■ Project Name: Central Subway Tunneling / San Francisco MTA Project #1252

■ Contractor(JV): Barnard Impregilo Healy JV

■ Subject: Seismic Seal /  $\Omega$  seal

■ Spec: ①Watertightness; 0.15MPa

②Expansion and contraction displacement; ±101.6mm

③Shear displacement; ±38.1mm

## 1. Water pressure test in our plant



2.  $\Omega$  seal



3. Holding pressure; 0.25MPa



10<sup>th</sup> April, 2015

MUTSUBISHI RUBBER CO. LTD.

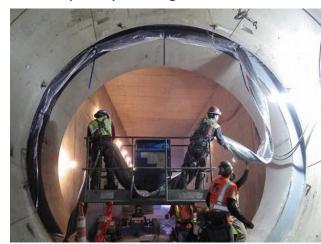
4. Tunnel eye concrete



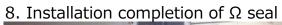
5. Installation of bolts



6. Temporary setting of  $\Omega$  seal



7. Installation of retainers





9. Watertightness test at site



10. Work completion



11. Overview design

