



# HIPERMAX

## Suspension Production Process

HKS suspension is manufactured within HKS' own facilities under strict quality control method to ensure product quality.

### Spring



**Materials**  
Heat-treated special steel (SAE9254 variant)



**Coiling**  
Materials are cold formed using the coiling machine.



**End Face Machining**  
Both ends are machined flat.



**Painting**  
Powder coating for better corrosion resistance.



**Inspection**  
Spring rates and dimensions are measured by a load testing machine.

### Main Shaft



**Materials**  
Special material selected specifically for the shaft.



**Processing**  
High precision machining according to each product specification.



**Plating**  
Special plating for increased durability and performance.



**Inspection**  
Surface roughness and dimensions are measured.

### Cylinder



**Materials**  
Specially ordered pipe is cut to required length.



**Processing**  
Precision machining for cut pipes.



**Welding**  
Fitting brackets are welded to the processed pipes.



**Special Surface Treatment**  
Special surface treatment for corrosion protection.

# Passion for Quality

Small scale production and attention to detail add value which cannot be achieved through mass production. Suspension by discerning people for discerning people

To ensure that each and every application can be made to satisfaction, generic design and production are avoided in preference for a meticulous design and test process. This achieves a special "Made in Japan" suspension product with "made by hand" quality with the accuracy of automated production.



**Picking**  
Parts to be assembled are picked.



**Piston Assembly**  
The piston and main shaft are assembled.



**Oil Injection**  
The cylinder and piston assembly are assembled, and special oil is injected into the cylinder.



**Dampening Force Measurement**  
Gas is charged, and the dampening force of each product is inspected.



**Final Check**  
Final checks are performed after assembling springs and upper mounts.



**Packing**  
The product is packed with a manual and accessories.