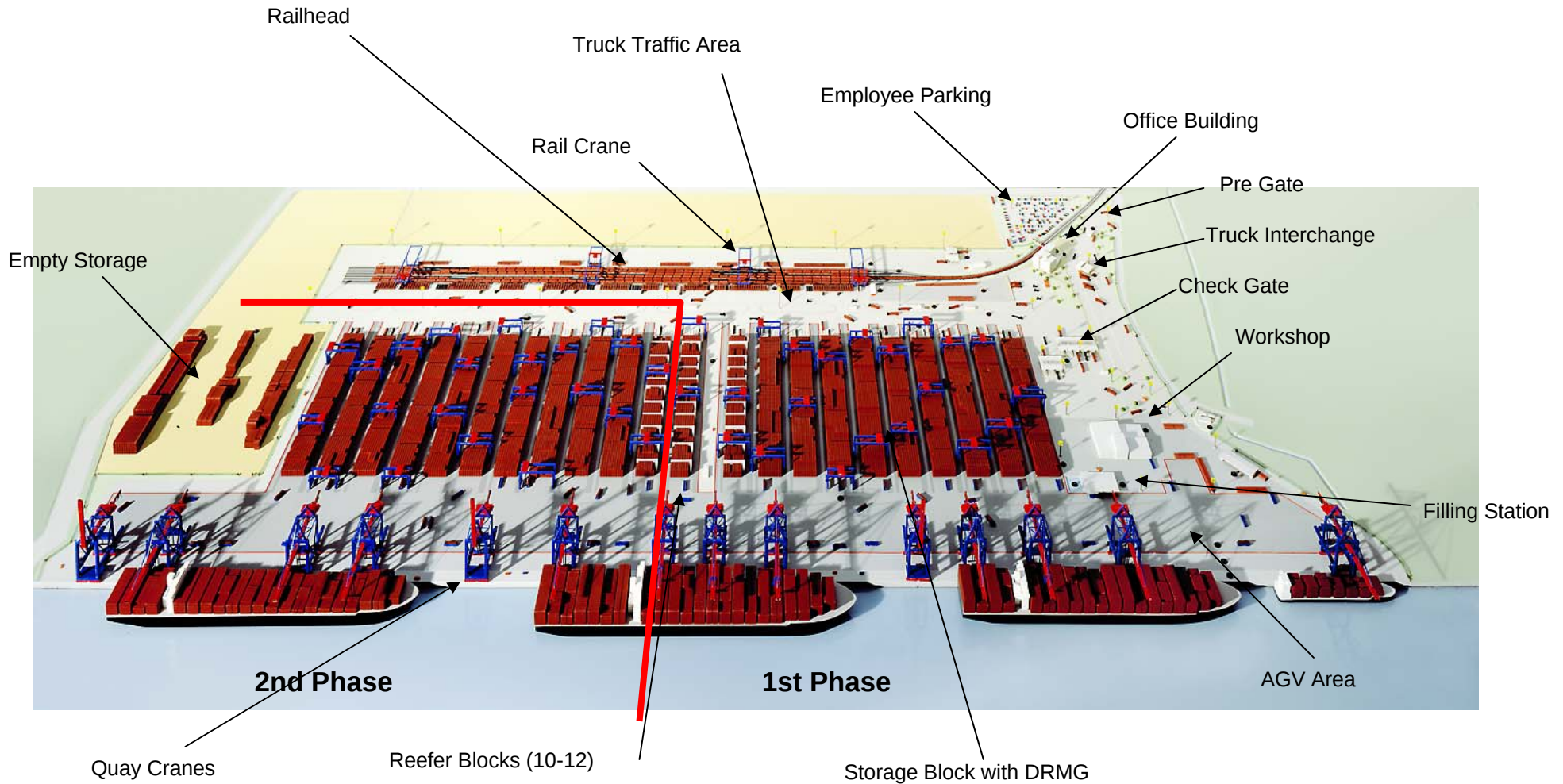
The Container Terminal Altenwerder – Basic Layout of DRMG (2nd Phase)



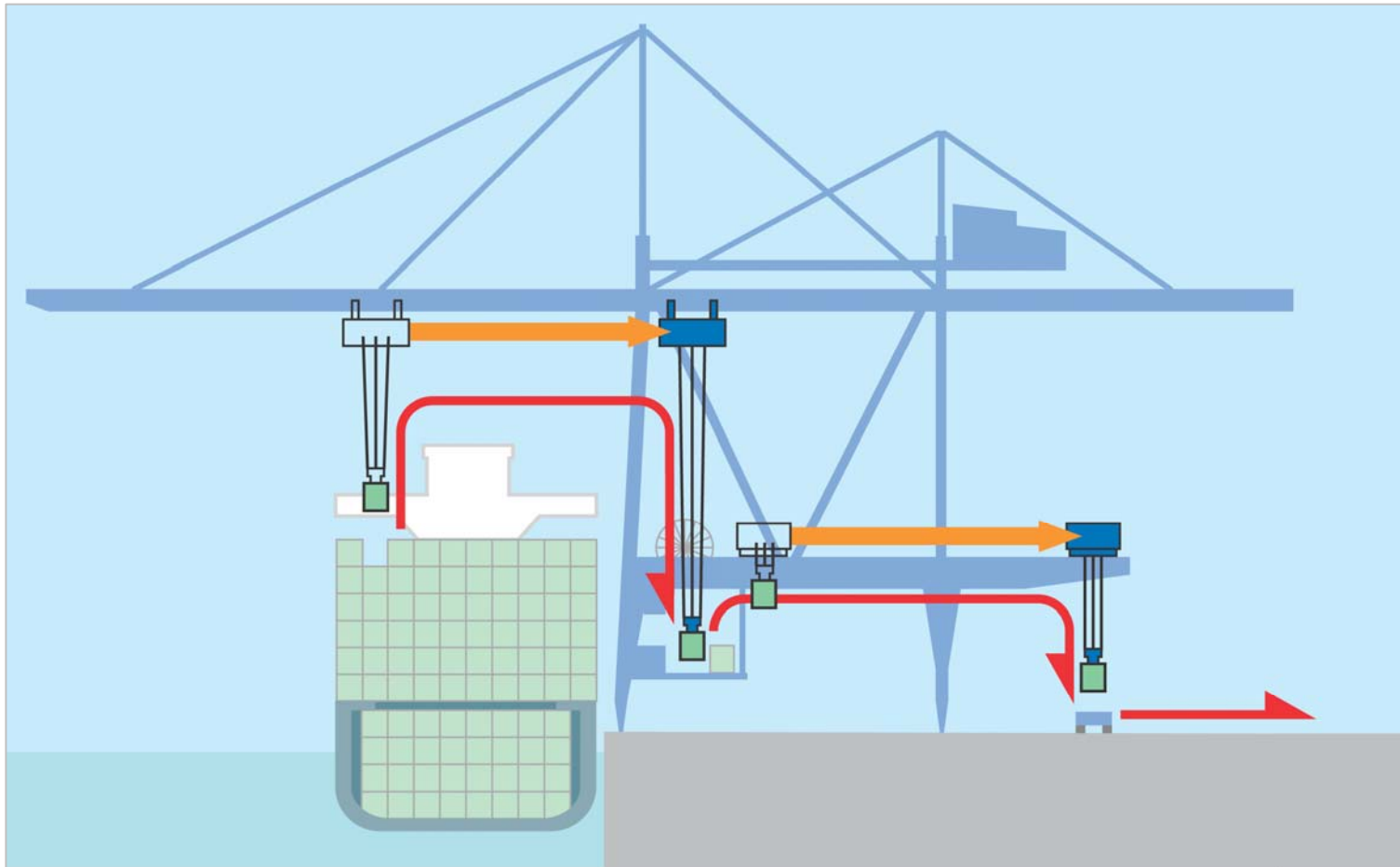
The Container Terminal Altenwerder – Basic Layout of DRMG (3rd Phase)



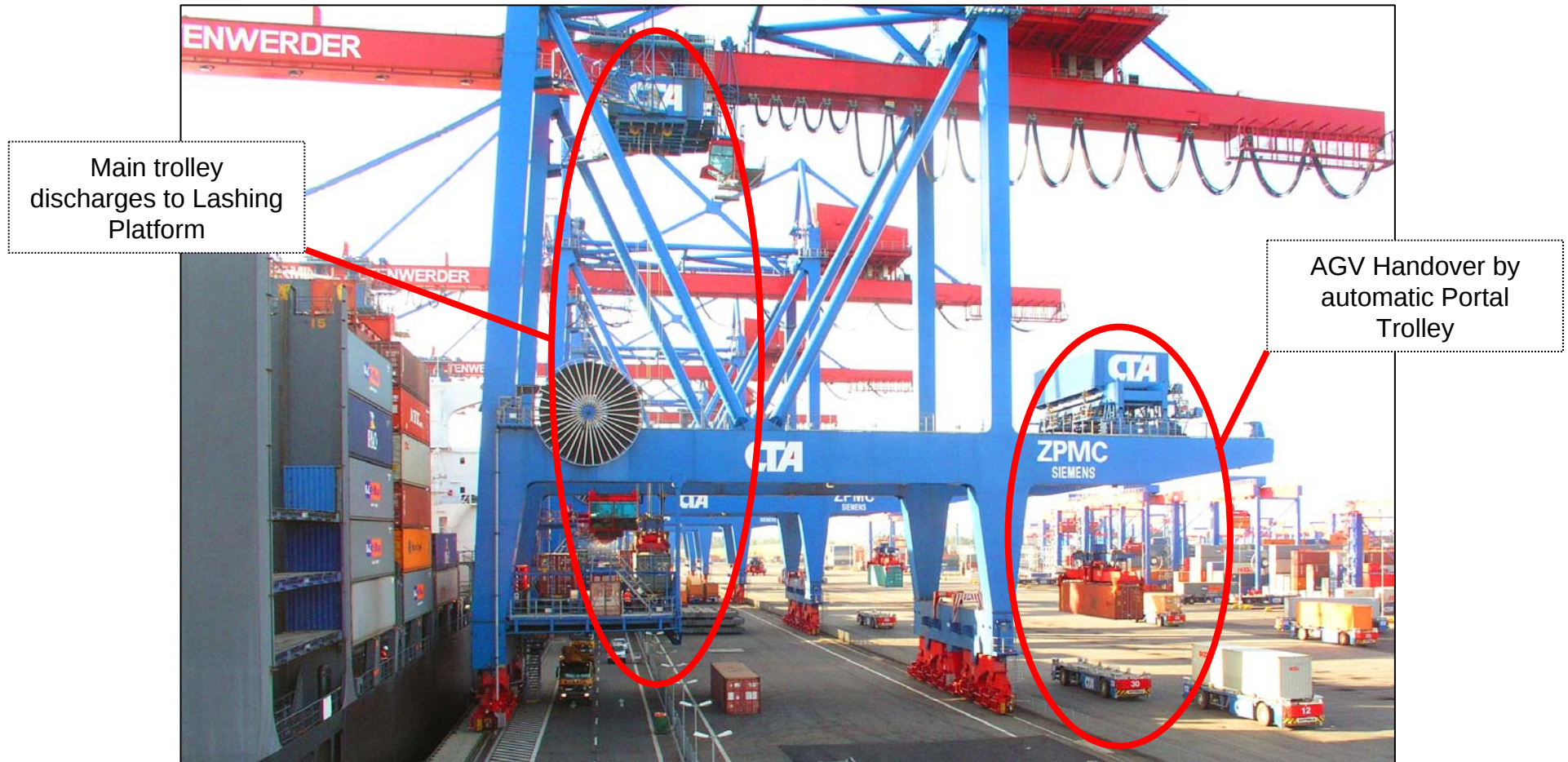
The Container Terminal Altenwerder – Operation



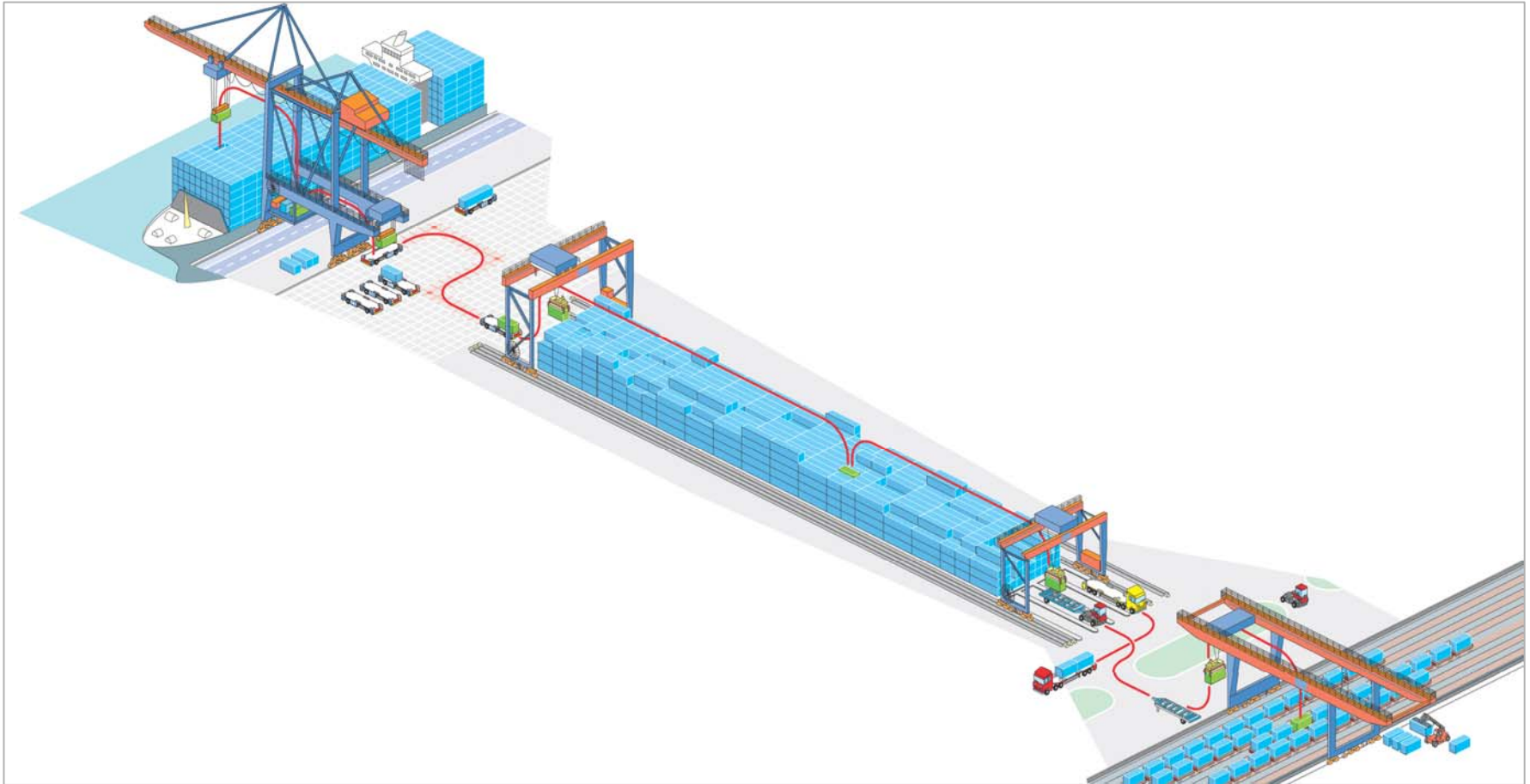
The Container Terminal Altenwerder – Work Flow Waterside



The Container Terminal Altenwerder – Waterside Handling



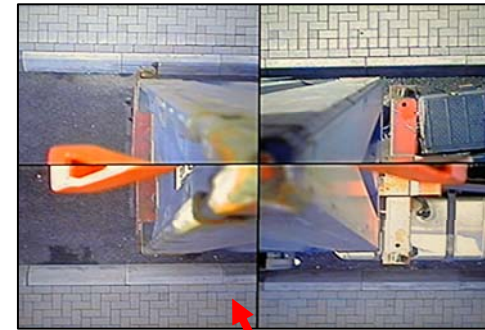
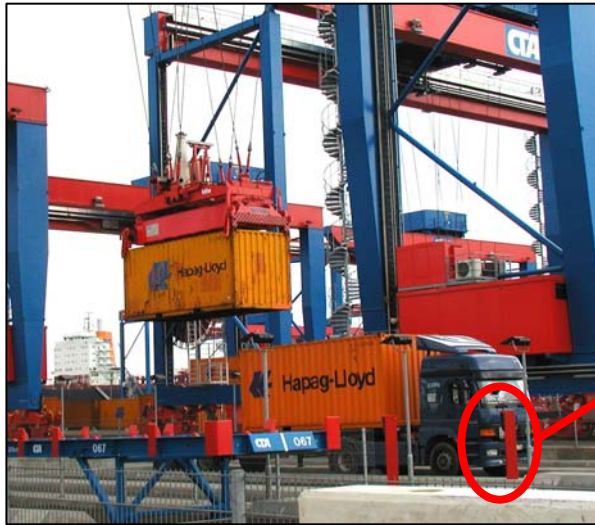
The Container Terminal Altenwerder – Work Flow



The Container Terminal Altenwerder – Yard Block w/ Automated Cranes



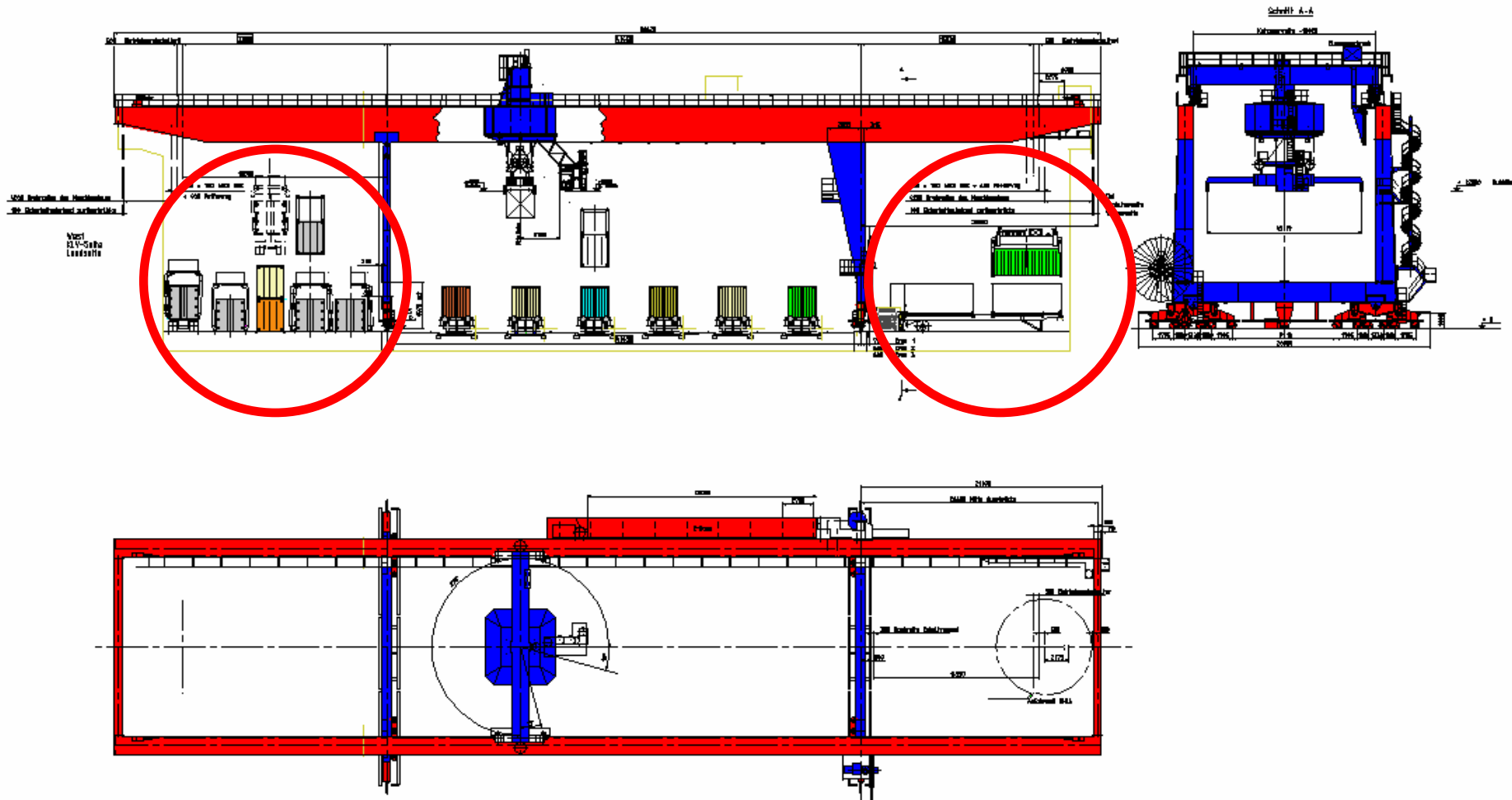
The Container Terminal Altenwerder – Remote Control Operation for Trucks



The Container Terminal Altenwerder – Control Room



The Container Terminal Altenwerder – Crane for Rail Operation



The Container Terminal Altenwerder – Rail Operation



The Container Terminal Altenwerder – Handling Figures as per May 2006

- 8 calls of Super Post-Panmax, Post-Panmax or Panmax vessels per week
- Appr. 85 - 90 Feeder Vessel calls per week
- Monthly throughput appr. 110,000 boxes (incl. Feeder volume)
- Truck handling appr. 1,800 to 2,000 trucks / day (Peak: 2,500)
- Rail handling appr. 800 to 1,000 mvs / day (Peak: 1,200)
- Export 45 %, Import 55 % , Empty Share appr. 10 %
- Terminal in operation since June 24, 2002



HPC Hamburg Port Consulting

- Founded in 1976 as subsidiary of the HHLA Hamburger Hafen- und Lagerhaus AG (Hamburg Port and Warehouse Company)
- Reputation as one of the worlds leading Consultants in the Port Sector
- Since 1976 port and transport related projects in more than 60 countries
- Private and public sector
- Approximately 700 projects world-wide
- Extensive experience in container terminal planning,
- Participation amongst others in the planning of Container Terminal Altenwerder, Burchardkai Extension, re-engineering of numerous ports worldwide



HPC Hamburg Port Consulting

HPC

Management

Port Planning & Operations
Systems (PPOS)

Systems Engineering
Group (SEG)

Advanced Terminal
Technology (ATT)

Transport Management
Systems (TMS)

Administration / Controlling /
Human Resources

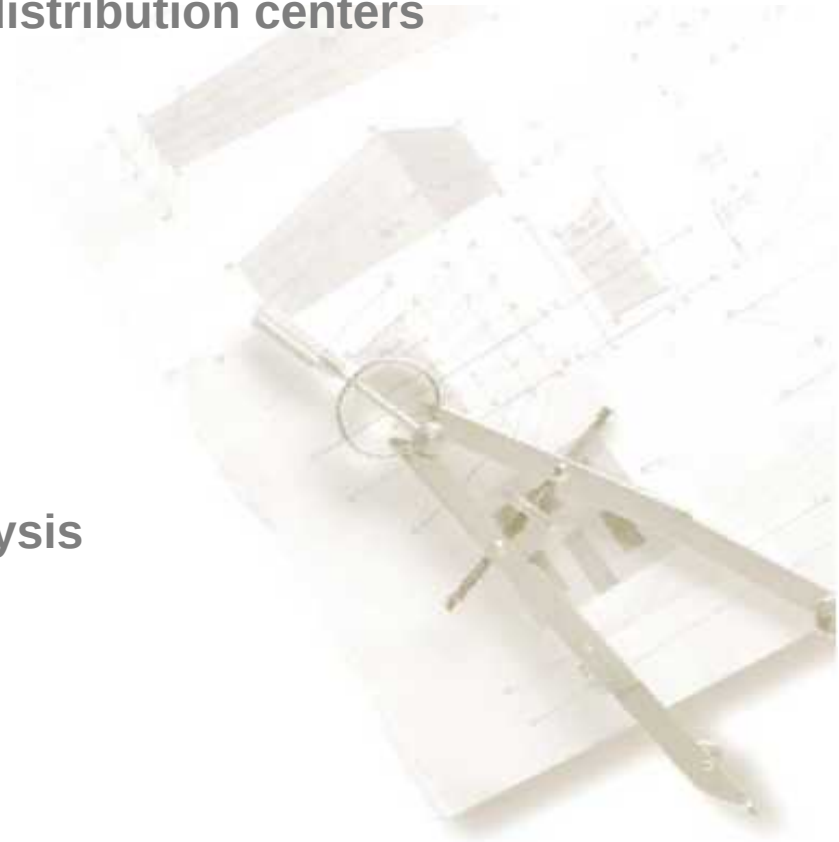
HPTI
(Hamburg Port
Training Institute GmbH)

UNICONSLT
Universal Transport
Consulting GmbH



HPC Hamburg Port Consulting – We are a “Full-Service Provider”

- Planning and development of ports and distribution centers
- Operation of ports
- Feasibility assessment and structuring
- Business development and marketing
- Management and administration
- Transport and port logistics
- Software, IT applications & systems analysis
- e-commerce solutions



HPC Hamburg Port Consulting – Our Concept

Realistic & economic solutions for the questions of our clients

Comprehensive experience gained from some 600 projects executed throughout the world

Profound practical know-how

Interdisciplinary approach

Permanent methodological enhancement

Continuous training of our experts

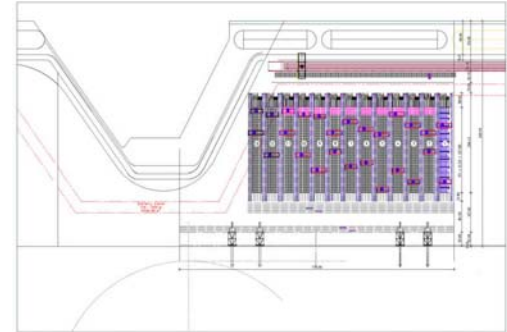


HPC Hamburg Port Consulting – Reference Projects



HPC Hamburg Port Consulting –Terminal Planning - References

- **Le Havre - Port 2000**
 - Customer: Perrigault S.A. (Terminaux de Normandie)
 - Development of operational concepts for a greenfield project, comparison and economical evaluation
- **Busan Newport Project**
 - Customer: Hypo-Vereinsbank AG
 - Feasibility and risk evaluation of operational terminal concept, developed by CSX for a Busan greenfield project



-



HPC Hamburg Port Consulting –Terminal Planning - References

- CTB Burchardkai – Extension Project „4 Mio. TEU“
 - Customer: HHLA
 - Cooperation in all phases of conceptional development and implementation
 - New gate concept
 - Re-arrangement of depot and repair facilities



HPC Hamburg Port Consulting

- For further contact please address

HPC Hamburg Port Consulting GmbH
Dr. Thomas Koch
Container-Terminal Burchardkai
Office Building 3
D-21129 Hamburg
Germany

Phone: +49 40 74008 190

Fax: +49 40 74008 115



The Container Terminal Altenwerder – Opening Ceremony

