

With the Customers...

R&D Base of Steel Materials for Social Infrastructure

THiNK SMART



The Solution Center, located around Keihin THiNK Site, for the Steel Materials for Application Research & Technology – THiNK SMART – is a group of laboratory facilities for a collaborative testing and research with customers for the social infrastructure sector such as civil, building and bridge constructions. The collaborative activities are conducted on the materials and application technologies for the steel products targeted on the sector.

Offering its wide open laboratory space, THiNK SMART allows customers to directly experience the state-of-the-art steel products and technologies. This interaction shall boost the development of new materials and application technologies, which potentially solves customers problems.



Two Bases of THiNK SMART

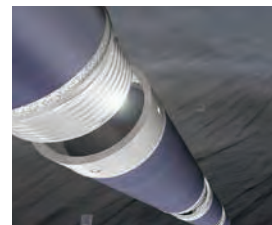
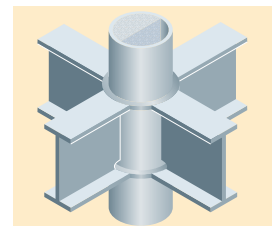
Keihin THiNK Site (Kawasaki City)

Consists of the facilities related to;

- Steel structure solution
- Maintenance solution
- Material forming solution
- Material solution of steel sheet for building construction (cooperated with JFE Galvanizing & Coating Co.,Ltd.)

Naganuma Site

- Large scale structural testing equipment

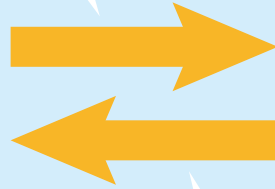


Solution Activities in THINK SMART

Component Technologies of JFE Steel



Proposal of new concept based on our component technologies



Technological needs and trends

Customers

- Government agencies and other institutions
- National Research and Development Agency
- Local government units
- Railroad and expressway companies
- Telephone and communication companies
- Energy and resource (oil & gas) companies
- Architectural design offices
- Universities and colleges
- General contractors
- Bridge and architecture construction companies

Customer's Perspective and Needs

Improvement of security/safety, durability and environmental friendliness

Enhanced readiness in construction, manufacturing and processing

Reduction of total cost (construction and maintenance)

Creation of New Products for Steel Structures

- Beam-to-column joints with high strength steel pipes filled with concrete



- Steel frame kit for housing with safety, longevity and comfort



- Buckling restrained braces

- Mechanical joints for steel pipe piles (High-Mecha-Neji™)



- J-Pocket Pile™, sheet pile with water-tight joints



- Ferroform™, hydration solidified made from steel slag