

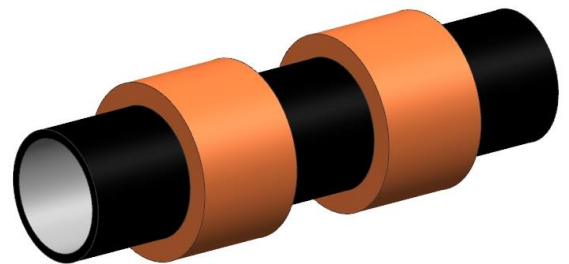


CFRP - Rubber composite pipe

□ We were able to mold CFRP and rubber integrally by our original technology.
 "Blend design, Integrated layer design, Mold design, Adhesion technology"



Interlayer rubber pipe



Molding mold pipe



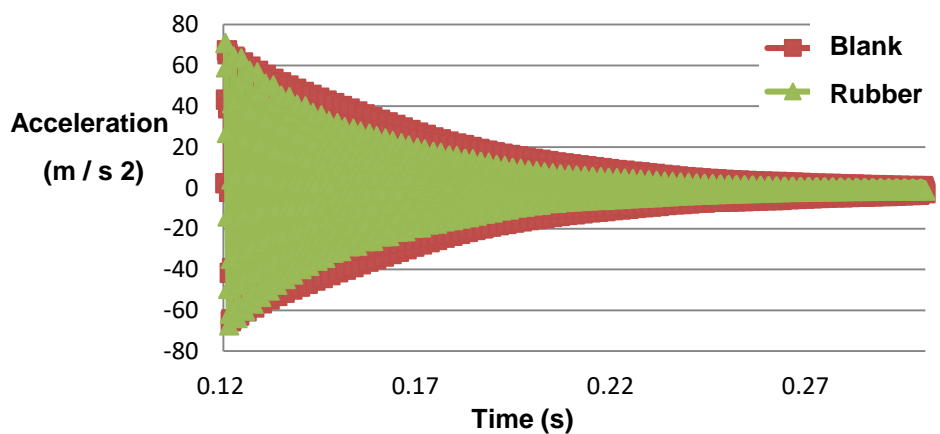
Surface rubber pipe

Black : CFRP
 Brown : Rubber

□ Expected effect
 Vibration damping the rubber layer was placed in an appropriate position by arranging it, efficient vibration damping granted.
 (Rigidity, Strength design required)

- Abrasion Resistance (Surface Rubber)
- Antiskid (surface layer rubber)
- Non-conductive (surface layer rubber)

Vibration damping example



| | Blank | Rubber |
|-------------------------|---------------------|-----------------------------------|
| Integrated layer design | $(\pm 45)_2/90/0_2$ | $(\pm 45)_2/90/\text{Rubber}/0_2$ |
| Inner diameter (mm) | 11.2 | 11.2 |
| outer diameter (mm) | 12.9 | 13.3 |
| Weight (g) | 19.7 | 24.1 |