

THE REDEVELOPMENT OF CENTRAL BERLIN

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Potsdamer Platz – big size project for Schindler

ABSTRACT

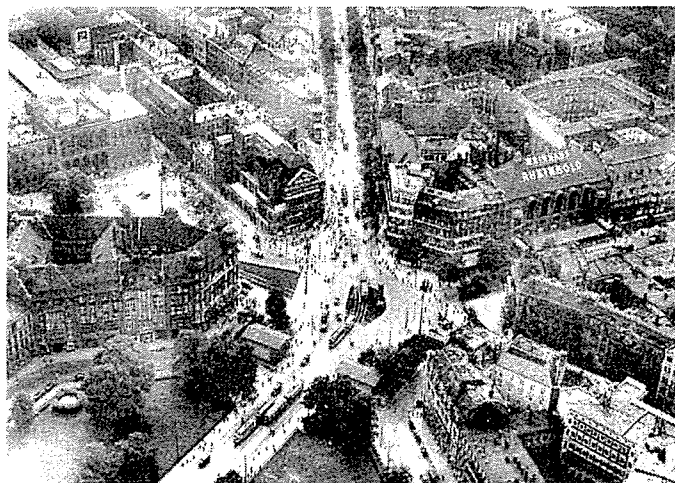
The unification of Germany and the decision that Berlin became the federal capital and seat of the federal government brought new challenges for the urban and regional planning. The redevelopment of central Berlin experienced great importance and was subject of significant international architectural design competitions. One of the major competitions were held for Potsdamer Platz, a wellknown historical place before the 2nd World War in Berlin.

This paper was written in preparation for the excursion we are going to have on Wednesday afternoon. It is not an explicit technical presentation but it gives a general information about huge construction activities in this city, where of course elevators take an important role.

1. POTSDAMER PLATZ – THE BIGGEST BUILDING SITE IN EUROPE

Together with the last phase of construction (A1, B1, Weinhaus Huth) and the opening on 8 October 1999 to the client the greatest building project of the „Nineties“ came to an end. It took five years to realize and it was something like a revival of the former center of Berlin.

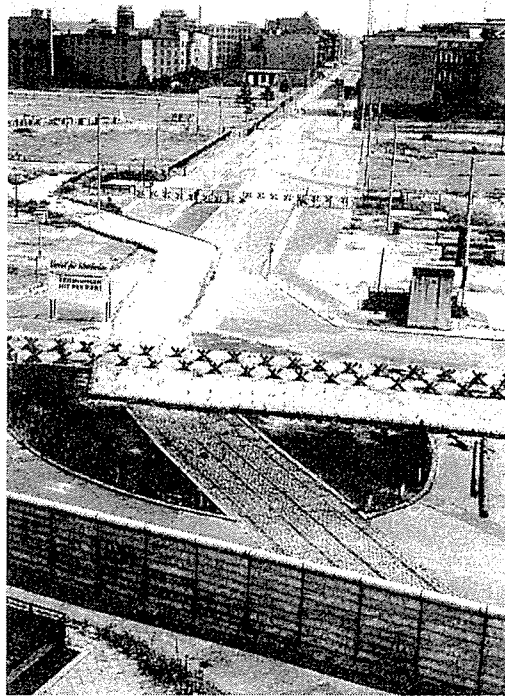
During the „Golden Twenties“ the Potsdamer Platz daily had to cope with 100.000 people walking across, 10.000 vehicles and 30 streetcars!



Der Potsdamer Platz im Jahre 1926
Photo: Landesbildstelle Berlin

It was a cosmopolitan place with exclusive hotels, cafés and restaurants, moreover it was a meeting place for tourists, business men and artists.

The 2nd World War destroyed 80 % of the buildings. As a consequence of Berlin's division in 1963 the Potsdamer Platz became a „no man's land“ for more than four decades.

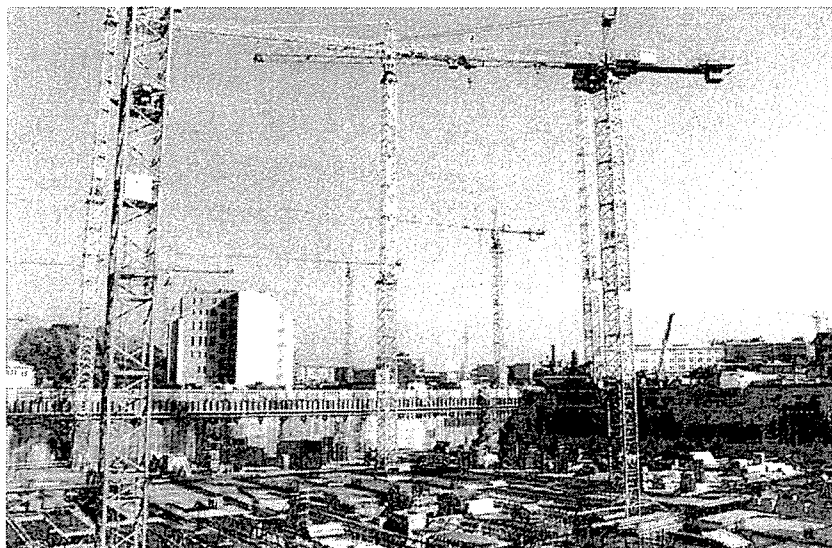


Die Berliner Mauer am Potsdamer Platz im Jahre 1967

Photo: Landesbildstelle Berlin

Today the Potsdamer Platz is the biggest building site in Europe. Important investors like Daimler and Sony acquired substantial sites for office blocks, restaurants, hotels and cinemas.

In 1988 Daimler Benz AG acquired the 68.000 m² areal at the Potsdamer Platz at a price of 1 billion marks and invested 3 billion marks to plan and build a new quarter.



On the whole a 340.000 m² area for service, dwellings and leisure facilities (casino, variété, musical theatre) has arisen and a vital inner-city infrastructure – attractively increased by green spaces and water landscapes – was created.

The redevelopment of central Berlin was subject of major international architectural design competitions. Together with the architect office Kohlbecker the winner, Renzo Piano, constructed the masterplan for the quarter.

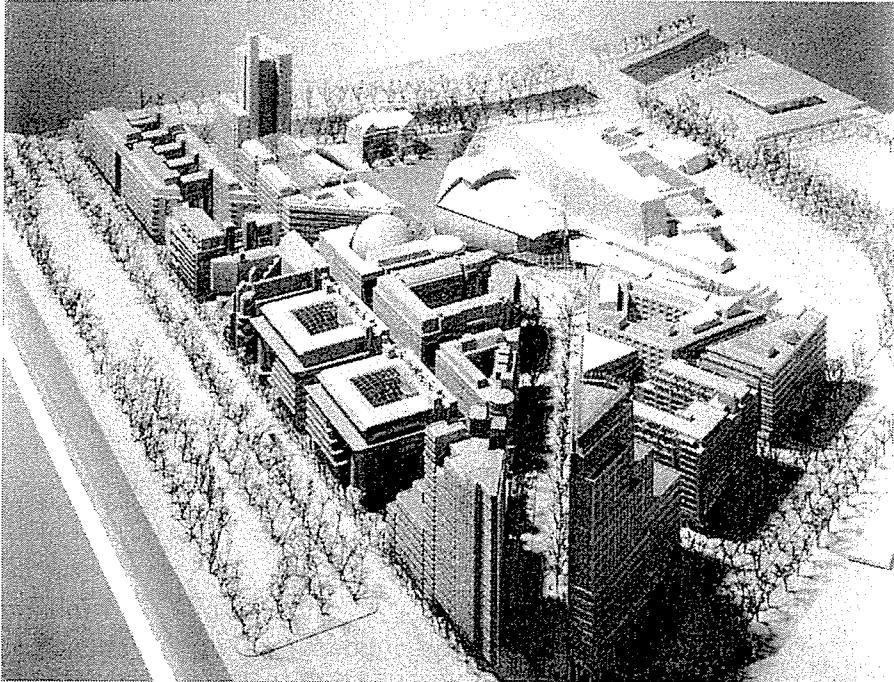
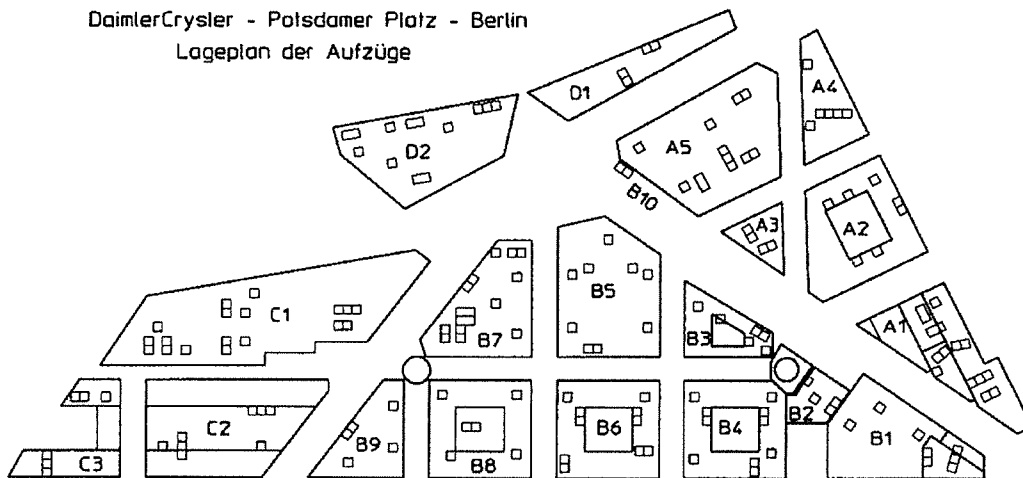


Photo: Andreas Muhs

Several well known architects were involved in the different construction phases with their own drafts.

DaimlerChrysler - Potsdamer Platz - Berlin
Lageplan der Aufzüge



2. THE ELEVATORS – ONE OF THE MOST SIGNIFICANT TENDER IN EUROPE OF THE LAST DECADE

At the end of 1994 the tender for lifts and escalators took place. Middle 1995 debis Immobilienmanagement GmbH (affiliated company of Daimler Benz AG) placed an order for 113 lifts with Schindler Germany. This was the biggest individual order Schindler Germany ever got. During the planning process the scope of the order extended up to 119 units.

SCOPE OF SUPPLY

(Table 1)

Lift Type	Capacity kg/person	Speed m/sec	Travel m	Drive	Control
4 Passenger Lifts	1000/13	3,15	81	Gearless ACVF	4 KS
5 Passenger Lifts	1000/13	2,50	65	ACVF	5 KS
4 Firemen's Lifts	1350/18	2,50	84	ACVF	1 KS
	1000/13	1,60	48	ACVF	1 KS
12 Panorama Lifts	1350/18	1,60	22	ACVF	2 KS
	630/8	1,60	26	ACVF	2 KS
2 Panorama Lifts	1025/13	1,00	12	ACVF	2 KS
2 Passenger Lifts	1000/13	0,85	7	ACVF	2 KS
15 Passenger Lifts	450/6 -	1,00	7 - 45	ACVF	1 KS - 2 KS
	1350/18				
48 Passenger Lifts	630/8 -	1,60	20 - 45	ACVF	1 KS - 3 KS
	1425/19				
4 Passenger Lifts	375/5	0,50	3 - 9	Hydraulic	1 KA
	800/10	0,63			1 KS
	1125/15	0,80			1 KS
16 Goods Lifts	1350/18	1,00	7 - 45	ACVF	1 KA - 1 KS
	3500/40				
2 Goods Lifts	3500/40	0,50	8	Hydraulic	2 KA
1 Goods Lift	6000/80	0,40	36	ACVF	1 KA
2 Service Lifts	100/0	0,40	4,5		
2 Dumbwaiters	150/0 -	0,20	7	Hydraulic	
	1300/0				
2 Escalators					

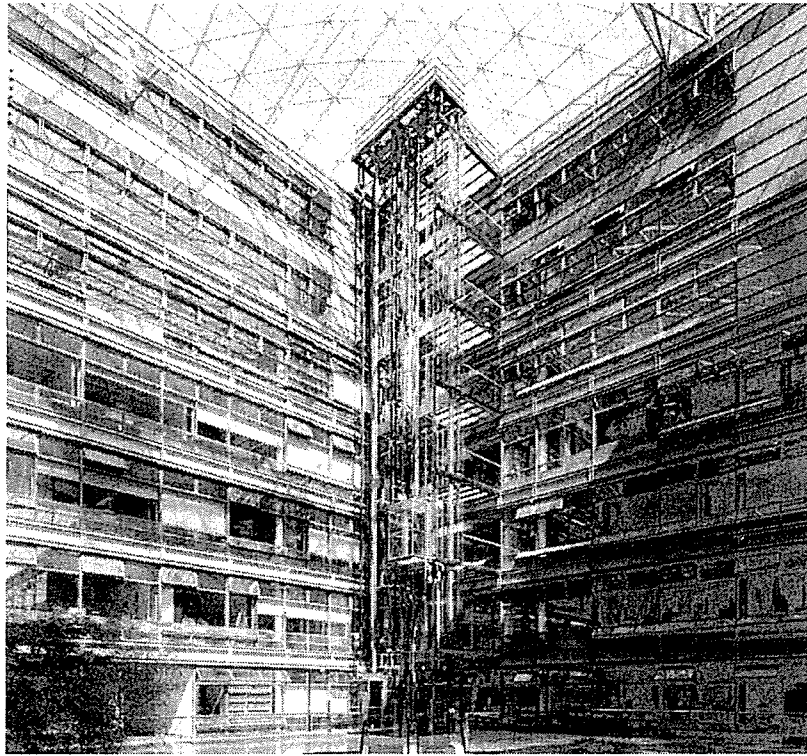
Following the architect's requirements, Schindler provided nearly the whole product range.

In high rise buildings – gearless lifts with speed of $v = 3,15\text{m/sec}$.

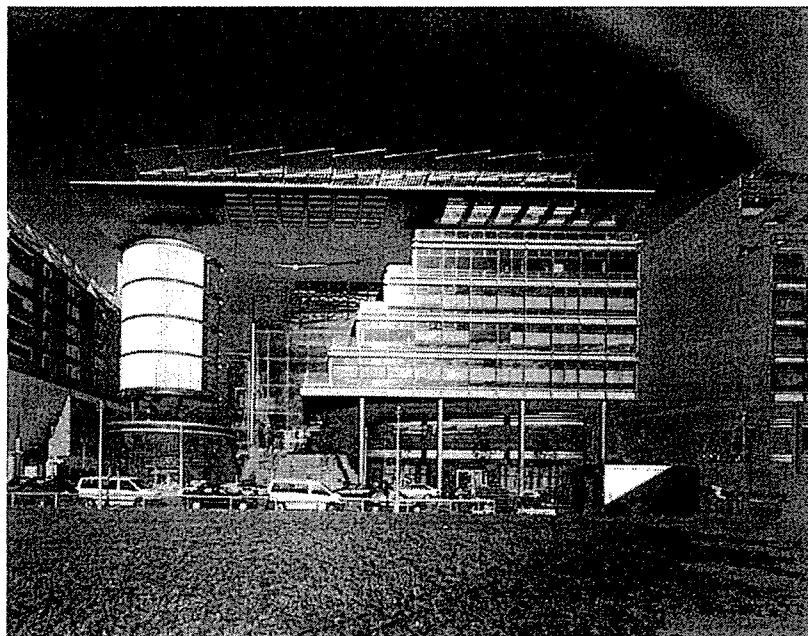
All other buildings – lifts with gear and speed of $v = 2,5\text{m/sec}$.

All drive systems are equipped with frequency controllers.

The biggest lift has been installed in the musical theatre. To cope with 6000 kg stage equipment, Schindler provided a cabin with 6 m length, 3 m width and 4,5 m height. In both construction sections B4 and B6 12 panorama lifts were erected.



The office buildings of architect Rogers show terraced open courts and from the panorama lifts one can have a nice view at the nearby planned parc.



With the finalization of our job and hand over of the lifts to the client we also solved the logistic problems:

Since the building site was just in the center a rather environmentally supplying and waste management was demanded.

As a support the „baulog“ was set up by the investors (DaimlerChrysler, Sony, Bundesbahn, ABB) at the Potsdamer Platz which coordinated all transports. Normally trucks do the transport, in this case a great deal was executed by ship and railway. The old „Anhalter-Güterbahnhof“ close to the Potsdamer Platz was reactivated for dispatching of construction

material. Since we rented storerooms in the old sheds incl. works siding, we were able to supply our material directly on site without additional intermediate storage warehouse. Our subsuppliers agreed to execute transport by rail to „Anhalter-Güterbahnhof“.

As exceptional the whole project was, as unusual were the ways to manage the marginal conditions.

Biographical details

Frank Keller, born in 1959 in Venezuela, apprenticeship technical drawing at IHK-Augsburg, Germany; Master degree of engineering, electrical engineer (Dipl.-Ing.), Frankfurt, Germany. Career started in 1986 at ELT, Elevator Company, Frankfurt, Germany, as technical engineer. In 1987 return to Venezuela as managing director of Combi-Lift C. A., Caracas, elevators and service (family-owned company). In 1990 move to Munich, Germany to work for MVP as technical engineer for subsystem drive and control for the magnetically levitated train TRANSRAPID.

1993 technical manager at C. Haushahn GmbH, Stuttgart, Germany, elevator company. Since 1995 with Schindler Berlin, Germany, member of managing board, responsible for Dual Brand business, Export Division and Baltic Schindler Operation.

Member of IAEE since 1993; member of several code and standard committees

Bernhard Kustos, born 1940 in Ratibor, apprenticeship technical drawing, final examination at IHK-Münster, Master degree of engineering (Dipl.-Ing.), Köln. Since 1972 with Schindler as a sales engineer for conveyor systems. Since 1995 in charge of Project Management Schindler Berlin (special task: project DaimlerChrysler AG)