

# Highly Versatile Hollow Shaft

- Mass Production
- Prototype
- Development

Precision

## Product Features

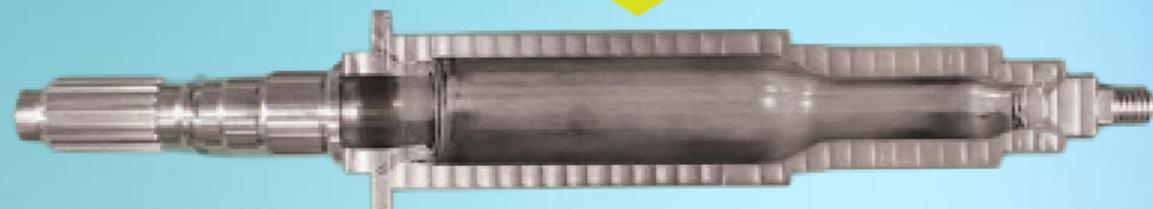
- Lightweight by changing from solid to hollow
- Addition of shaft center lubrication function by changing from solid to hollow
- Sharing parts by joining separate parts, joining different materials

Solid Shaft



Approximately 50% lighter

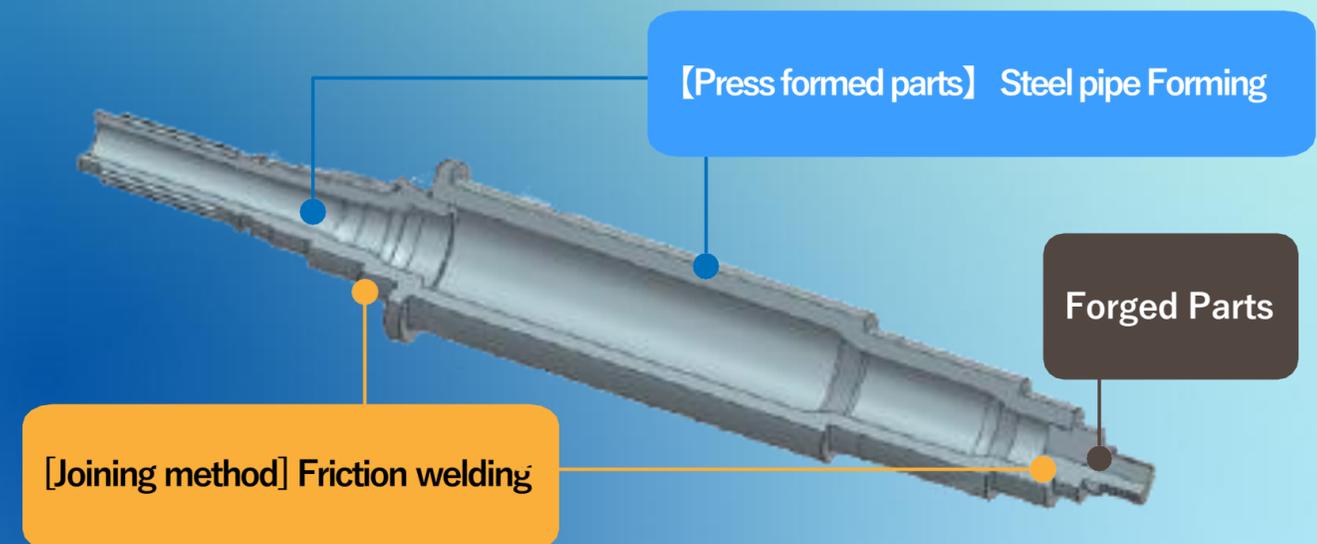
Press formed hollow shaft



## Product Technology

- By forming steel pipe material, hollowing is possible without cutting the inner diameter.
- Hollow components can be joined by friction welding

### Hollow type: 3-part design



### Press formed parts (cross section)



Pressing Toward a Brighter Tomorrow