PCI Announces 2016 Big Beam Contest Results

The Judging Committee recently selected the winners of the Engineering Student Design Competition, also known as the Big Beam Contest. PCI’s Student Education Committee (Dr. Sergio Breña, Chair) organized the Big Beam Contest (sponsored by SIKA Corp., PTAC, and ASPIRE Magazine) and assigned the judging committee (Dr. Richard Miller, Chair). The objective is for teams of students to fabricate and test a precast/prestressed concrete beam with the help of local precast concrete PCI Producer Members. Prizes are awarded to the top twenty (20) performers in consideration of efficient design, highest load capacity, and other categories.

Entries were ranked by total number of points earned per the contest rules and the first place team, for the second year in a row, was from the University of Notre Dame in South Bend, Ind.

Overall Results

**First place: University of Notre Dame; Notre Dame, Ind. (Zone 4)**
Faculty advisor: Yahya Kurama, PhD, PE
PCI producer: StresCore, Inc.; South Bend, Ind. (John Reihl)
  *Student team: Megan McKeon, Luis Gabriel Muñoz Dispa, Tyler Thompson, Thomas Sweeney, Anna Spatz, Molly O’Toole, Ryan Shea*
  Points: 62.25
  Award: $2000, plus other prizes

**Second place: Saint Martin’s University; Lacey, Wash. (Zone 1)*
Faculty advisor: Jill Walsh, PhD
PCI producer: Concrete Technology Corporation; Tacoma, Wash. (Austin Maue)
  *Student team: William J. Miller III, Micaylla O’Leary, Madeline Knecht, Jessica De Boer, Anthony Merlino, Kyle Howlett*
  Points: 58.25
  Award: $1750

**Third place: Oregon State University; Corvallis, Ore. (Zone 1)**
Faculty advisor: Keith Kaufman, PhD, PE
PCI producer: Knife River - Prestress; Harrisburg, Ore. (Keith Kaufman)
  *Student team: Tyler Oathes, Cody Tibbits, Neil Schweitzer, Taylor Kiefel, Anh Nguyen, Jonathan Kopp*
  Points: 56.25
  Award: $1500

**Fourth place: University of South Florida [Team 2]; Tampa, Fla. (Zone 6)**
Faculty advisor: Rajan Sen, PhD, PE
PCI producer: Standard Concrete Products; Tampa, Fla. (Ryan Cartwright)
  *Student team: Arlind Aliaj, Tanya Anisimova, Nelson Figueroa, Daniel Hagerman, Andrew Williams*
  Points: 54.75
  Award: $1250

**Fifth place: Missouri University of Science and Technology; Rolla, Mo. (Zone 3)**
Faculty advisor: John Myers, PhD, PE
PCI producer: Coreslab Structures, Inc (Missouri); Marshall, Mo. (Jim Myers)
  *Student team: Eli S. Hernandez, Hayder Alghazali, Saipavan Rallabhandhi*
  Points: 54.5
  Award: $1000
Sixth place: University of South Florida [Team 1]; Tampa, Fla. (Zone 6)
Faculty advisor: Rajan Sen, PhD, PE
PCI producer: Standard Concrete Products; Tampa, Fla. (Ryan Cartwright)
  Student team: Sandra Buitrago Gutierrez, Mohammed Alamri, Amjed Salhabaltamimi, Luiz
  Antonio Braga Jacinthe
  Points: 54.25
  Award: $1000

Seventh place: University of Alabama [Team Jelly Beam]; Tuscaloosa, Ala. (Zone 6)
Faculty advisor: Sriram Aaleti, PhD
PCI producer: Gate Precast; Monroeville, Ala. (Mark Ledkins)
  Student team: Vidya Sagar Ronanki, Saeid Hayati, David Burkhalter, Md. Kobir Hossain
  Points: 53.25
  Award: $1000

Eighth place: University of California, San Diego; La Jolla, Calif. (Zone 1)
Faculty advisor: Jose Restrepo, PhD
PCI producer: Oldcastle Precast, Inc.; Perris, Calif. (Jon Grafton)
  Student team: David E. Duck, Farshad Alimohamamdi, Mohamed ElGabaly, Rainbow Lin
  Points: 51.75
  Award: $1000

Ninth place (tie): Iowa State University [Team 1]; Ames, Iowa (Zone 3)
Faculty advisor: Sri Sritharan, PhD
PCI producer: Forterra Pipe and Precast; West Des Moines, Iowa (Jeff Butler)
  Student team: Michael Rosenthal, Nathan Scharenbrock, Anmol Pakhale
  Points: 51.25
  Award: $1000

Ninth place (tie): Lehigh University [Team 1]; Bethlehem, Pa. (Zone 5)
Faculty advisor: Clay Naito, PhD, PE
PCI producer: J&R Slaw, Inc.; Lehighton, Pa. (Robert Slaw)
  Student team: Robin Hendricks, John Thompson
  Points: 51.25
  Award: $1000

Eleventh place: Lehigh University [Team 2]; Bethlehem, Pa. (Zone 5)
Faculty advisor: Clay Naito, PhD, PE
PCI producer: J&R Slaw, Inc.; Lehighton, Pa. (Robert Slaw)
  Student team: Joseph Ingaglio, Carly Daitch, Rebecca Milano
  Points: 48.25
  Award: $1000

Twelfth place (tie): Western University [Team 1]; London, Ontario, Canada (Zone 7)
Faculty advisor: Aiham Adawi, PhD, P.Eng.
PCI producer: Prestressed Systems, Inc.; Windsor, Ontario, Canada (Anil Mehta)
  Student team: Rob Kuehnen, Khalid Backtash, Li Hao Zhang, Brendon Tan, Erik Mahon,
  Alexander Riveros
  Points: 45.5
  Award: $500
Twelfth place (tie): Western University [Team 2]; London, Ontario, Canada (Zone 7)
Faculty advisor: Ayman El Ansary, PhD, P.Eng.
PCI producer: Prestressed Systems, Inc.; Windsor, Ontario, Canada (Anil Mehta)
   Student team: Ahmed Elshaer, Zaid Al-Qaysi, AbdelRahman Fayez, Moustafa El-sawy, Fouad Elezaby, Ibrahim Ibrahim, Ahmed Shehata
   Points: 45.5
   Award: $500

Fourteenth place: California State University, Sacramento; Sacramento, Calif. (Zone 1)
Faculty advisor: Eric Matsumoto, PhD, PE
PCI producer: Clark Pacific; Woodland, Calif. (Glen Underwood)
   Student team: Bryce Leuschen, Alex Switzgable, Alex Biaheza, Matthew James, Vince Anicich, Ivan Tulao, Jaber Tannous
   Points: 43.25
   Award: $500

Fifteenth place: University of Kansas [Team 4]; Lawrence, Kan. (Zone 3)
Faculty advisor: Bob Lyon, PhD, PE
PCI producer: Coreslab Structures; Kansas City, Kan. (Terry Fleck)
   Student team: Brian Robertson, Triveni Mudaliar, Amin Dehghani
   Points: 42.75
   Award: $500

Sixteenth place: University of Windsor; Windsor, Ontario, Canada (Zone 7)
Faculty advisor: Amr El Ragaby, PhD, P.Eng.
PCI producer: Prestressed Systems, Inc.; Windsor, Ontario, Canada (Anil Mehta)
   Student team: Junaid Khan, Omar Albarazi, Majed Alkheriji, Alaeldeen Abdelmoneim, Sofia Tahat
   Points: 40.5
   Award: $250

Seventeenth place: University of Kansas [Team 3]; Lawrence, Kan. (Zone 3)
Faculty advisor: Bob Lyon, PhD, PE
PCI producer: Coreslab Structures; Kansas City, Kan. (Terry Fleck)
   Student team: Shahedreen Ameen, Sean Cameron, Rezoana Islam
   Points: 40
   Award: $250

Eighteenth place: Iowa State University [Team 2]; Ames, Iowa (Zone 3)
Faculty advisor: Sri Sritharan, PhD
PCI producer: Forterra Pipe and Precast; West Des Moines, Iowa (Jeff Butler)
   Student team: Michailina Hadjiyiangou, Chetan Swarn, Satyam Mandloi, Praveen Rajasekar
   Points: 39.75
   Award: $250

Nineteenth place: University of Kansas [Team 1]; Lawrence, Kan. (Zone 3)
Faculty advisor: Bob Lyon, PhD, PE
PCI producer: Coreslab Structures; Kansas City, Kan. (Terry Fleck)
   Student team: Sajed Huq, Ryan Landreneau, Kelly Lowe
   Points: 39
   Award: $250
Twentieth place: University of Kansas [Team 2]; Lawrence, Kan. (Zone 3)
Faculty advisor: Bob Lyon, PhD, PE
PCI producer: Coreslab Structures; Kansas City, Kan. (Terry Fleck)
Student team: Alexander Weber-Kamin, Zahra Andalib, Meredith Megaffin, Mahesh Mediboyina
Points: 38.5
Award: $250

Best Report

The judging committee considers the overall presentation of the report when deciding on a best report winner. In addition to verifying the report contains all the requested sections and required signatures, judges look for clear presentation of data, professional look and formatting, and an overall well-written report.

University of Alabama [Team Jelly Beam]; Tuscaloosa, Ala. (Zone 6)
Faculty advisor: Sriram Aaleti, PhD, P.Eng.
PCI producer: Gate Precast; Monroeville, Ala. (Mark Ledkins)
Student team: Vidya Sagar Ronanki, Saeid Hayati, David Burkhalter, Md. Kobir Hossain
Award: $500

Best Video

Contest requirements include a video taken of the beam being tested. Teams are encouraged to be as creative as they wish when preparing the final video. Videos with a storyline related to the big beam competition are clear standouts and the judging committee may elect an entry to receive a best video award.

Iowa State University [Team 1]; Ames, Iowa (Zone 3)
Faculty advisor: Sri Sritharan, PhD
PCI producer: Forterra Pipe and Precast; West Des Moines, Iowa (Jeff Butler)
Student team: Michael Rosenthal, Nathan Scharenbrock, Anmol Pakhale
Award: $500

Honorable Mentions

Western University [Team 1]; London, Ontario, Canada (Zone 7)
Faculty advisor: Aiham Adawi, PhD, P.Eng.
PCI producer: Prestressed Systems, Inc.; Windsor, Ontario, Canada (Anil Mehta)
Student team: Rob Kuehnen, Khalid Backtash, Li Hao Zhang, Brendon Tan, Erik Mahon, Alexander Riveros

University of California, San Diego; La Jolla, Calif. (Zone 1)
Faculty advisor: Jose Restrepo, PhD
PCI producer: Oldcastle Precast, Inc.; Perris, Calif. (Jon Grafton)
Student team: David E. Duck, Farshad Alimohamamdi, Mohamed ElGabaly, Rainbow Lin

All videos are posted online on PCI’s Big Beam Channel on Youtube. Simply visit www.youtube.com and search PCI Big Beam.
*New school to competition*