



# ***NATIONAL STEEL BRIDGE ALLIANCE***

## World's Longest Bridge Spans

<b><u>Type of Bridge</u></b>	<b><u>Page</u></b>
<b>Suspension</b>	<b>1</b>
<b>Cable-stayed steel girder and truss</b>	<b>7</b>
<b>Cable-stayed prestressed concrete girder</b>	<b>13</b>
<b>Bridges with shop-fabricated PWS cables</b>	<b>16</b>
<b>Steel arch</b>	<b>19</b>
<b>Concrete arch</b>	<b>22</b>
<b>Cantilever truss</b>	<b>24</b>
<b>Continuous truss</b>	<b>27</b>
<b>Simple truss</b>	<b>29</b>
<b>Continuous steel plate- and box-girder</b>	<b>31</b>
<b>Prestressed concrete girder</b>	<b>35</b>

Compiled by: *Jackson Durkee, C.E., P.E.*  
*Consulting Structural Engineer*  
*217 Pine Top Trail*  
*Bethlehem, Pennsylvania 18017*

Note: Information has been taken from sources believed to be reliable but cannot be guaranteed.

## SUSPENSION BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Messina Strait	Sicily - mainland Italy	UD	10827	Stretto di Messina, SpA	
Akashi Strait <sup>1</sup>	Kobe-Naruto Route, Japan	1998	6532	Honshu-Shikoku Bridge Authority	
Izmit Bay	Turkey	UD	5538	Anglo Japanese Turkish Consortium - Kvaerner, Enka, IHI, MHI, NKK	Design engineer <sup>15</sup>
Great Belt (East Bridge) <sup>5</sup>	Denmark	1998	5328	COWIConsult	Coinfra SpA - SDEM
Humber	Hull, England	1981	4626	Freeman Fox	British Bridge Builders
Jiangyin <sup>1,5</sup>	Jiangyin, China	1999	4544	Highway Planning & Design Institute - Tongyi University - Jiangsu Province - Mott MacDonald	Kvaerner Cleveland Bridge - Shanghai Pujiang Cable
Tsing Ma <sup>2</sup>	Hong Kong	1997	4518	Mott MacDonald	Kvaerner Cleveland Bridge
Verrazano Narrows	New York City	1964	4260	Ammann & Whitney	American Bridge - Bethlehem - Harris
Golden Gate	San Francisco	1937	4200	Joseph B. Strauss, Charles Ellis	Bethlehem - Roebling
Höga Kusten <sup>5</sup>	Veda, Sweden	1997	3970	Kjessler & Mannerstråle - COWIConsult	Scandinavian Bridge Joint Venture
Mackinac Straits	Mackinaw City, Mich.	1957	3800	Steinman	American Bridge
South Bisan-Seto <sup>1,2</sup>	Kojima-Sakaide Route, Japan	1988	3609	Honshu-Shikoku Bridge Authority	Mitsubishi - IHI - Nippon Steel - Kobe Steel - Yokogawa - Kawasaki
Fatih Sultan Mehmet (Bosporus II)	Istanbul	1988	3576	Freeman Fox	IHI - Mitsubishi - Nippon Kokan
Ataturk (Bosporus I)	Istanbul	1973	3524	Freeman Fox	Hochtief - Cleveland
George Washington	New York City	1931, 1962 <sup>3</sup>	3500	O. H. Ammann	McClintic-Marshall - Roebling (1931); Bethlehem (1962)
Kurushima No. 3 <sup>1</sup>	Onomichi-Imabari Route, Japan	1999	3379	Honshu-Shikoku Bridge Authority	
Kurushima No. 2 <sup>1</sup>	Onomichi-Imabari Route, Japan	1999	3346	Honshu-Shikoku Bridge Authority	
25 de Abril <sup>2</sup>	Lisbon	1966, 1998 <sup>13</sup>	3323	Steinman	American Bridge (1966); Consortio Teja (1998)
Forth Road	near Edinburgh, Scotland	1964	3300	Freeman Fox	A.C.D. Bridge
North Bisan-Seto <sup>1,2</sup>	Kojima-Sakaide Route, Japan	1988	3248	Honshu-Shikoku Bridge Authority	Kawasaki - Hitachi - Mitsubishi - IHI

**SUSPENSION BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Severn	near Bristol, England	1966	3240	Freeman Fox	Associated Bridge Builders
Shimotsui-Seto <sup>2</sup>	Kojima-Sakaide Route, Japan	1988	3084	Honshu-Shikoku Bridge Authority	NKK - Mitsui - Nippon Steel - Kobe Steel - Miyaji
Xiling <sup>1,5</sup>	Yangtse River, China	1996	2953	MBRDI - Wuhan	3 <sup>rd</sup> Construction - MBEB
Boca Tigris <sup>1,5</sup>	Guangdong Province, China	1997	2913	Highway Planning & Design Institute	Gordon Wu - Hopewell
Ohnaruto <sup>1,2</sup>	Kobe-Naruto Route, Japan	1985	2874	Honshu-Shikoku Bridge Authority	Mitsubishi - Kawasaki - Nippon Steel - Kobe Steel - Yokogawa - Miyaji
Tacoma Narrows	Tacoma, Wash	1950	2800	Washington Toll Bridge Authority - Dexter R. Smith	Bethlehem - Roebling
AskNy	Norway	1992	2789		Monberg & Thorsen
Kami-Yoshinogawa <sup>4,6</sup>	Kochi Prefecture, Japan	1971	2733	Yokogawa - Miyaji	Design engineer
Innoshima <sup>1</sup>	Onomichi-Imabari Route, Japan	1983	2526	Honshu-Shikoku Bridge Authority	Hitachi - NKK - Nippon Steel - Kobe Steel - Kawada
Akinada	Japan	1996	2461		
Hakucho <sup>1</sup>	Hokkaido Prefecture, Japan	1996	2362		
Angostura	Ciudad Bolivar, Venezuela	1967	2336	Sverdrup & Parcel	American Bridge
Kanmon Strait <sup>1</sup>	Honshu - Kyushu, Japan	1973	2336	Japan Highway Public Corporation	Mitsubishi - IHI - Nippon Steel - Kobe Steel - Yokogawa - Miyaji
West Bay	San Francisco - Oakland	1936	2 @ 2310	C. H. Purcell - G. B. Woodruff	American Bridge
Bronx-Whitestone	New York City	1939	2300	O. H. Ammann - A. Dana - L. S. Moisseiff	American Bridge
Pierre Laporte	Quebec City	1970	2190	Demers-Vandry-Gronquist	Janin - Cleveland - Dominion
Delaware Memorial I	Wilmington, Del.	1951	2150	HNTB	American Bridge
Seaway Skyway	Ogdensburg, N.Y.	1960	2150		
Delaware Memorial II	Wilmington, Del.	1968	2150	E. Lionel Pavlo	Bethlehem
Gjemnessundet	Krifast, Norway	1992	2044	DOPR	Selmer Moere - Sterkoder - Linjebogg
Walt Whitman	Philadelphia	1957	2000	Ammann & Whitney - Modjeski & Masters	Bethlehem - American Bridge
Tancarville <sup>5</sup>	Le Havre, France	1959	1995	Baudin Chateauneuf - CFEM	Design engineer

**SUSPENSION BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
New Lillebaelt <sup>5</sup>	Little Belt, Denmark	1970	1969	Ostenfeld & Jonson	Monberg & Thorsen
Kurushima No. 1 <sup>1</sup>	Onomichi-Imabari Route, Japan	1999	1969	Honshu-Shikoku Bridge Authority	
Rainbow <sup>1</sup>	Tokyo	1993	1870	Metropolitan Expressway Public Corp.	
Ambassador	Detroit	1929	1850	McClintic-Marshall	Design engineer
Hakata-Oshima <sup>1</sup>	Onomichi-Imabari Route, Japan	1988	1837	Honshu-Shikoku Bridge Authority	Sumitomo - Mitsubishi - Miyaji - Yokogawa
Yong Jong Grand <sup>2, 16</sup>	Yong Jong Island, Korea	UC(2001)	1804	Yooshin Corp.	Samsung - Hanjin
Throgs Neck	New York City	1961	1800	Ammann & Whitney	American Bridge - Bethlehem
Tokyo Harbor <sup>1</sup>	Tokyo	1994	1772	Metropolitan Expressway Public Corp.	Mitsui - Kawasaki - Yokogawa - IHI
Benjamin Franklin	Philadelphia	1926	1750	Modjeski - Webster - Ball	Bethlehem - American Bridge - Keystone
Skiomen	Narvik, Norway	1972	1722	Arild & Grove	Erik Ruuds Mek. Verksted
Kvalsund	Hammerfest, Norway	1977	1722		
President Mobuto Sese Seko <sup>1</sup>	Matadi, Zaire	1983	1706	IHI Consortium	Design engineer
Emmerich	Emmerich, Germany	1964	1640	H. Homberg	Hein Lehmann
Bear Mountain	Peekskill, N.Y.	1924	1632	H. C. Baird - F. P. Witmer - H. D. Robinson	Bethlehem - Roebling
Williamsburg <sup>2</sup>	New York City	1903	1600	L. L. Buck	Pennsylvania Steel - Roebling
Wm. Preston Lane, Jr. Memorial I	Chesapeake Bay, Md.	1952	1600	Greiner - Dexter R. Smith	Bethlehem
Newport <sup>1,6</sup>	Narraganset Bay, R.I.	1969	1600	PBQ&D	Bethlehem
Wm. Preston Lane, Jr. Memorial II <sup>1,6</sup>	Chesapeake Bay, Md.	1973	1600	Greiner	American Bridge
Brooklyn <sup>2</sup>	New York City	1883	1595½	John A. Roebling	Design engineer
Lion's Gate	Vancouver, British Columbia	1938	1550	Monsarrat & Pratley	Dominion Bridge - Hamilton Bridge
Sotra	Bergen, Norway	1971	1535		
Hirado Ohashi	Hirado Island, Japan	1977	1526	Nagasaki Prefecture	Mitsubishi - Nippon Steel - Sasebo

**SUSPENSION BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Vincent Thomas	San Pedro, Calif.	1963	1500	California Division of Highways - G. B. Woodruff	Kaiser - Yuba - Roebling
Mid-Hudson	Poughkeepsie, N.Y.	1930	1495	Modjeski & Moran	American Bridge
Manhattan <sup>2</sup>	New York City	1909	1470	L. L. Buck - L. S. Moisseiff	Phoenix Bridge - Terry & Tench
Angus L. MacDonald	Halifax, Nova Scotia	1955	1447		Dominion Bridge
Male Kap Shui Mun	Hong Kong	1997	1447	Mott MacDonald	
A. Murray Mackay	Halifax, Nova Scotia	1970	1400	Pratley & Dorton	Canadian Bridge
Triborough	New York City	1936	1380	O. H. Ammann - A. Dana - L. S. Moisseiff	American Bridge
Alvsborgsbron <sup>5</sup>	Gothenburg, Sweden	1966	1370		
Hadong-Namhae	Pusan, South Korea	1973	1325	Nippon Steel - IHI	IHI
Baclan <sup>5</sup>	Bordeaux	1967	1292		
Amu-Daria River	Turkistan	1964	1280		
Cologne-Rodenkirchen	Cologne	1954,1992 <sup>7</sup>	1240	H. Homberg; Rendel Palmer & Tritton	Strabag - Thyssen (1954); Cleveland (1992)
St. Johns	Portland, Ore.	1931	1207	Robinson & Steinman	Wallace Bridge - Roebling - La Pointe
Wakato Narrows	Kitakyushu City, Japan	1962,1990 <sup>8</sup>	1204	Japan Highway Public Corporation	Yokogawa
Mount Hope	Mount Hope Bay, R.I.	1929	1200	Robinson & Steinman	Bethlehem - Keystone
International	Ogdensburg, N.Y.	1960	1150	Modjeski & Masters - P. L. Pratley	American Bridge
Hercilio Luz	Florianopolis Island, Brazil	1926	1114	Robinson & Steinman	American Bridge
Bidwell Bar <sup>6</sup>	Oroville, Calif.	1965	1108	Calif. Dept. of Water Resources	Bethlehem
Varodd	Kristiansand, Norway	1956	1106		
Tamar <sup>5</sup>	Saltash, England	1962	1100		
Deer Isle	Penobscot Bay, Maine	1939	1080	Robinson & Steinman	Phoenix Bridge
Rombaks <sup>5</sup>	Nordland, Norway	1964	1066		
Maysville	Maysville, Ky.	1931	1060	Modjeski, Masters & Chase	Roebling - Bethlehem
Ile D'Orleans	Quebec City	1936	1059	Monsarrat & Pratley	Dominion Bridge

**SUSPENSION BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
John A. Roebling	Cincinnati	1866,1898 <sup>8</sup>	1057	John A. Roebling (1866); Wm. Hildenbrand (1898)	John A. Roebling (1866); Wm. Hildenbrand (1898)
Otto Beit	Chirundu, Zimbabwe	1939	1050	Freeman Fox	Dorman Long
Dent	Orofino, Idaho	1971	1050	HNTB	Fought
Cologne-Mülheim	Cologne	1951	1034	M.A.N.	Design engineer
Mampimi	Mampimi, Mexico	1900	1030	Henry G. Tyrrell	Wm. Hildenbrand
Wheeling <sup>9</sup>	Wheeling, W.Va.	1849,1856	1010	Charles Ellet	Design engineer
Bidwell Bar	Oroville Gorge, Calif.	1854,1965 <sup>14</sup>	1010		
Konohana <sup>10</sup>	Osaka	1987	984	Hanshin Expressway Public Corp.	Hitachi - Mitsubishi
Elizabeth	Budapest	1964	951	Uvaterv - Fömterv	Ganz-Mavag - Massányi - Fekete - Vogt
Tjeldsund	Bjerkvik, Norway	1967	951		
Gran'Mere	Quebec City	1929	949	Robinson & Steinman	Roebling
Cauca River	Colombia	1894	940		
Peace River	Alberta, Saskatchewan	1950	932		
Cornwall-Massena International	Massena, N.Y.	1958	900	Steinman	
Terenez	Aulne, France	1952	892		
Brevik <sup>5</sup>	Telemark, Norway	1962	892		
Royal Gorge	Canon City, Colo.	1929	880	G. E. Cole	Midland Bridge
Higashi-Ohi <sup>1</sup>	Kumamoto Prefecture, Japan	1976	866		Kurimoto
Kjerringstraumen	Nordland, Norway	1975	853		
Rognonas	Viviers, France	1949	833		
Kamiyoshinagawa	Kochi Prefecture, Japan	1972	832		
Cuscatlan	El Salvador	1943	820	American Bridge	Design engineer
Dome	Dome, Ariz.	1929	800	Arizona Highway Department	Roebling
Waldo-Hancock	Bucksport, Maine	1931	800	Robinson & Steinman	American Bridge
Thousand Islands	Clayton, N.Y.	1938	800	Robinson & Steinman - Monsarrat & Pratley	American Bridge

## SUSPENSION BRIDGES (cont'd)

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Kosui Ohdan <sup>1</sup>	Kochi Prefecture, Japan	1983	787		
Iron Gate II	Gogosu branch of Danube River, Romania	1994	787	Victor Popa	Sorin Heinman - ENERGO-MONTAGE
Anthony Wayne	Toledo, Ohio	1930	785	Waddell & Hardesty	McClintic-Marshall
Mobile River	Alabama	1991	780		
Parkersburg	Parkersburg, W. Va.	1916	775		
Fykesund	Norway	1937	750		
Iowa-Illinois Memorial I	Moline, Ill.	1935	740	Modjeski, Masters & Chase	Bethlehem
Iowa-Illinois Memorial II	Moline, Ill.	1959	740	Modjeski & Masters	Bethlehem
South 10th Street	Pittsburgh	1933	725	Allegheny County	American Bridge
Kirjala Sound	Finland	1964	722		
Fukase <sup>1</sup>	Ishikawa Prefecture, Japan	1979	709	Matsuo Bridge	Design engineer
Rondout	Kingston, N.Y.	1921	705	Robinson & Steinman	Terry & Tench
General U.S. Grant <sup>6,11</sup>	Portsmouth, Ohio	1927	700	Robinson & Steinman	Dravo - American Bridge
Fort Steuben <sup>12</sup>	Steubenville, Ohio	1928	689	Dravo	Design engineer
Hakogase	Fukui Prefecture, Japan	1967	676		

- 1 Shop fabricated PWS cables
- 2 Highway & railway
- 3 Lower deck installed
- 4 1 PWS cable, 1 aerial-span cable
- 5 Concrete towers
- 6 Plastic cable covering
- 7 Widened by adding tower legs and cables
- 8 Widened to 4 lanes, additional cables installed
- 9 First bridge span in the world to exceed 1,000 ft; destroyed by wind 1854, rebuilt (by Ellet) 1856
- 10 Shop-fabricated PWS monocable
- 11 Cables replaced 1940 and again 1979 by American Bridge
- 12 Cables replaced 1941
- 13 Additional cables and lower deck installed
- 14 Moved to new location
- 15 Design, build, operate, transfer
- 16 Self anchored
- UD Under design
- UC Under construction

## CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Tatara <sup>1</sup>	Onomichi-Imabari Route, Japan	1999	2920	Honshu-Shikoku Bridge Authority	
Normandie <sup>2,3</sup>	Le Havre, France	1995	2808	Setra - Sofresid - COWIConsult	GIE du Pont de Normandie
Qing Zhou Min Jiang	China	1996	1985		
Yangpu <sup>2,4</sup>	Shanghai	1993	1975	Shanghai Municipal Engineering Design Institute - DRC Consultants	Hudong Shipyard - Shanghai Metallurgical & Building Construction
Xu Pu	China	1996	1936		
Meiko-chuo <sup>1</sup>	Tokyo	1997	1936		
Gulf of Corinth <sup>2,14</sup>	Greece	UD	3 @ 1837	Soci�t� d'Etudes et d'Equipements	Dumel GTM
Skarnsundet	Trondheim, Norway	1991	1739	Johs. Holt	Aker Entrepren�r
Tsurumi-Kroo <sup>1</sup>	Yokohama	1994	1673		
Ikuchi <sup>1</sup>	Onomichi-Imabari Route, Japan	1992	1608	Honshu-Shikoku Bridge Authority	
�resund <sup>2, 5</sup>	Sweden - Denmark	UC(2000)	1608	Sudlink Contractors HB	Design engineer
Higashi Kobe <sup>1,5</sup>	Kobe	1993	1591	Hanshin Expressway Public Corp.	
Ting Kau <sup>2,4</sup>	Hong Kong	1998	1558, 1470	Schlaich Bergermann	Ting Kau Contractors
Arade	Portimao, Portugal	1992	1542		
Seohae Grand <sup>2</sup>	South Korea	1999	1542	T. Y. Lin - DRC Consultants	Daelim Engineering
Alex Fraser <sup>2</sup>	Vancouver, British Columbia	1986	1526	CBA - Buckland & Taylor	PCL - Paschen - Pike
Yokohama Bay <sup>1,5,6</sup>	Yokohama	1989	1509	Shin Nihon Giken	Mitsubishi - NKK
Second Hooghly	Calcutta	1993	1500	Freeman Fox - Leonhardt & Andr�	Bhagirathi Bridge
Second Severn <sup>2</sup>	England - Wales	1996	1496	Halcrow - SEEE	Laing - GTM
Rama IX (Chao Phya)	Bangkok	1987	1476	P. Fraenkel - H. Homberg	Hitachi Zosen
Queen Elizabeth II	London	1991	1476	Cleveland - H. Homberg	Cleveland
Kap Shui Mun <sup>7</sup>	Hong Kong	1997	1411	Mott MacDonald - Flint & Neill	Kumagai - Maeda - Yokogowa - Hitachi
Nanpu <sup>4</sup>	Shanghai	1991	1388	Shanghai Municipal Engineering Design Institute	Hudong Shipyard
Iwakurojima <sup>1,5,7</sup>	Kojima-Sakaide Route, Japan	1988	1378	Honshu-Shikoku Bridge Authority	IHI consortium



**CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Hitsuishijima <sup>1,5,7</sup>	Kojima-Sakaide Route, Japan	1988	1378	Honshu-Shikoku Bridge Authority	IHI consortium
Meiko Higashi <sup>1</sup>	Aichi Prefecture, Japan	1994	1345		
Volga River <sup>2,5,7</sup>	Ulianovsk, Russia	1993	2@1335	Giprotransmost	Ulianovskmoststroj
Meiko Nishi <sup>1</sup>	Nagoya	1985	1329	Japan Highway Public Corp.	IHI - NKK
Saint Nazaire	Saint Nazaire, France	1977	1325	CFEM	Design engineer
Rande <sup>2,8</sup>	Vigo, Spain	1978	1313		
Fred Hartman	Baytown - LaPorte, Tex.	1995	1250	Greiner - Leonhard & Andrä	Williams Bros. - Traylor Bros.
Hale Boggs	Luling, La.	1983	1222	Frankland & Lienhard - Modjeski & Masters	Williams Bros. - IHI - Melbourne Bros.
Dusseldorf-Flehe <sup>2</sup>	Düsseldorf	1979	1207	Leonhardt & Andrä	
Tjorn <sup>2</sup>	Askerø Fjord, Sweden	1981	1201	Skanska Cementgjuteriet - Krupp	Design engineer
WilliamNatcher	Owensboro, Ky. - Rockport, In.	UC(2001)	1200	Parsons Brinckerhoff Quade & Douglas	Traylor Bros.
Panuco River <sup>2,3</sup>	Tampico, Mexico	1988	1181	COMEC - Sogelerg	ICA Group
Yamatogawa <sup>1,9</sup>	Osaka	1982	1165	Mitsubishi	Design engineer
Sloboda	Novi Sad, Yugoslavia	1981	1152	Institute Kirilo Savic - N. Hajdin	Mostogradnja - Ganz-MAVAG - Stahlton
Duisburg-Neuenkamp	Duisburg, Germany	1970	1148	Gutehoffnungschütte - Oberhausen	Design engineer
Ajigawa Tenpozan <sup>1</sup>	Osaka	1990	1148	Hanshin Expressway Authority	Hitachi consortium
Jindo	South Korea	1984	1132	Rendel Palmer & Tritton	Hyundai
West Gate <sup>10</sup>	Melbourne	1978	1102	Freeman Fox - Redpath Dorman Long	John Holland - Redpath Dorman Long
Zarate - Brazo Largo <sup>1,2,7</sup> (twin <sup>11</sup> )	Buenos Aires	1976,1977 <sup>11</sup>	1083	R. Morandi - Leonhardt & Andrä	Techint - H. Albano Ingeneria
Parana Guazu <sup>7</sup>	Rio Parana Gauzu, Argentina	1977	1083		
Köhlbrand	Hamburg	1974	1066	Rheinstahl - Hein Lehmann	Design engineer
Karnali River <sup>6,9,12</sup>	Nepal	1993	1066	Steinman	Kawasaki
Chakra	Assam, India	1996	1050	Steinman	
Kniebrücke	Düsseldorf	1968	1047	Leonhardt & Andrä	Demag - Hein Lehmann

**CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Daugara River	Riga, Latvia	1981	1024	Sojuzdorproject Institute	Mostostroj
Mezcala	Mexico	1993	1022	Europe Etudes Gecti	ICA Freyssinet de Mexico
Erskine	Glasgow	1971	1000	Freeman Fox	Fairfield-Mabey
Slovak National Uprising <sup>12</sup> ("New Bridge")	Bratislava, Slovakia	1972	994	A. Tesar	Vitkovice
Cologne-Severin	Cologne	1959	988	Gutehoffnungschütte - Oberhausen	Design engineer
Moskovsky	Kiev, Ukraine	1976	984	Sojuzdorproject Institute	Mostostroj
Neuwied	Rhein River, Germany	1977	958	H. Homberg - Leonhardt & Andrä	CFEM
Deggendorf - Deggenau	Deggendorf, Germany	1975	951	M.A.N.	Design engineer
Faroe <sup>1,2</sup>	Storstrom Channel, Denmark	1985	951	COWIConsult	Monberg & Thorsen
Kurt Schumacher <sup>8</sup>	Mannheim, Germany	1972	942	Leonhardt & Andrä	Hein Lehmann
Erasmus <sup>12</sup>	Rotterdam	1996	932	Van Berkel & Bos	Gemeente Werken
Friedrich Ebert	Leverkusen, Germany	1964	919	H. Homberg	Kloenne
Nord-Brücke	Bonn, Germany	1966	919	Federal Ministry of Transportation	Hein Lehmann
Dolsan	South Korea	1984	919	Rendel Palmer & Tritton	Daelim - Samsung
Speyer-Nord	Mannheim, Germany	1975	902		Kloenne
Quincy <sup>3</sup>	Quincy, Ill.	1987	900	Modjeski & Masters	McCarthy Bros.
Ewijk	Ewijk, The Netherlands	1975	886		
Willems	Rotterdam	1981	886		
South <sup>2</sup>	Kiev, Ukraine	1990	886	Kier Souzдорproekt	Mostootriad-17
Weitingen	Weitingen, Germany	1978	865	Leonhardt & Andrä	
Theodore Heuss	Düsseldorf	1958	853	Leonhardt & Andrä	Demag - Hein Lehmann
Burton	New Brunswick, Canada	1970	850		Dominion Bridge
Oberkassel	Düsseldorf	1976	846	Leonhardt & Andrä	Hein Lehmann
Obere Argen	near Memmingen, Germany	1987	846	J. Schlaich	CFEM
Zaltbommel	Rotterdam	1996	840		
Duisberg-Rheinhausen	Duisberg, Germany	1965	837		

**CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Rees	Rees, Germany	1967	837	H. Homberg	Demag
Sava River Railway	Belgrade	1978	833	N. Hajdin - Jevtović	
Ishikari River <sup>1</sup>	Hokkaido Prefecture, Japan	1972	820		NKK - Mitsubishi
Suehiro Ohashi <sup>1,9</sup>	Tokushima Prefecture, Japan	1975	820	Chodaikyo Sekkei Center	Nippon Kokan - Kawasaki
Weirton-Steubenville <sup>2</sup>	Weirton, W.Va.	1987	820	Michael Baker, Jr.	S. J. Groves
Tokachi-chuo <sup>2</sup>	Hokkaido Prefecture, Japan	1988	820		Yokogawa
Raippaluoto	Vaasa, Finland	1997	820		
Papineau-Leblanc	Montreal	1971	790	Gendron Lefebvre	Dominion Bridge
Kamome Ohashi <sup>1,9</sup>	Osaka	1975	787	City of Osaka	Mitsubishi - Hitachi
Kessock	Inverness, Scotland	1982	787	H. Homberg - City of Cleveland - Redpath Dorman Long	Cleveland - Redpath Dorman Long
Yaei	Japan	1989	787		
Karkistensalmi	Korpilahti, Finland	1997	787		
Kemi <sup>1,5</sup>	Wakayama Prefecture, Japan	1993	784		
Sugawara <sup>1</sup>	Osaka	1989	781		
Neuwied	Rhein River, Germany	1977	772	H. Homberg - Leonhardt & Andrä	CFEM
River Wye	Chepstow, England	1966	770	Freeman Fox	Cleveland
Clark <sup>2,4</sup>	Alton, Ill.	1994	756	Hanson Engineers - Figg Engineering	McCarthy Bros. - PCL
Hainburg <sup>12</sup>	Hainburg, Austria	1972	748	Wagner Biro	Design engineer
Charles River	Boston	UD	744	HNTB	
Luangwa River	Zambia	1968	730	Freeman Fox	Dorman Long
Higashi - Rokko Ohashi <sup>1,5,9</sup>	Kobe	1977	722	City of Kobe	Mitsubishi
Katushika <sup>13</sup>	Tokyo	1987	722	Tokyo Metropolitan Highway Authority	Kawasaki - Sakurada - Toykyo Tekkotsu
Hawkshaw	Fredericton, New Brunswick	1967	713	ADI	Dominion Bridge
Toyosato Ohashi <sup>1,9</sup>	Osaka	1969	709	City of Osaka	Mitsubishi - Hitachi - Fuji - Yawata
Onomichi	Onomichi	1968	705		Hitachi
Steyregg <sup>12</sup>	Linz, Austria	1979	705	Nobels - Peelman - Sotrahay	V.O.E.S.T.

**CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Godsheide	Hasselt, Belgium	1978	690	H. Homberg	Nobels-Peelman - Sotrahy
Batman	Launceston, Australia	1968	689	G. Maunsell	Lewis Construction - Cleveland
Arno	Florence, Italy	1976	676	De Miranda	CMF Sud
Burlington <sup>12</sup>	Burlington, Iowa	1996	660	Sverdrup & Parcel	
Yodo	Osaka	1970	656	City of Osaka	
Chung Yang	Taipeh, Taiwan	1984	656	China Engineering	Tang Eng
Tosigai-Niwagi	Osaka	1987	656		Matsuo - Mitsui - Tokogawa
Yodogawa	Osaka	1987	656		
Ijssel	Kampen, The Netherlands	1983	635		
Sakitama <sup>1</sup>	Saitama Prefecture, Japan	1991	623		
Bybrua <sup>2,3</sup>	Norway	1978	607		
Aratsu Ohashi	Fukuoka Prefecture, Japan	1988	607		Yokogawa - Mitsubishi
Strömsund	Sweden	1956	600	F. Dischinger - Demag	Demag
Adhamivah	Baghdad	1984	599	G. Maunsell	Marubeni - Sumitomo
New Galecopper Twin	Utrecht, The Netherlands	1971	590	Rijkswaterstaat	Werkspoor
Suigo <sup>1,9</sup>	Chiba Prefecture, Japan	1977	587		Sakurada - Yokogawa
Maxau	Karlsruhe, Germany	1967	575		
Norderelbe	Hamburg	1961	564	Rheinstahl	
Daikoku <sup>1,9</sup>	Yokohama	1974	541		Mitsubishi - IHI - NKK
Massena	Paris	1971	530	CFEM	Design engineer
Isanube River	Steyregg, Austria	1978	529		
Komatsugawa <sup>1,9</sup>	Tokyo	1970	525	Metropolitan Expressway Public Corporation	Yokogawa
Arakawa <sup>1</sup>	Tokyo	1970	525	Metropolitan Expressway Public Corporation	
Ishikari River <sup>1,9</sup>	Hokkaido Prefecture, Japan	1971	525	Hokkaido Engineering	Mitsubishi
Chichibu <sup>2</sup>	Japan	1985	502		
George Street <sup>2</sup>	Newport, Wales	1964	500	Mott, Hay & Anderson	Cleveland

**CABLE-STAYED STEEL GIRDER AND TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
River Ursk	England	1965	492		
Olympic	South Korea	1984	492	Samwoo	
Hoechst	Frankfurt	1972	486	Dyckerhoff & Widman	Design engineer
Eisai	Kanagawa Prefecture, Japan	1977	472		
Gassho	Toyama Prefecture, Japan	1979	2@472		
Hattabara <sup>1</sup>	Hiroshima Prefecture, Japan	1993	472		
Bannaguro	Hokkaido Prefecture, Japan	1990	459		
Maya Ohashi	Kobe-Naruto Route, Japan	1985	457		Mitsubishi
Ludwigshafen	Ludwigshafen, Germany	1968	2@453	Rheinstahl	
John O'Connel Memorial	Sitka, Alaska	1972	450	Alaska Department of Highways	Associated Engineers & Contractors

- 1 Shop-fabricated PWS cables
- 2 Concrete towers
- 3 Concrete side spans
- 4 Composite girders
- 5 Truss stiffened
- 6 Long-lay PWS cables
- 7 Highway & railway
- 8 Site-fabricated PWS cables
- 9 Plastic cable covering
- 10 Failure during construction
- 11 Two identical bridges 30 km apart
- 12 Single tower
- 13 S-curve in deck
- 14 Design, build, operate, transfer
- UD Under design
- UC Under construction

## CABLE-STAYED PRESTRESSED CONCRETE GIRDER BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Wadi Laben	Wadi Laben, Saudi Arabia	UC(1998)	1476	Dar Al-Handasa	Tanmea - Arkerodon
Barrios de Luna	Cordillera, Spain	1983	1444	Carlos Fernandez Casado	Huarte y Cia
Helgeland	Alsten Island, Norway	1991	1394	Aas Jakobsen - Leonhardt & Andr�	Aker Entrepren�r
Vasco da Gama	Lisbon	UC(1998)	1378	Lusoponte	Design engineer <sup>6</sup>
Clark	Alton, Ill.	1994	1362		
Broward (Dame Point)	Jacksonville, Fla.	1988	1300	HNTB	Pensacola - Tyger
Sidney Lanier	Brunswick, Georgia	UC(2000)	1250	DRC Consultants	Recchi - GLF
Sunshine Skyway	Tampa, Fla.	1987	1200	Figg & Muller	Paschen - Morrison Knudsen - American Bridge
My Thuan	Mekong River, Vietnam	UC(2000)	1148	Maunsell	Boulderstone Hornibrook
Glebe Island	Sydney	1996	1132	DRC Consultants	Boulderstone Hornibrook - Campenon Bernard
Mesopotamia	Parana, Argentina	1972	1115		
Skytrain	Vancouver, B.C.	1990	1115	Bush, Bohlman - Reid, Crowther	Kerkhoff - Hyundai
Talmadge Memorial	Savannah, Ga.	1990	1100	DRC Consultants - PBQ&D	Atkinson - Groves
Posadas Encarnacion <sup>4</sup>	Parana River, Argentina	1986	1083	Consortio Coppem	Consortio Puerto Posadas - Encarnacion
Brotonne	Rouen, France	1977	1050	Campenon Bernard Cetra	Design engineer
Qi Ao	Pearl River, China	1998	1050	MBEB - Ministry of Railways	MBEB - Ministry of Transportation
Intercity	Pasco - Kennewick, Wash.	1978	981	Arvid Grant - Leonhardt & Andr�	Peter Kiewit
Coatzacoalos II	Coatzacoalos River, Mexico	1984	945	COMEC - Sogelerg	ICA Group
Wadi Kuf	Beida, Libya	1972	925	R. Morandi	Cogefar
East Huntington <sup>2</sup>	East Huntington, W.Va.	1984	900	Arvid Grant - Leonhardt & Andr�	Melbourne Bros.
South Bridge Passage	Kiev, Ukraine	1990	889	Sojuzdorproject Institute	Mostosroj
Tielse	Tiel, The Netherlands	1974	876	Van Hattum en Blankenvoort	Hollandsh Aannemingsbedrijf
Yonghe-Tianjin <sup>1</sup>	Tianjin, China		853		
Arade	Portimao, Portugal	1992	840	Armando Rito	Conduril SARL
Yobuko Ohaski	Saga Prefecture, Japan	1989	820	New Structural Engineering	Kajima

**CABLE-STAYED PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Ho Chi Minh	Ho Chi Minh City, Vietnam	UD	820	Halcrow	
General Manuel Belgrano	Corrientes, Argentina	1973	804	Ammann & Whitney	Ferrocemento - others
Aomori	Aomori Prefecture	1991	787		Kajima
Cochrane	Mobile, Ala.	1990	780	Barret Daffin & Carlin - Iberinsa - Figg Engineering	Harbert International
General Rafael Urdanetta <sup>3</sup>	Maracaibo, Venezuela	1962	5@771	R. Morandi	Corsorcio Puente Maracaibo
Shimen	Jialing River, China	1989	755	Shanghai Municipal Engineering Institute	Chongqing Bridge
Houston Ship Channel	Houston	1982	750		
Chesapeake & Delaware Canal	New Castle Co., Del.	1995	750	Figg Engineering	Recchi America
Penang Island	Malaysia	1985	738	HNTB	Hyundai
Luangwa	Zambia	1968	728	Freeman Fox	Redpath Dorman Long
Jinan	China	1981	722	Sousjen S;anshar Bingren Ronkun	
Evripos Straits	Greece	1990	705	J. Schlaich	T.E.V. - Technodomiki
Periera - Dosquebradas	Columbia	1997	692	Figg Engineering	
Polcevera Creek	Genoa	1966	689	R. Morandi	S.I.C.A.R.
Chalkis	Greece	1984	689	J. Schlaich	
Columbia River	Umatilla, Wash.	1988	660	Washington DOT	Johnson Bros.
Yonghe-Tianjin <sup>1</sup>	Tianjin, China	1981	656		
Shin-Inagawa	Osaka Prefecture, Japan	1993	2@656		
Dee No. 3 <sup>2</sup>	Wales	1997	656	Gifford Grajam	Kier - Northwest Holst - Campenon Bernard
Neches River	Port Arthur, Tex.	1989	640	Figg & Muller	
Chichibu Koen	Saitama Prefecture, Japan	UD	2@640		
James River	Richmond, Va.	1988	630	Figg & Muller	S. J. Groves - Peter Kiewet
Stavanger	Stavanger, Norway	1976	607		
Ashigara	Kanagawa Prefecture, Japan	1991	607		
Wandre	Belgium	1994	600		

**CABLE-STAYED PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Carpineto	Poetenza Province, Italy	1977	594		
Lanaye	Belgium		581		
Pearl River	Guangdong, China	1989	574	Shanghai National Bridge Office	Guangdong Province
Rinku	Osaka Prefecture, Japan	UD	2@554		
Bogen - Bogenberg	Bogen, Germany	1986	505	Huber & Maly	Aicher - Schuhbauer
Bourgogne	Bourgogne, France	1990	498	Charles Lavigne	Leon Grosse
Yanango	Peru		489		
Mainbrücke <sup>4</sup>	Frankfurt	1971	486	Dyckerhoff & Widmann	Design engineer
Ebro River	Navarra, Spain	1978	480	Carlos Fernandez Casado	
Ansa de la Magliana	Rome	1967	476	R. Morandi	
Metten <sup>2</sup>	Metten, Germany	1981	476		Dyckerhoff & Widmann - Wayss & Freitag
Matsukawa	Fukushima Prefecture, Japan	1992	476		
Dnieper River	Kiev, Ukraine	1963	474		
Baranquilla	Colombia	1974	459	R. Morandi	Cuellar Sovano & Gomez
Neckar Center <sup>5</sup>	Mannheim, Germany	1974	459	Leonhardt & Andrä	
Toko	Toko Prefecture, Japan	1992	459		
Ebro River	Navarra, Spain	1979	450		
Columbia River	Richland, Wash.	1984	450	Washington DOT	Johnson Bros.
Kwang Fu	Taiwan	1977	2@440	Churgsin Engineering	

- 1 Shop-fabricated PWS cables
- 2 Single tower
- 3 Cables replaced 1979
- 4 Highway & railway
- 5 Pedestrian
- 6 Design, build, operate, transfer
- UD Under design
- UC Under construction



## BRIDGES WITH SHOP-FABRICATED PWS CABLES

Bridge	Location	Year Completed	Main Span (ft)	Type	See Page
Newport <sup>1</sup>	Narragansett Bay, R.I.	1969	1600	Suspension	<b>3</b>
Toyosato Ohashi <sup>1</sup>	Osaka	1969	709	Cable-stayed steel girder	<b>10</b>
Komatsugawa <sup>1</sup>	Tokyo	1970	525	Cable-stayed steel girder	<b>11</b>
Arakawa	Tokyo	1970	525	Cable-stayed steel girder	<b>11</b>
Kami-Yoshinogawa <sup>1,2</sup>	Kochi Prefecture, Japan	1971	2733	Suspension	<b>2</b>
Wakise	Kumamoto Prefecture, Japan	1971	574	Suspension	–
Ishikari River <sup>1</sup>	Hokkaido Prefecture, Japan	1971	525	Cable-stayed steel girder	<b>11</b>
Ishikari River <sup>1</sup>	Hokkaido Prefecture, Japan	1972	820	Cable-stayed steel girder	<b>9</b>
Kanmon Strait	Honshu-Kyushu, Japan	1973	2336	Suspension	<b>2</b>
Wm. Preston Lane, Jr. Memorial II <sup>1</sup>	Chesapeake Bay, Md.	1973	1600	Suspension	<b>3</b>
Ryugatake	Kumamoto Prefecture, Japan	1973	571	Suspension	–
Daikoku	Yokohama	1974	541	Cable-stayed steel girder	<b>11</b>
Suehiro Ohashi <sup>1</sup>	Tokushima Prefecture, Japan	1975	820	Cable-stayed steel girder	<b>9</b>
Kamome Ohashi <sup>1</sup>	Osaka	1975	787	Cable-stayed steel girder	<b>10</b>
Higashi-Ohi	Kumamoto Prefecture, Japan	1976	866	Suspension	<b>5</b>
Zarate - Brazo Largo <sup>4</sup>	Buenos Aires	1976, 1977	1083	Cable-stayed steel girder	<b>8</b>
Higashi - Rokko Ohashi <sup>1</sup>	Kobe	1977	722	Cable-stayed truss	<b>10</b>
Suigo	Chiba Prefecture, Japan	1977	587	Cable-stayed steel girder	<b>11</b>
Fukase	Ishikawa Prefecture, Japan	1979	709	Suspension	<b>6</b>
Yamatogawa <sup>1</sup>	Osaka	1982	1165	Cable-stayed steel girder	<b>8</b>
Innoshima	Onomichi-Imabari Route, Japan	1983	2526	Suspension	<b>2</b>
President Mobuto Sese Seko	Matadi, Zaire	1983	1706	Suspension	<b>3</b>
Kosui Ohdan	Kochi Prefecture, Japan	1983	787	Suspension	<b>5</b>
Ohnaruto	Kobe-Naruto Route, Japan	1985	2874	Suspension	<b>2</b>
Meiko Nishi	Nagoya	1985	1329	Cable-stayed steel girder	<b>8</b>
Faroe	Storstrom Channel, Denmark	1985	951	Cable-stayed steel girder	<b>9</b>

**BRIDGES WITH SHOP-FABRICATED PWS CABLES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Type</b>	<b>See Page</b>
South Bisan-seto	Kojima-Sakaide Route, Japan	1988	3609	Suspension	<b>1</b>
North Bisan-seto	Kojima-Sakaide Route, Japan	1988	3248	Suspension	<b>1</b>
Hakata-Oshima	Onomichi-Imabari Route, Japan	1988	1837	Suspension	<b>3</b>
Iwakurojima	Kojima-Sakaide Route, Japan	1988	1378	Cable-stayed truss	<b>7</b>
Hitsuishijima	Kojima-Sakaide Route, Japan	1988	1378	Cable-stayed truss	<b>7</b>
Yokohama Bay <sup>3</sup>	Yokohama	1989	1509	Cable-stayed truss	<b>7</b>
Sugawara	Osaka	1989	781	Cable-stayed steel girder	<b>10</b>
Ajigawa Tenpozan	Osaka	1990	1148	Cable-stayed steel girder	<b>8</b>
Sakitama	Saitama Prefecture, Japan	1991	623	Cable-stayed steel girder	<b>11</b>
Ikuchi	Onomichi-Imabari Route, Japan	1992	1608	Cable-stayed steel girder	<b>7</b>
Rainbow	Tokyo	1993	1870	Suspension	<b>3</b>
Higashi Kobe	Kobe	1993	1591	Cable-stayed truss	<b>7</b>
Karnali River <sup>3</sup>	Nepal	1993	1066	Cable-stayed truss	<b>8</b>
Kemi	Wakayama Prefecture, Japan	1993	784	Cable-stayed truss	<b>10</b>
Hattabara	Hiroshima Prefecture, Japan	1993	472	Cable-stayed steel girder	<b>11</b>
Tokyo Harbor	Tokyo	1994	1772	Suspension	<b>3</b>
Tsurumi-Kroo	Yokohama	1994	1673	Cable-stayed steel girder	<b>7</b>
Meiko Higashi	Aichi Prefecture, Japan	1994	1345	Cable-stayed steel girder	<b>7</b>
Hakucho	Hokkaido Prefecture, Japan	1996	2362	Suspension	<b>2</b>
Boca Tigris	Guangdong Province, China	1997	2913	Suspension	<b>2</b>
Meiko-chuo	Tokyo	1997	1936	Cable-stayed steel girder	<b>7</b>
Akashi Strait	Kobe-Naruto Route, Japan	1998	6529	Suspension	<b>1</b>
Jiangyin	Jiangyin, China	1999	4544	Suspension	<b>1</b>
Kurushima No. 3	Onomichi-Imabari Route, Japan	1999	3379	Suspension	<b>1</b>
Kurushima No. 2	Onomichi-Imabari Route, Japan	1999	3346	Suspension	<b>1</b>
Tatara	Onomichi-Imabari Route, Japan	1999	2920	Cable-stayed steel girder	<b>7</b>
Kurushima No. 1	Onomichi-Imabari Route, Japan	1999	1969	Suspension	<b>3</b>

**BRIDGES WITH SHOP-FABRICATED PWS CABLES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Type</b>	<b>See Page</b>
Yonghe-Tianjin	Tianjin, China	?	853	Cable-stayed concrete girder	<b>13</b>

- 1 Plastic cable covering
  - 2 One PWS cable, one aerial-spun cable
  - 3 Long-lay PWS cables
  - 4 Two identical bridges 30km apart
- UC Under Construction

## STEEL ARCH BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
New River Gorge	Fayetteville, W.Va.	1977	1700	Michael Baker, Jr.	American Bridge
Bayonne (Kill van Kull) <sup>3</sup>	Bayonne, N.J.	1931	1652	Port of New York Authority	American Bridge
Sydney Harbour	Sydney, Australia	1932	1650	Freeman Fox	Dorman Long
Wanxian	Yangtze River, China	1997	1378		
Fremont <sup>1</sup>	Portland, Ore.	1973	1255	PBQ&D	Murphy Pacific
Port Mann <sup>1</sup>	New Westminster, B.C.	1964	1200	CBA Engineering	Dominion Bridge - Canron
Laviolette <sup>1</sup>	Trois-Rivieres, Quebec	1967	1100	George Demers	Dominion Bridge
Zdąkov	Lake Orlik, Czech Republic	1967	1083	Joseph Zeman	VZKG - Ostrava
Runcorn-Widnes <sup>2</sup>	Liverpool, England	1962	1082	Mott, Hay & Anderson	Dorman Long
Birchenough <sup>2</sup>	Sabi River, Zimbabwe	1935	1080	Freeman Fox	Dorman Long
Roosevelt Lake	Gila County, Ariz.	1990	1080	HNTB	Broad, Vogt & Conant - PDM
Nagasaki Sasebo	Nagasaki	1955	1042		
Glen Canyon	Page, Ariz.	1959	1028	U.S. Bureau of Reclamation	Peter Kiewit - Judson Pacific Murphy
Kizugawa Shimbasi	Osaka	1987	1001		
Lewiston-Queenston	Lewiston, N.Y.	1962	1000	Hardesty & Hanover	Bethlehem
Perrine	Twin Falls, Idaho	1976	993	HNTB	Allied
Seiun	Japan	1984	984		
Van Brienoord <sup>2</sup>	Rotterdam	1989	984		Grootint
Hell Gate <sup>2,3</sup>	New York City	1917	978	Gustav Lindenthal	American Bridge
Ohmishima <sup>2</sup>	Onomichi-Imabari Route	1979	974	Honshu-Shikoku Bridge Authority	Yokogawa - IHI
Rainbow	Niagara Falls, N.Y.	1941	950	Waddell & Hardesty	Bethlehem
Van Brienoord	Rotterdam	1968	942	Rotterdam Public Works Dept.	
Blue Water II <sup>1</sup>	Port Huron, Mich. - Sarnia, Ont.	1997	922	Modjeski & Masters - Buckland & Taylor	PCL/McCarthy - PDM - Canron - Traylor Bros.
Moundsville <sup>2</sup>	Moundsville, W.Va.	1986	912	Michael Baker, Jr.	Beasley
Tjorn	Askerø Fjord, Sweden		912		

**STEEL ARCH BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Jefferson Barracks (twin spans)	St. Louis	1984,1990	909	Alfred Benesch	American Bridge (1984); Bristol - Harris (1990)
Hernando de Soto <sup>1</sup>	Memphis	1973	2@900	Hazelet & Erdal	Bethlehem
Monongahela River	Pittsburgh	UD	892	Michael Baker, Jr.	
Saigo	Okinoshima Shimane	1977	853		Kawasaki
Las Americas suspended span <sup>2,4</sup>	Panama City	1962	850	Sverdrup & Parcel	Beasley
Julien Dubuque <sup>1</sup>	Dubuque, Iowa	1943	845	HNTB	Bethlehem
Qinggan River <sup>5</sup>	Hubei, China	1998	840		
Duisburg-Rheinhausen <sup>1</sup>	Duisburg, Germany	1950	837		Demag
Shinhamadera <sup>2</sup>	Sakai, Japan	1989	833		
Ohio River	Cannelton, Ohio	1961	825	Sverdrup & Parcel	
Düsseldorf-Hamme <sup>2</sup>	Düsseldorf	1987	820		
Fehmarnsund <sup>1</sup>	Fehmarn Island, Germany	1963	814	Gotehoffnungschütte - Oberhausen	DeLong
Ayub	West Pakistan	1962	807	Steinman	Dorman Long
Waal River	Nijmegen, The Netherlands	1946	804		
Adomi	Volta River, Ghana	1957	804	Freeman Fox	Dorman Long
Henry Hudson	New York City	1936	800	Robinson & Steinman	American Bridge
Inoura Narrows	Nagasaki	1955	800	Government Construction Ministry	Yokogawa
Alexandra	Fraser River, British Columbia	1963	791		
Novi Sad <sup>6</sup>	Novi Sad, Yugoslavia	1961	786	IMS - B. Zezelj	Mostogradnja
West End <sup>2</sup>	Pittsburgh	1934	778		
Tennessee River <sup>2</sup>	South Pittsburg, Tenn.	1983	770	Tennessee Highway Department	
Piscataqua River <sup>1</sup>	Portsmouth, N.H.	1973	756	Hardesty & Hanover	Bethlehem
McKees Rocks	McKees Rocks, Pa.	1931	750	Allegheny County	
Croton Lake	Croton Lake, N.Y.	1931	750	Howard C. Baird	Mount Vernon Bridge
Ohio River <sup>2</sup>	Wheeling, W.Va.	1984	750	Richardson Gordon	Bristol
Sherman Minton <sup>2</sup>	New Albany, Ind.	1961	2@735	Hazelet & Erdal	Mahon - Beasley

## STEEL ARCH BRIDGES (cont'd)

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Ghotour Valley	Iran	1970	732	Sverdrup & Parcel	American Bridge
Kaiserlei	Frankfurt	1962	722		
Seiun	Miyazaki Prefecture, Japan	1984	722		Yokogawa
Utsumi	Hiroshima Prefecture, Japan	1990	722		Mitsubishi
Kobe Ohashi	Kobe	1970	712		
Sakai	Nagasaki Prefecture, Japan	1955	709		Yokogawa
Changjiang River <sup>3</sup>	Juijiang, Jiangxi, China	1992	709	Chinese Ministry of Railways	
Cold Spring Canyon	Santa Barbara, Calif.	1963	700	California Division of Highways	American Bridge
Kawabashirigawa	Kumamoto Prefecture, Japan	1991	689		Hitachi
Sanshanxi <sup>5</sup>	Guangdong, China	1995	656		
Kizugawa Shinbashi	Osaka	1989			
D. Luis	Oporto, Portugal				

1 Continuous tied arch

2 Tied arch

3 Railway

4 See cantilever truss bridges, no. 14

5 Tubular steel arch ribs, concrete-filled

6 Highway & railway

UD Under design

## CONCRETE ARCH BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Wanxian <sup>1</sup>	Sichuan, China	1997	1378		
Krk	Croatia	1979	1280		
Yijiang <sup>1</sup>	Guangxi, China	1998	1024		
Gladesville	Sydney, Australia	1964	1000	G. Maunsell	Reed & Mallik - Stuart Bros.
Amizade (Foz do Iguacu)	Paranagua, Brazil	1965	951	SOTEGE	SOTEGE - Constructors Rabello
Bloukrans River	South Africa	1984	892	Liebenberg & Stander	Murray & Roberts - Concor
Arrabida	Oporto, Portugal	1963	886		
Sandö	Kramforts, Sweden	1943	866	S. Haggbom	Skanska Cementgjuteriet
Krva River	Shibenik, Croatia	1967	808	I. Stojadinovic	Mostogradnja
Novi Sad <sup>2</sup>	Danube River, Yugoslavia	1961	773	Branko Zeselj	Mostogradnja
Beppu	Oita Prefecture, Japan	1989	771		Kajama - Sumitoma
Fiumarella	Catanzaro, Italy	1961	758		
Dnieper River	Zaporozhye, Ukraine	1952	748		
Kylltal	Germany	UC(1999)	732		Schorfel
Esha	Spain	1940	689		
Lingenau	Bregenz, Austria	1967	689		Kunz - Ast - Beyer
Usagawa	Yamaguchi Prefecture, Japan	1982	669	Chiyoda - Sumitomo	Sumitomo
Pfaffenburg-Zwenburg	Pfaffenburg, Austria	1971	656		
Van Staden's Gorge	Port Elizabeth, South Africa	1970	650		Impresa - P. di Penta
Martin Gil	Andavias, Spain	1942	631		
Groot River	South Africa	1984	620		
Plougastel	Brest, France	1929	612	R. Maillart	
Antas River	Brazil	1953	610		
Traneberg	Stockholm	1934	594		
Natchez Trace	Franklin, Tenn.	1993	582	Figg Engineering	PCL
Hokawazu	Saga Prefecture, Japan	1974	558	Saga Prefecture, Japan	
Yilongjiang <sup>1</sup>	Sichuan, China	1998	558		

**CONCRETE ARCH BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Minneapolis - St. Paul	Minneapolis	1991	2@555	HNTB	McCossan
Shuanglong <sup>1</sup>	Zhejiang, China	1994	551		
Selah Creek	Washington	1970	2@550		
Bobbejaans River	South Africa	1984	541		
La Roche - Guyon	France	1937	528		
Pitan (twin bridges)	Taiwan	1994	525	OPAC	
Luonguo Zinshajiang <sup>1</sup>	Sichuan, China	1995	525		
Cowlitz River	Mossyrock, Wash.	1967	520	HNTB	Paul Jarvis
Svinesund	Oslo	1946	505		

1 Tubular reinforced-concrete arch ribs, concrete-filled

2 Highway & railway



## CANTILEVER TRUSS BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Quebec <sup>1</sup>	Quebec City	1917	1800	St. Lawrence Bridge Co.	Design engineer
Forth <sup>1</sup>	near Edinburgh, Scotland	1890	2@1710	John Fowler & Benjamin Baker	Arrol - Tancred
Minato Ohashi	Osaka	1974	1673	Hanshin Expressway Public Corp.	Mitsubishi - Hitachi - IHI - Yokogawa
Commodore John Barry	Chester, Pa.	1974	1644	E. Lionel Pavlo	Bethlehem
Greater New Orleans I	New Orleans	1958	1575	Modjeski & Masters	Bethlehem
Greater New Orleans II	New Orleans	1985	1575	Modjeski & Masters	Harris - Vincennes - Hyundai
Howrah <sup>1</sup>	Calcutta	1943	1500	Rendel Palmer & Tritton	Cleveland - BB&J
Mississippi River	Gramercy, La	1988	1460	E. Lionel Pavlo	Beasley - IHI
East Bay	San Francisco - Oakland	1936	1400	C. H. Purcell - G. B. Woodruff	American Bridge
Baton Rouge <sup>2</sup>	Baton Rouge	1968	1235	Modjeski & Masters	American Bridge
Tappan Zee	Tarrytown, N.Y.	1955	1212	Madigan-Hyland	American Bridge
Longview	Longview, Wash.	1930	1200	Strauss Engineering	Bethlehem
Queensboro <sup>2</sup>	New York City	1909	1182	NYC Department of Bridges	Pennsylvania Steel
Las Americas	Panama City	1962	1128	Sverdrup & Parcel	Beasley
Carquinez West	Crockett - Vallejo, Calif.	1927	2@1100	Steinman	American Bridge
Carquinez East	Crockett - Vallejo, Calif.	1958	2@1100	California Division of Highways	American Bridge
Second Narrows	Vancouver, B.C.	1961	1100	Swan Wooster	Dominion Bridge
Jacques Cartier	Montreal	1930	1097	Monsarrat & Pratley	Dominion Bridge
Isaiah D. Hart	Jacksonville, Fla.	1967	1088	Sverdrup & Parcel	American Bridge
Richmond - San Rafael	Richmond, Calif.	1956	2@1070	Earl & Wright	Judson Pacific
John P. Grace Memorial I	Charleston, S.C.	1929	1050	Waddell & Hardesty	McClintic-Marshall
Mississippi River	MacArthur, Ill.	1918	1000		
Newburgh-Beacon I	Newburgh, N.Y.	1963	1000	Modjeski & Masters	Bethlehem
Newburgh-Beacon II	Newburgh, N.Y.	1981	1000	Modjeski & Masters	American Bridge
Martin Luther King	St. Louis	1950	964	Hazelet & Erdal	Bethlehem
Storey	Brisbane, Australia	1940	924	J. J. C. Bradfield	Deakin Hornibrook

**CANTILEVER TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Caruthersville	Caruthersville, Mo.	1975	919	Sverdrup & Parcel	Bethlehem - Beasley
Henderson	Henderson, W.Va.	1969	900	E. Lionel Pavlo	Allied - Harris
St. Marys	St. Marys, W.Va.	1977	900	E. Lionel Pavlo	American Bridge
Portsmouth	Portsmouth, Ky.	1987	900		
Natchez I	Natchez, Miss.	1940	2 @875	Ash Howard Needles & Tammen	Bethlehem
Natchez II	Natchez, Miss.	1988	2 @875	HNTB	Beasley - Marathon - IHI
Blue Water I	Port Huron, Mich. - Sarnia, Ont.	1938	871	Modeski & Masters	American Bridge
Vicksburg	Vicksburg, Miss.	1973	870	E. Lionel Pavlo	
Sunshine Skyway I	St. Petersburg, Fla.	1954	863	PBQ&D	American Bridge
Auburn-Foresthill	Auburn, Calif.	1972	862	U.S. Bureau of Reclamation	Kawasaki - Mitsubishi - IHI
Governor O. K. Allen <sup>2</sup>	Baton Rouge	1940	2 @848	Louisiana Highway Department	Bethlehem
Cornwall	Montreal	1899	843	N.Y. & Ottawa Railway	Phoenix Bridge
Missouri River	Brownsville, Neb.	1939	840	Ash Howard Needles & Tammen	Bethlehem
Mississippi River	Greenville, Miss.	1940	840	Ash Howard Needles & Tammen	American Bridge
Mississippi River	Helena, Ark.	1961	840		
Brent Spence	Covington, Ky.	1963	830	Modjeski & Masters	
Mississippi River	Vicksburg, Miss.	1930	825	Harrington Howard & Ash	American Bridge
Louisville Municipal	Louisville, Ky.	1929	2@820	Modjeski & Masters	American Bridge
Sunshine	Donaldsonville, La.	1964	814	Palmer & Baker	American Bridge
John E. Mathews	Jacksonville, Fla.	1953	810	PBQ&D	Bethlehem
Lake Union	Seattle, Wash.	1932	800	Jacobs & Ober	U.S. Steel Products
Rip Van Winkle	Catskill, N.Y.	1935	800	G. B. Woodruff	Harris
Ohio River	Cairo, Ill.	1938	800	Modjeski & Masters	Mount Vernon Bridge
Ludlow Ferry	Morgantown, Md.	1940	800	J. E. Greiner	Harris
Maurice J. Tobin	Boston	1950	800		
Auckland Harbour	New Zealand	1959	800	Freeman Fox	Cleveland - Dorman Long
Coos Bay	North Bend, Ore.	1936	793		Virginia Bridge
Frisco <sup>1</sup>	Memphis	1892	792	G. S. Morison & Alfred Noble	Union Bridge - Baird Bros.

**CANTILEVER TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Harahan	Memphis	1916	790	Ralph Modjeski	Pennsylvania Steel
Huey P. Long <sup>2</sup>	New Orleans	1935	790	Modjeski, Masters & Chase	American Bridge
Mississippi River	Memphis	1949	790	Modjeski & Masters	Harris
Wm. Preston Lane, Jr. Memorial I	Chesapeake Bay, Md.	1952	780	J. E. Greiner	Bethlehem
Wm. Preston Lane, Jr. Memorial II	Chesapeake Bay, Md.	1973	780	J. E. Greiner	American Bridge
Beaver <sup>1</sup>	Beaver, Pa.	1910	769	Albert Lucius	McClintic-Marshall
John P. Grace Memorial II	Charleston, S.C.	1966	2@760	HNTB	Bethlehem
Warm Springs Creek	California	1974	752	Tudor Engineering	Western Pacific Erectors
Ohio River	Owensboro, Ky.	1940	751	Modjeski & Masters	Hunter Steel
Outerbridge Crossing	Perth Amboy, N.J.	1928	750	O. H. Ammann	McClintic-Marshall
Parkersburg	Parkersburg, W.Va.	1979	750	E. Lionel Pavlo	Harris

1 Railway

2 Highway &amp; railway

## CONTINUOUS TRUSS BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Ikitsuki Ohashi	Nagasaki Prefecture, Japan	1991	1312		
Astoria	Astoria, Ore.	1966	1232		American Bridge
Francis Scott Key	Baltimore	1977	1200	J. E. Greiner	PDM
Ohshima Ohashi	Yamaguchi Prefecture, Japan	1976	1066	Nippon Kozo Kyoryo	Nippon Kokan - Yokogawa
Tenmon	Kumamoto, Japan	1966	984	Japan Highway Public Corporation	Yokogawa
Kuronoseto	Kagashima, Japan	1974	984		Kawasaki
Ravenswood	Ravenswood, W.Va.	1980	902	Michael Baker, Jr.	
Central	Cincinnati	1995	850	Hazelet & Erdal	Beasley - Stupp Brothers
Braga Memorial	Somerset, Mass.	1966	840	E. Pichel	American Bridge
Kamakari	Hiroshima	1979	837	Hiroshima Kensetsu Consultants	IHI
Duisburg-Rheinhausen	Duisburg, Germany	1945	835		Demag
Earle S. Clements	Shawneetown, Ill.	1956	2@826		Allied
Lincoln Trail	Cannelton, Ind.	1966	826		
Cairo	Alexander County, Ill.	1976	821		
Yoshima <sup>2</sup>	Kojima-Sakaide Route	1988	804	Honshu-Shikoku Bridge Authority	Nippon Kokan - Yokogawa - Mitsubishi
Kingston-Rhinecliff	Kingston, N.Y.	1957	800	Steinman	Harris
Cooper River	Charleston, S.C.	1991	800	HNTB	S.J. Groves - PDM
Sakai Suido	Tottori	1972	787	Japan Highway Public Corporation	Kawasaki
Glade Creek	near Beckley, W. Va.	1988	784	Greiner	Harris - American Bridge
Rochester	Rochester, Pa.	1987	780		American Bridge
Sciotoville <sup>1</sup>	Sciotoville, Ohio	1917	2@775	Gustav Lindenthal	McClintic-Marshall
Warm Springs Creek	Healdsburg, Calif.	1974	751	Tudor Engineering	
Sewickley	Sewickley, Pa.	1981	750	Richardson Gordon	American Bridge
Betsy Ross	Philadelphia	1972	729	Michael Baker, Jr.	Harris
Hayase	Hiroshima	1973	728	Hiroshima Prefecture, Japan	Mitsubishi
Matthew E. Welch	Mauckport, Ind.	1966	2@725	Sverdrup & Parcel	

**CONTINUOUS TRUSS BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Ohio River	California, Ohio	1978	2@720	Sverdrup & Parcel - Kroboth	American Bridge
6 <sup>th</sup> Street	Huntington, W. Va.	1993	720		
Ohio River	New Martinsville, W.Va.	1960	715	Praeger-Kavanagh	Mount Vernon Bridge
Chain-of-Rocks	St. Louis	1930	2@700	S. L. Brown & E. B. Fay	American Bridge
Main River <sup>2</sup>	Nantenbach, Germany	1992	682	Leonhardt & Andrä	Noell Buyck
Dukla Pass Heroes <sup>2</sup> ("Harbor Bridge")	Bratislava, Slovakia	1985	672	Dopravoprojekt - SUDOP - Hydrostav - Doprastav	Doprastav
Mississippi River	Cape Girardeau, Mo.	1930	2@671	Ash Howard Needles & Tammen	American Bridge
Kohsan	Yamaguchi Prefecture, Japan	1982	656		Yokogawa
Williamstown - Marietta	Williamstown, W. Va.	1992	650		
Mississippi River	Quincy, Ill.	1930	2@628	Strauss Engineering	Kelly-Atkinson
Cernavoda <sup>2</sup>	Cernavoda, Romania	1987	623	Railway Studies & Design Institute ISCPF	Bridge Construction Company
Sagamore	Bourne, Mass.	1935	616	Fay Spofford & Thorndike	American Bridge
Clarion River	Clarion, Pa.	1967	612	Modjeski & Masters	Bethlehem
Rio Grande Gorge	Taos, N.Mex.	1965	600	New Mexico Highway Department	American Bridge

1 Railway

2 Highway and railway

## SIMPLE TRUSS BRIDGES

Bridge	Location	Year Completed	Center Span (ft)	Design Engineer	Superstructure Contractor
Commodore John Barry suspended span <sup>5</sup>	Chester, Pa.	1974	822	E. Lionel Pavlo	Bethlehem
Chester-Liverpool	Chester, W.Va.	1977	750	E. Lionel Pavlo	Vincennes
Metropolis <sup>1</sup>	Metropolis, Ill.	1917	720	Chicago Burlington & Quincy RR	American Bridge
Irvin S. Cobb	Paducah, Ky.	1929	716	Harrington Howard & Ash	Wisconsin Bridge
Tanana River	Nenana, Alaska	1923	700	Modjeski - Angier	American Bridge
MacArthur <sup>2</sup>	St. Louis	1911	668	Boller & Hodge	
Henderson <sup>1</sup>	Henderson, Ky.	1933	665		
Williamstown - Marietta	Williamstown, W.Va.	1970	650	Sverdrup & Parcel	Vincennes
Ohio River	Louisville, Ky.	1919	644		
Quebec suspended span <sup>1,3</sup>	Quebec City	1917	640	St. Lawrence Bridge	Design engineer
Chinsha River <sup>1</sup>	Chenfu - Chungking, China	1952	630		
King Carol I <sup>1</sup>	Cernavoda, Romania	1895	623		
Rhine River <sup>1</sup>	Urmitz - Engers, Germany	1954	617		
Hamburg	Hamburg, Germany	1912	610		
Minato Ohashi suspended span <sup>4</sup>	Osaka	1974	610	Hanshin Expressway Public Corporation	Mitsubishi - Hitachi - IHI - Yokogawa
Atchafalaya	Morgan City, La.	1933	608		
Alfred E. Smith <sup>1</sup>	Castleton, N.Y.	1924	598		Bethlehem
Great Miami River	Elizabethtown, Ohio	1906	586	Henry G. Tyrrell	
Szabadság	Budapest	1986	574		
Ohio River <sup>1</sup>	Louisville, Ky.	1929	546		
Ohio River <sup>1</sup>	Cincinnati	1889	542		
Easton - Phillipsburg	Easton, Pa.	1938	540	J. E. Greiner	Bethlehem
Yodogawa <sup>1</sup>	Kyoto	1928	538		
Delaware River <sup>1</sup>	Philadelphia	1896	533		
Danube River <sup>1</sup>	Belgrade	1931	532		

## SIMPLE TRUSS BRIDGES (cont'd)

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Center Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Allegheny River <sup>2</sup>	Pittsburgh	1914	531		
Martinez <sup>1</sup>	Martinez, Calif.	1930	526		
Tanana River	Alaska	1967	500		

1 Railway

2 Highway & railway

3 See cantilever truss bridges, no. 1

4 See cantilever truss bridges, no. 3

5 See cantilever truss bridges, no. 4

## CONTINUOUS STEEL PLATE- AND BOX-GIRDER BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Sfalassá Viaduct	Monte St. Elia, Calabria, Italy	1972	1234		Soimi
Presidente Artur Costa e Silva	Rio de Janeiro	1973	984	HNTB	Redpath Dorman Long - Cleveland
Neckar Tal	Weitingen, Germany	1978	863		
Sava I	Belgrade	1957	856	M.A.N.	Design engineer
Zoobrücke	Cologne	1966	850	Gerd Lohmer	Rheinstahl
Sava II ("Gazelle")	Belgrade	1970	820	Milan Djuric	Mostogradnja
Portpia <sup>1,2</sup>	Kobe	1980	820	Japan Bridge & Structure Institute	Kawasaki
Shirinashigawa	Osaka	1987	820	Japanport Consultants Ltd - Kawasaki	Kawasaki
Shirinashigawa	Osaka	1991	820		
Auckland Harbour (widening portion)	Auckland, New Zealand	1969	800	Freeman Fox	IHI
Koblentz-Sud <sup>3</sup>	Koblentz	1974	773	M.A.N - Klöppel	M.A.N.
Shorenjigawa	Osaka	1990	771		Kawasaki - Tokyo Tekkotsu
Grand Duchess Charlotte	Luxembourg	1966	768		
River Foyle	Londonderry, N. Ireland	1984	766	Redpath Dorman Long - Freeman Fox	Redpath Dorman Long
Adenauer	Bonn, Germany	1971	755		Hein Lehmann
San Mateo - Hayward	San Mateo, Calif.	1967	750	California Division of Highways - Grassl	Murphy Pacific
Rader Insel	Baltic Canal, Germany	1972	728		Krupp
Winningen	Mosel River, Germany	1972	715	Leonhardt & Andrä - Dillinger	Dillinger
Umemachi	Osaka	1990	705		
Angosturita	Cuidad Guayana, Venezuela	1992	701	Leonhardt & Andrä	Van Dam - DSD - CGI
Milford Haven <sup>3</sup>	Cleddau River, Wales	1975	700	Freeman Fox	John Thompson Horseley Bridge
Prater <sup>3</sup> (Fourth Danube)	Vienna	1970	689	Kurt Schlauss	Wagner Biro - Wiener Brueckenbau
Martigues	France	1973	689		



**CONTINUOUS STEEL PLATE- AND BOX-GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Second Maya	Kobe	1975	689		Kawasaki
Oslava River	Czech Republic		679		
Düsseldorf-Neuss	Düsseldorf	1951	676		Demag - Hein Lehmann - G.H.H.
Wiesbaden-Schierstein	Wiesbaden, Germany	1962	673	H. Homberg	Hein Lehmann
Weisenau - Mainz	Weisenau, Germany	1962	669		M.A.N. - Krupp
Buffalo Bayou	Houston	1956	668	Texas Highway Department	American Bridge
San Diego - Coronado	San Diego	1969	2@660	California Division of Highways	Murphy Pacific
Benodet	Odet River, France	1972	656		Sotracomet
Europa	Innsbruck, Austria	1963	650	Tyrol Provincial Government	Wagner Biro
Bonn-Buel	Bonn, Germany	1951	643		Krupp - Rheinhausen
Fourth Danube	Vienna	1973	640	Kurt Schlauss	Wagner Biro - Wiener Brueckenbau
Houston	Houston	1972	630	HNTB	Brown & Root
Tozaki	Kobe-Naruto Route	1983	2@625		
Jozaki Koka	Japan	1986	625		IHI - Katayama
Hyogo	Hyogo Prefecture, Japan	1983	620	Honshu-Shikoku Bridge Authority	
Kiel - Holtenua	Baltic Canal, Germany	1972	610		Kloenne
Cologne-Deutz	Cologne	1950	607	Leonhardt & Andrä	Gutehoffnungschütte
Hirabayashi	Osaka	1981	605	IHI - others	Design engineer
Poplar Street	St. Louis	1967	600	Sverdrup & Parcel	Bethlehem
Italia	Lao River, Italy	1969	574	Morandi - Covre	Badoni - Lodigiani
Brigittenau	Vienna	1982	573		
Friarton	Perth, Scotland	1978	571	Freeman Fox	Cleveland
Avonmouth	Bristol, England	1974	570	Freeman Fox	Fairfield-Mabey
Smederevo	Smederevo, Yugoslavia	1976	562	Mostogradnja - Tripalo - Certic	Mostogradnja - Ganz-MAVAG
Passau - Schalding	Passau, Germany	1973	561		Krupp
Scalpay	Western Isles, Scotland	1998	561	Halcrow Crouch	Edmund Nuttall
Keihin Canal	Toyko	1984	558	Metropolitan Expressway Public Corporation	

**CONTINUOUS STEEL PLATE- AND BOX-GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Tomari Ohashi	Okinawa Prefecture, Japan	1986	558		Mitsubishi - IHI
Bezdan - Batina	Bezdan, Yugoslavia	1974	556	Mostogradnja - Tripalo - Certic	Mostogradnja - Ganz-MAVAG
Krems	Krems, Austria	1972	551	H. Homberg	V.O.E.S.T. - Wagner Biro
Florinsdorf	Vienna	1978	550		
Florinsdorf	Vienna	1979	548		Wagner Biro - Wiener Brueckenbau
Kiefersfelden	Inn River, Germany - Austria	1968	541		M.A.N. - V.O.E.S.T. - Wagner Biro
Vilvoorde	Brussels	1979	541		
Shikama Rinkai	Hyogo Prefecture, Japan	1984	541		Kawasaki - Nippon Steel - Mitsubishi
Arkansas River	Arkansas	1981	538	Garver & Garver	
Speyer	Rhein River, Germany	1956	535		
Ile Ste. Helene	Montreal	1966	525	Beaulieu - Trudeau	Dominion Bridge
Danube River	Giurgeni, Romania	1970	525	Gheorghe Buzuloiu - I.P.T.A.N.A.	Construction Trust for Roads, Bridges & Airports
Katagami Ohashi	Okayama Prefecture, Japan	1974	525		Mostogradnja - Ganz-MAVAG
Bäcka Palanka - Ilok	Bäcka Palanka, Yugoslavia	1981	525	Mostogradnja	Mitsui - NKK
Muya	Kobe-Naruto Route, Japan	1986	525	Honshu-Shikoku Bridge Authority	Hitachi - Takigami
Tennessee River	Clifton, Tennessee	1996	525	Tennessee Department of Transportation	McKinnon Bridge Co.
Macdonald-Cartier	Ottawa	1966	522		Dominion Bridge
Veterans Memorial	Ottawa, Ill.	1983	510	Alfred Benesch	American Bridge
Bogojevo-Erdut	Bogojevo, Yugoslavia	1980	509	Inzenjerski Projektni Zavod - Vukusa	Mostogradnja - Doro Dakovic
Donau-wald	Winzer, Germany	1976	499		Krupp
Beez	Namur, Belgium	1971	495	Grassl	
Ahmad Shah	Temerlok, Malaysia	1974	495	G. Maunsell	Low - Kurimoto - Ng
Berliner	Duisberg, Germany	1963	492		Demag - Rheinstahl - Storp
Pfatter - Wörth	Pfatter, Germany	1964	492		Noell
Hochhern	Main River, Germany	1966	492		M.A.N.
Jagsttal	Widdern, Germany	1974	492		Krupp

**CONTINUOUS STEEL PLATE- AND BOX-GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Schanzl	Passau, Germany	1970	490	Dorsch & L. Obermeyer	Neusser Eisenbau - Bleichert
River Severnaya Dvina	Archangelsk, Russia	1990	5@482	Lengitranmost Design Institute	Mostostroj
Schwanheim	Main River, Germany	1963	476		
Hakata-Ohshima	Onomichi-Imabari Route, Japan	1989	476	Honshu-Shikoku Bridge Authority	
Ehrang	Mosel River, Germany	1969	472		Kloenne
Rhenen	The Netherlands	1960	469	Rijkswaterstaat	
Bremen	Bremen	1962	469		
Lake Biwa	Kyoto	1967	459		
Puumalansalmi	Puumala, Finland	1995	459	Pontek Oy	YIT - Yhtymä Oy
White Bird Canyon	Idaho	1976	451		
Niederranna	Niederranna, Austria	1980	449		
Velke Mezirici	Czech Republic	1978	443		
Aschach	Aschach, Austria	1962	435		
Arkansas River	Little Rock	1973	430	Brighton Engineering	Vogt & Conant
Kojimawan	Okayama City	1982	427	Long Span Bridge Consultants	Mitsui
Sinzing	Sinzing, Germany	1966	426	M.A.N.	M.A.N. - Gran & Bilfinger
River Ob	Novosibirsk, Russia	1985	7@418	Lengiprotransmost Design Institute	Mostostroj
River Oka	Gorki, Russia	1991	5@413	Giprotransmost Design Institute	Mostotrest Ministry of Transport Construction
Hernando de Soto approach spans	Memphis	1973	3 @ 400	Hazelet & Erdal	Bethlehem
Hakata	Japan	1988			Tokyo Tekkotsu - Nikon Totto
Kernours	River Bono, France				
Rochester-Monaca	Rochester, Pa.				

- 1 Railway
- 2 Stiffened by mono-chord arch
- 3 Failure during construction

## PRESTRESSED CONCRETE GIRDER BRIDGES

Bridge	Location	Year Completed	Main Span (ft)	Design Engineer	Superstructure Contractor
Boca Tigris (second channel)	Guangdong Province, China	1997	886	Highway Planning & Design Institute	Gordon Wu - Hopewell
Gateway	Brisbane, Australia	1985	853	Gateway Bridge	Gateway Bridge - Transfield
President Tancredo Neves	Iguacu River, Brazil - Argentina	1985	820		Sobrenco - Supercemento S.A.I.C.
Duoro River	Oporto, Portugal	1990	820		
Schottwein	Schottwein, Austria	1991	820		Strabag
Skye	Scotland	1995	820	Ove Arup	Miller - Dywidag
Confederation <sup>2</sup>	Northumberland Strait, Prince Edward Island, Canada	1997	43 @ 820	J. Muller International - SLG Stanley	Strait Crossing Joint Venture <sup>1</sup>
Koror-Babeldaop <sup>2,3</sup>	Palau	1977	790	Alfred Yee	Dyckerhoff & Widmann
Hamana Ohashi	Shizuoka	1978	787	Japan Highway Public Corporation	Kajima - Sumitomo
East London	London	1996	787	Halcrow	
Hikoshima Ohashi	Shimonoseki City	1975	779	Chiyoda Consultants	Sumitomo - Oriental
Urato Bay	Kochi	1972	755	Japan Highway Public Corporation	Kajima
Jesse H. Jones Memorial	Houston	1982	750	HNTB - Figg & Muller	Williams Bros.
Frey Bentos - Puerto Unzuc	Uruguay - Argentina	1975	722		COPUI J/V
Parana River	Brazil	1975	722		
Akigawa Reservoir	Gifu Prefecture, Japan	1985	722		Sumitomo
Mooney Mooney Creek	New South Wales, Australia	1985	722		
President Tancredo Neves	Brazil - Argentina	1985	722	Figueiredo Farraz & Consulbaires	Sobrenco & Supercemento
Shubenacadie River <sup>2</sup>	South Maitland, Nova Scotia	1978	700	Dyckerhoff & Widmann	Design engineer
Selbjorn	Norway	1980	696		
Beska	Beska, Yugoslavia	1975	689	IMS Beograd - B. Zezelj	Mostogradnja
Uruguay River	Uruguay - Argentina	1975	686		
Bendorf	Koblenz	1964	682	U. Finsterwalder	Dyckerhoff & Widmann
Jamestown - Verrazano	Narraganset Bay, Rhode Island	1991	674	T.Y. Lin	Franki - Clark-Fitzpatrick
Tatorna	Acheloos River, Greece	1972	643	Ikonomou	Odon & Odostromaton

**PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Parrots Ferry <sup>2</sup>	Sonora, Calif.	1979	640	HNTB	S. J. Groves
Acosta (twin bridges)	Jacksonville, Fla.	1992,1994	630	DRC Consultants	Recchi America
Melk	Melk, Austria	1972	623		
Rio Higuamo	Dominican Republic	1974	623	T. Y. Lin	Matos Holsteinson & Carbonell
River Orwell	Ipswich, England	1982	623	Halcrow	Stevin
Boknasukndet	Rogaland, Norway	1994	623		
Pelotas river	Lajes, Brazil	1966	620	Sergio Marques de Sousa	Sobrenco
Columbia River	Portland, Ore	1982	620	Sverdrup & Parcel	S. J. Groves
Hachimantai	Akita Prefecture, Japan	1982	617		
Iwa	Kanagawa Prefecture, Japan	1981	607	Nikken - New Structural Engineering	Sumitomo
Snake River <sup>2</sup>	Lewiston, Idaho - Clarkston, Wash.	1982	607	T. Y. Lin	
Cologne-Deutz II	Cologne	1979	604	Leonhardt & Andrä	Hochtief - Holzmann - Berger
Rip	Gosford, N.S.W., Australia	1975	600	N.S.W. Department of Main Roads	John Holland
Columbia River <sup>2</sup>	Portland, Ore.	1979	600		
Gouritz River	Cape Town, South Africa	1977	597		Murray & Stewart
St. Maurice River <sup>2,4</sup>	Gran'Mere, Quebec	1978	595		
Duwamish Waterway	Seattle	1983	590		Peter Kiewit - Grice
Changjiang River	Chongqing, China	1980	571		
Lafranconi	Bratislava, Slovakia	1991	571		
Volga River	Saratov, Russia	1965	558		
Paraguay River	Asuncion, Paraguay	1979	558		
Reichsbrücke	Vienna	1970	556		
Wörth	Wörth, Germany	1979	551	Köhler & Seitz - Thosti Bau	Strabag Bau - Thosti Bau
Illinois River	Valley City, Ill.	1990	550	HNTB	Shappert
Hachinoe Ohashi	Aomori, Japan	1976	541		Yokogawa - Sumitomo - Kawasaki
Confederation <sup>2,5</sup>	Northumberland Strait, Prince Edward Island, Canada	1997	2 @ 541	J. Muller International - SLG Stanley	Strait Crossing Joint Venture <sup>1</sup>

**PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Johor Strait	Singapore	UD	541	Halcrow Fox	
Pearl Line (Amakusa 3)	Kyushu	1967	525	Japan Highway Public Corporation	
New Redheugh	Newcastle-upon-Tyne, England	1980	525	Mott, Hay & Anderson	Nuttall - HBM
Tsing Tsuen	Hong Kong	1988	525	Scott Wilson Kirkpatrick	
Sungai Perak	Malaysia	1989	525	Mott, Hay & Anderson	Hyundai
Benecia-Martinez No. 2	San Francisco	1998	525	T. Y. Lin - CH2M Hill	
Sandhornøya	Norway	1989	505		
Medway	Rochester, England	1960	500	Freeman Fox	Kier - Christiani & Neilsen
West Seattle	Seattle, Wash.	1992	499	DRC Consultants	
Los Turumos	Spain	1978	492		
Alssund	Denmark	1981	492		
Mainbrücke	Frankfurt	1971	486		
Likhachev	Moscow	1960	485		
Amakusa 4	Kyushu	1966	479	Japan Highway Public Corporation	
Straum	Norway	1993	479	Aas Jakobsen	Selmer Moere
Smart Highway <sup>2</sup>	near Blacksburg, Va.	1999	472	Figg Engineering	
Kingston	Glasgow	1970	469		
Bettinger	Main River, Germany	1961	463		
Rhone River	Geneva	1971	459	U. Finsterwalder	
Pine Valley Creek	near San Diego	1974	450	California Division of Highways	
Sundsvall-Alno	Sweden	1964	442		Skanska Cementgjuteriet
Okutone	Japan	1986	433		Zenitaka
Genesee River	Rochester, N.Y.	1980	430		
Retzbach - Zellingen	near Würzburg, Germany	1992	413	Köhler & Seitz	Adam Hörnig
Itchen	Southampton, England	1977	410		
Dauphin Island	Mobile, Ala.	1982	400	Figg & Muller	Brown & Root
Wando	Charleston, S.C.	1989	400	Figg & Muller	T.L. James - Morrison Knudsen
Wabasha Street <sup>2</sup>	St. Paul, Mn.	1998	2 @ 400	Toltz, King, Duvall, Anderson	Lunda Constructors

**PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)**

<b>Bridge</b>	<b>Location</b>	<b>Year Completed</b>	<b>Main Span (ft)</b>	<b>Design Engineer</b>	<b>Superstructure Contractor</b>
Mahatma Ghandi	Patna, India	1987	45@397		Gammon India
Yamatogawa	Sakai, Japan	1970	394		
Chao Phya	Bangkok	1984	394	Norconsult	Sumitomo
Zilwaukee <sup>4</sup>	Saginaw River, Mich.	1988	390	BVN/STS	Stevin - Walter Toebe
Umeda	Kiryu City	1981	371	Long Span Bridge Consultants	Sumitomo
Red River	Boise, La.		370	Figg & Muller	
Mtwapa	Kenya	1980	367	H. P. Gauff	Sumitomo
River of the Mules	Ste. Adele, Quebec	1964	365		
Paksey	Pabna, Bangladesh	1998	361	Rendel Palmer & Tritton - Bangladesh Consultants	
Knight Street	Vancouver, B.C.	1973	360		
Fier River	Annecy, France	1988	360	Haute-Savoie Province - Europe Etude	Dragages et Travaux Publics
Hobart	Hobart, Tasmania		8@358	Maunsell	Leighton-Candac
Second Thane Creek	Bombay, India	1997	351	Rendel Palmer & Tritton	
Barton Creek Boulevard	near Austin, Texas	1987	340	Gee - Quandel	Prescon
London	London	1972	338		
Viaduct Arrêt Darré <sup>2</sup>	France	1987	4@328	Spie Batignolles	Citra Sud-Ouest
Jamuna <sup>2</sup>	Bangladesh	1998	6@326	Rendel Palmer & Tritton	Hyundai
Oneida Lake	New York	1960	320	Summers & Minninger	Terry
Kentucky River	Frankfort, Ky.	1979	320		
Indiana Harbor Canal	Lake County, Ind.	1981	315		
Cogan Viaduct	South Glamorgan, England	1988	312		
Eel River	Scotia, Calif.		310		
Confederation <sup>2,5</sup>	Northumberland Strait, Prince Edward Island, Canada	1997	18 @ 305	J. Muller International - SLG Stanley	Strait Crossing Joint Venture <sup>1</sup>
Credit River	Mississauga, Ontario	1981	3@300		
Escatawpa	Mississippi	1987	300	Figg & Muller	J. D. Adams

1 Design, build, operate, transfer

2 Segmental

## PRESTRESSED CONCRETE GIRDER BRIDGES (cont'd)

- 3 Main span collapsed Sept. 1996
  - 4 Failure during construction
  - 5 Part of approach spans
- UD Under design  
UC Under construction