Genuine innovation takes us farther.
It goes well beyond the boundary. It makes the impossible possible.
Introducing a revolutionary breakthrough in modular steel bridge design – The Tunable Bridge™ from Big R.
With clear spans of up to 400 feet, The Tunable Bridge™ is a structural hybrid that’s short on costs and long on possibilities.

The Tunable Bridge™ combines the physics of a hinged tied arch with any standard steel truss system or girder superstructure and features an innovative adjustable “tuning” system to balance the live and dead loads between the arches and trusses. The resulting design is lightweight, economical, easy-to-install and very attractive.
Lightweight, easy-to-install, and very attractive, The Tunable Bridge™ takes modular steel bridges to a whole new dimension.

Real innovation is a rare bird, and the Tunable Bridge™ from Big R Bridge is the genuine article. This amazing advance in bridge design combines the inherent benefits of a hinged tied arch system with those of a standard steel truss system. The Tunable Bridge™ can balance or “tune” the structures’ natural frequencies like a finely-tuned instrument. Longitudinal, tightening rods in the trusses’ lower chords pre-stress the truss modules for dead load before installation. The tied-arch sections are then attached by adjustable, tension hanger rods to balance the live load. Fine tuning the adjustable arch and truss rods ultimately balances live and dead loads between the two systems. With no critical members, this redundant stress sharing increases safety and allows for lighter, lower-cost material and longer, more-graceful designs. Ideal over high-traffic or difficult terrain, the modular components install quickly and have all pins and connectors visible for easy inspections. The Tunable Bridge™ from Big R Bridge – one more way we are taking you farther for less.