



BRIDGE PROJECTS

HEAVY LIFTING DESIGN
KEY PROJECTS



Bridge Design & Engineering Services

wiecon



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Wiecon Introduction

About Us

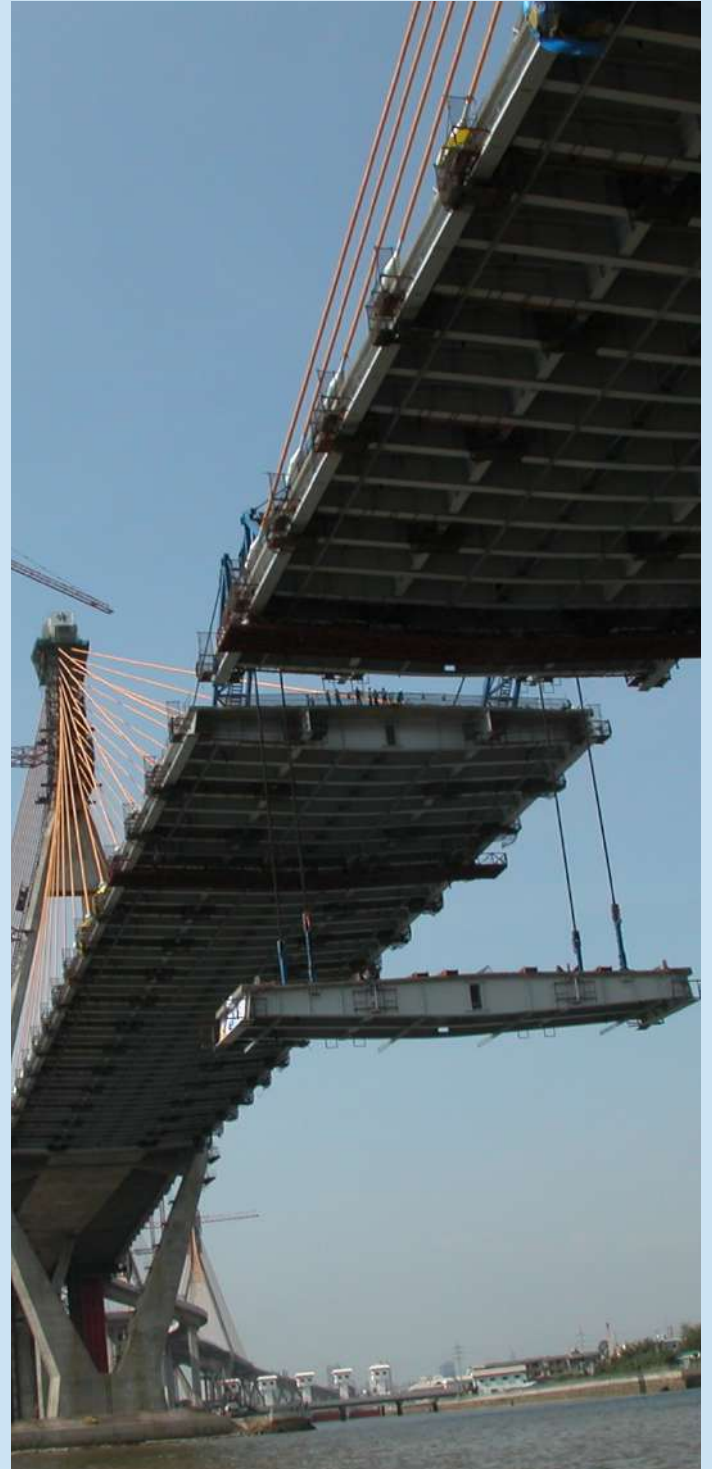
We don't just design bridges; we create engineering benchmarks that stand as testaments to innovation, precision, and excellence. With a legacy spanning three decades, we have emerged as leaders in the field of bridge engineering, driven by an unwavering commitment to pushing boundaries and exceeding expectations.

Our Approach

Our passion for bridge structures is matched only by our dedication to integrating cutting-edge designs and the latest technologies with our vast reservoir of experience and expertise. We provide comprehensive multi-disciplinary engineering consultancy services that encompass every facet of bridge engineering, construction processes, and project management.

30 Years of Excellence

With a rich portfolio spanning over 30 years, WIECON has been at the forefront of bridge engineering projects. Our in-house team of experts offers a diverse range of design services, including precast segmental, full-span erection, balanced cantilever, advanced shoring, incrementally launched, cable stay, suspension, and other specialized bridges. We handle projects from the initial preliminary studies and detailed design stages to the design of bridge construction equipment, major temporary works, and the supervision of the final erection stages.



Design & Engineering Services



Aircraft Field Radar Test Facility, Republic of Turkey

Client:

Nurol Construction

Services:

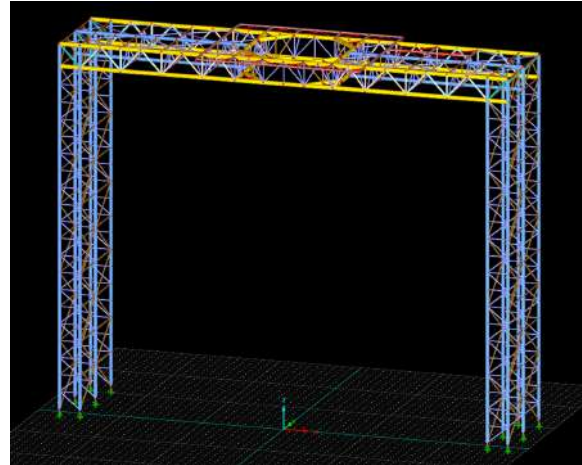
- (IPC) Independent Check Engineering

Specifications:

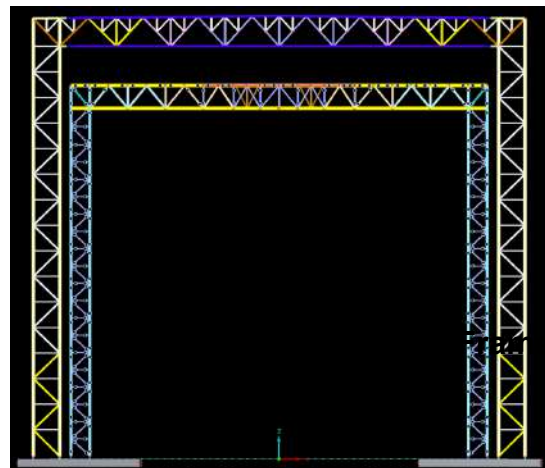
- Aircraft Heavy Lifting Design Check
- Outer Main Frame Design Check
- Inner Frame Design Check
- Entire Structure Design Check

Project Duration:

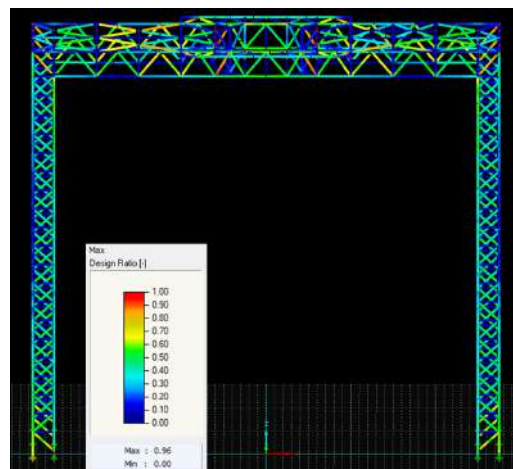
2022



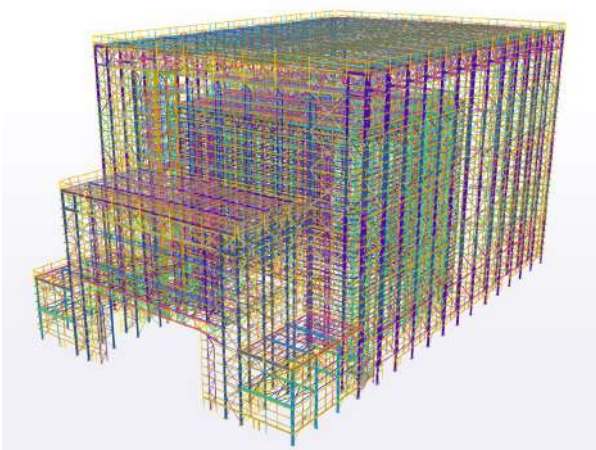
Aircraft Hanging Structure



Outer / Inner Structure



Design Model



Entire Structure



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Vijayawada Bypass Bridge, Andhra Pradesh, Republic of India

Client:

Navayuga Group Company LTD
(NEC)

Services:

- Launching Gantry Detail Design
- Launching Gantry Shop Drawings
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- **Precast Segmental Bridge Construction**
- Total Bridge Length: 3.5km
- Max Span: 60m
- Launching Gantry Weight: 1600 tons
- Deck Width: 17m

Project Duration:

2019-2023



Precast I Beam Segment Lifter, Kerala, Republic of India

Client:

Tech 9 Engineering Solutions

Services:

- Launching Gantry Detail Design
- Launching Gantry Shop Drawings
- Contractors Engineer

Specifications:

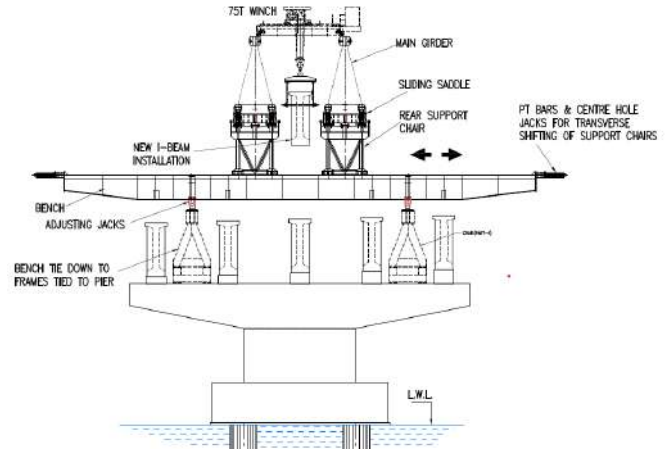
- **Precast I Beam Girders**
- **Mogral Bridge:**
- Total Bridge Length: 215m
- Span: 3*40 m + 2*27.5 m +40 m

- **Shriya Bridge:**
- Total Bridge Length: 329.6m
- Spans: 8*41.2 m = 329.6m

- **Upla Bridge:**
- Total Bridge Length: 146m
- Spans: 13 m + 3*40 m + 13 m

- **Kumpala Bridge:**
- Total Bridge Length: 266m
- Spans: 7* 38m

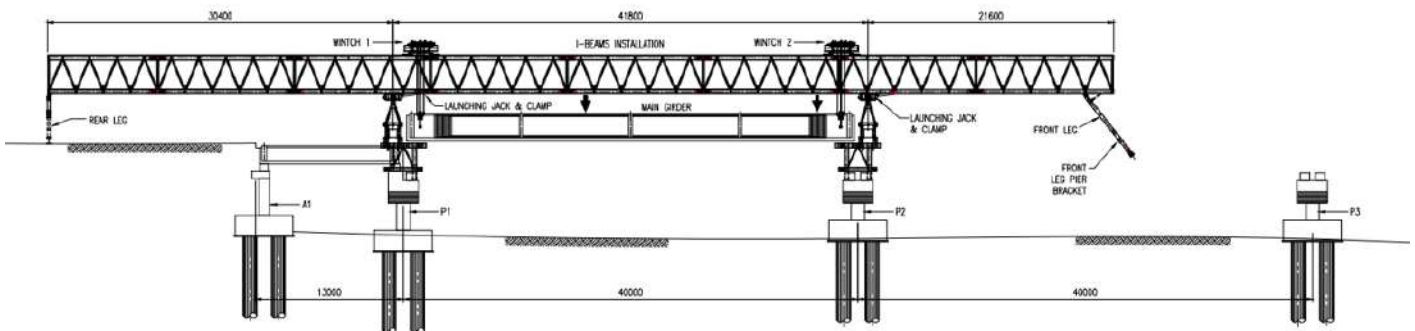
- Total Project Length: 957m
- Launching Gantry Length: 93.8m
- Maximum Lifting Capacity: 120t



Section of Launching Gantry



Project Duration: 2022-2023



Elevation of Launching Gantry



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Dwarka Cable Stay Bridge, State of Gujrat, Republic of India

Client:

SP Singla Construction Pvt Ltd.

Services:

- Construction Engineering
- Detail Design
- Shop Drawings
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- Total Bridge Length: 900m
- **Second Longest Bridge In India**
- Span Configuration:
50m+50m+100m+500m+100m+50m+
50m
- Deck Width: 29.6m
- Pylon Heights: 128m (From Deck Level)

Project Duration:

2019-2023



Kuwait Intl Airport, Roof Segment Heavy Lifting, Republic of Kuwait

Client:

Limak Construction

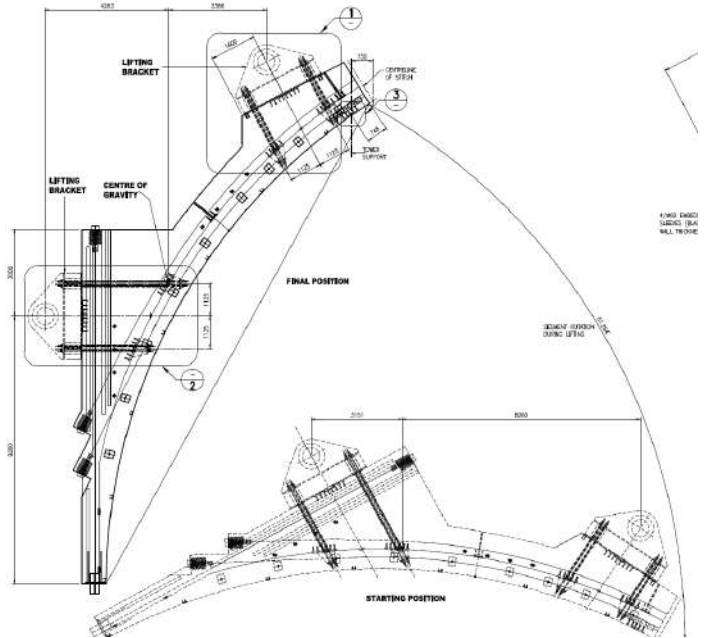
Services:

- Construction Engineering
- Roof Segment Heavy Lifting Design
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- Max Weight of an Arch Segment: 350t

Project Duration: 2018-2020



Typical Roof Arch Segment



Tainan Expo Center, Roof Truss Segment Heavy Lifting, Taiwan

Client:

DSI Taiwan

Services:

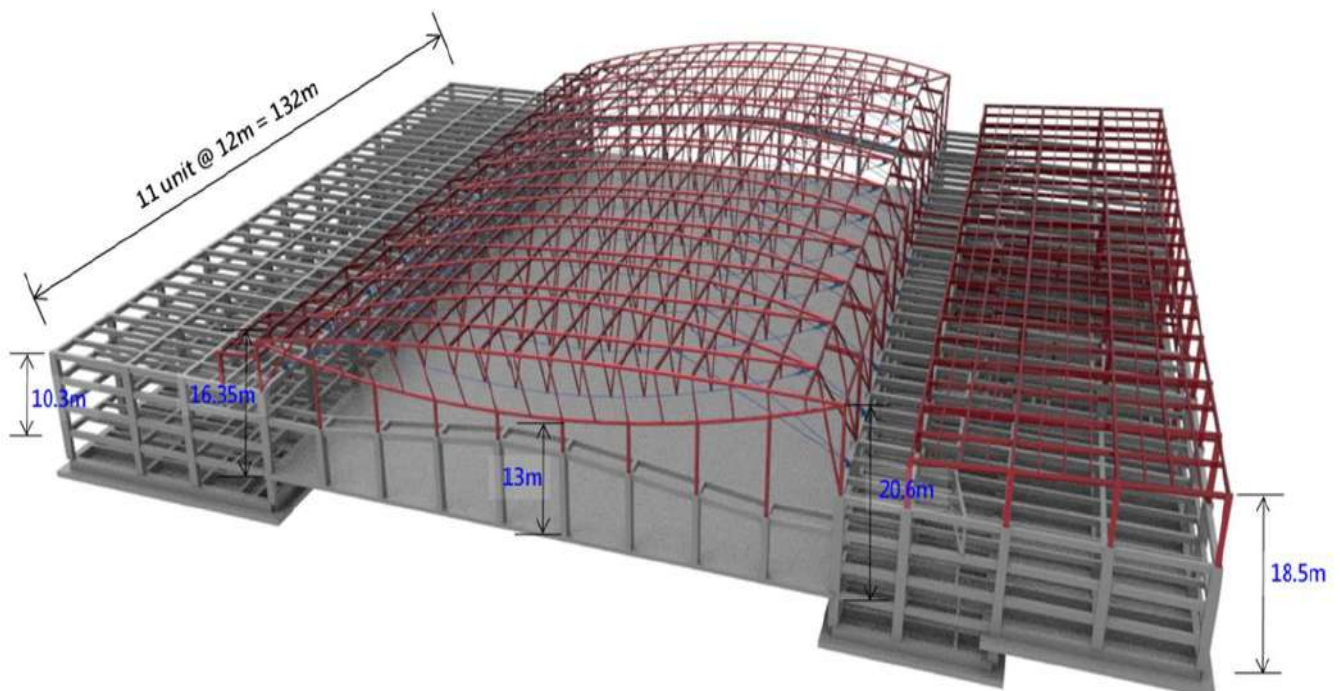
- Construction Engineering
- Roof Segment Heavy Lifting Design
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- Max Lifting Design Weight: 1500t
- 11 Units @ 12m Spacing
- Total Length: 132m

Project Duration:

2018-2020



Izmit Bay Crossing South Approach Viaduct, ILM Bridge

Client:

Nurol Insaat ve Ticaret AS.
MegaYapi Const & Trading Co.

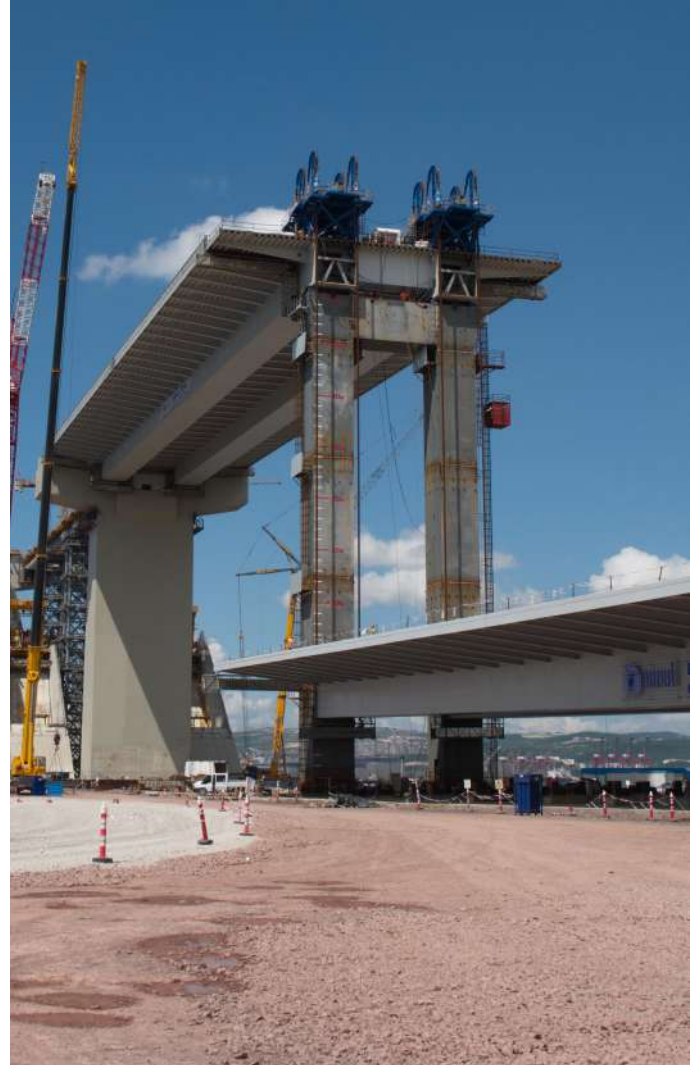
Services:

- Construction Engineering
- Deck ILM Launching Equipment Design
- Detail Design
- Shop Drawings
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- Total Bridge Length: 1.378km
- Span Configuration:
126.92m+136m+132m+128m+124m+1
20m+116m+112m+108m+104m+100m
+72m
- Max Span: 136m / Min Span: 72m
- Deck Width: 35.93m
- Max Pier Height: 50m

Project Duration: 2012-2017



Korabelny Fairway Cable Stay Bridge, St Petersburg, Russia

Client:

ICA Construction & Megayapi

Services:

- Construction Engineering
- Deck Erection Equipment Design
- Contractors Engineer
- Major Temporary Works Design
- Site Supervision

Specifications:

- Total Bridge Length: 620m
- Span Configuration:
150m+320m+150m
- Deck Width: 39m
- Pylon Height: 100m Approx (From Deck Level)

Project Duration:

2015-2017





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Petrovsky Fairway Cable Stay Bridge, St Petersburg, Russia

Client:

ICA Construction & Megayapi

Services:

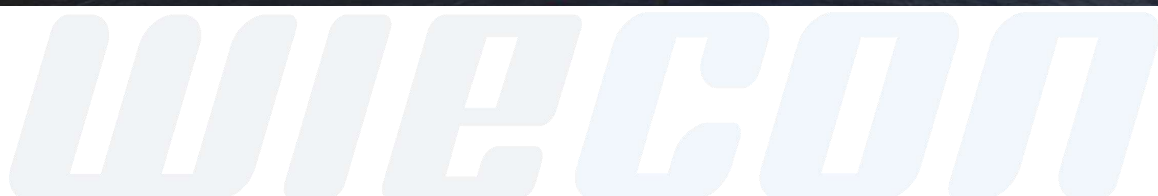
- Construction Engineering
- Deck Erection Equipment Design
- Contractors Engineer
- Major Temporary Works Design
- Site Supervision

Specifications:

- Total Bridge Length: 460m
- Span Configuration:
110m+240m+110m
- Deck Width: 48m
- Pylon Height: 110m Approx (From Deck Level)

Project Duration:

2015-2017



Golden Horn Metro Project, Istanbul, Republic of Turkey

Client:

Astaldi Gulermak Joint Venture

Services:

- Construction Engineering
- Shop Drawings
- Lifting Equipment Design

Specifications:

- **South Concrete Approach Viaduct**
- 17+25+25+42+32+27.9 Meter spans
- 68.9m Total Bridge Length.
- **Steel Swing Bridge**
- 50+70 Meter Spans
- 120m Total Bridge Length
- **Steel Cable Stay Bridge**
- 90+180+90 Meter Spans
- 360m Total Bridge Length
- **North Concrete Approach Viaduct**
- 27+36+36+36+36+45+28.5+23.5
- Meter spans
- 268m Total Project Length
- **Total Project Length: 916.9m**
- Deck Width: 14.3m
- Walkways Width: 3.4m (Each side)
- Total Deck Width: 21.1m

Project Duration: 2007-2014



Linkou Power Plant, Renewal Project, New Taipei City, Taiwan

Client:

Kung Shin Construction

Services:

- Construction Engineering
- Steel Roof Lifting Equipment Design
- Climbing Formwork System Design
- Contractors Engineer

Specifications:

- Total of 10 Coal Storage Silos
- Each Silo Diameter: 46m
- Silo Concrete Wall Thickness: 0.6m at the base ~1.6m at the top
- Each Silo Height: 72m from the Ground

Project Duration: 2012-2014



Industrial Ring Road Cable Stay Bridges, Bangkok, Thailand

Client:

Taisei Corporation

Services:

- **Two Cable Stay Bridges**
- Construction Engineering
- Shop Drawings
- Contractors Engineer
- Major Temporary Works Design

Specifications:

- **Northern Cable Stay Bridge**
- Total Bridge Length: 576m
- Span Configuration:
125m+326m+125m
- Deck Width: 37.4m
- Pylon Height: 176m (From Deck Level)

- **Southern Cable Stay Bridge**
- Total Bridge Length: 702m
- Span Configuration:
152m+398m+152m
- Deck Width: 37.4m
- Pylon Height: 163m (From Deck Level)

Total Length for Both Bridges: 1.278 km

Project Duration:

2002-2006



Kao Ping Hsi Cable Stay Bridge, Pintung, County, Taiwan

Client:

Taisei, Kawada, Raito, Pan Asia,
Joint Venture

Services:

- Construction Engineering
- Major Temporary Works Design
- Contractors Engineer
- Erection Equipment Design
- Major Temporary Works Design
- Site Supervision
- Wind Tunnel Testing

Specifications:

- Total Bridge Length: 510m
- Span Configuration: 180m+330m
- Deck Width: 34.5m
- Pylon Height 183.5m (From Deck Level)

Project Duration:

1996-2000





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