

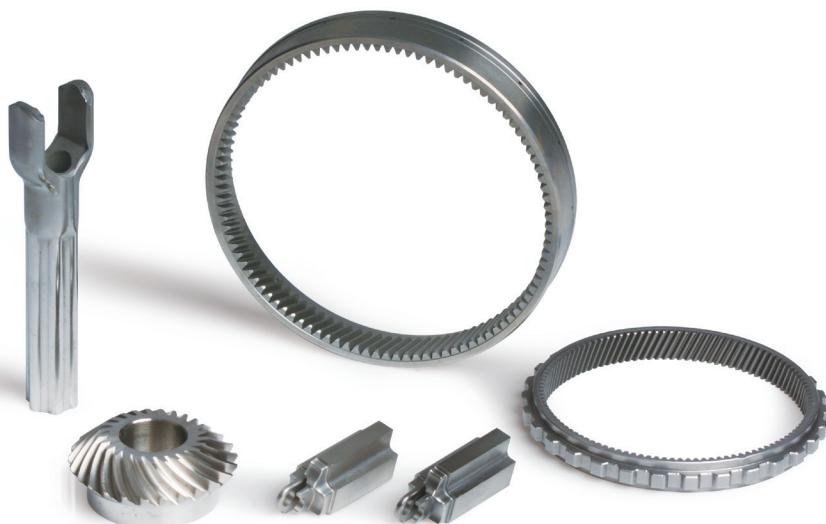


# HP-NITRIDING™



## High Density Plasma / Inner Wall Nitriding

Eco-friendly · high-speed nitriding treatment technology by high density plasma



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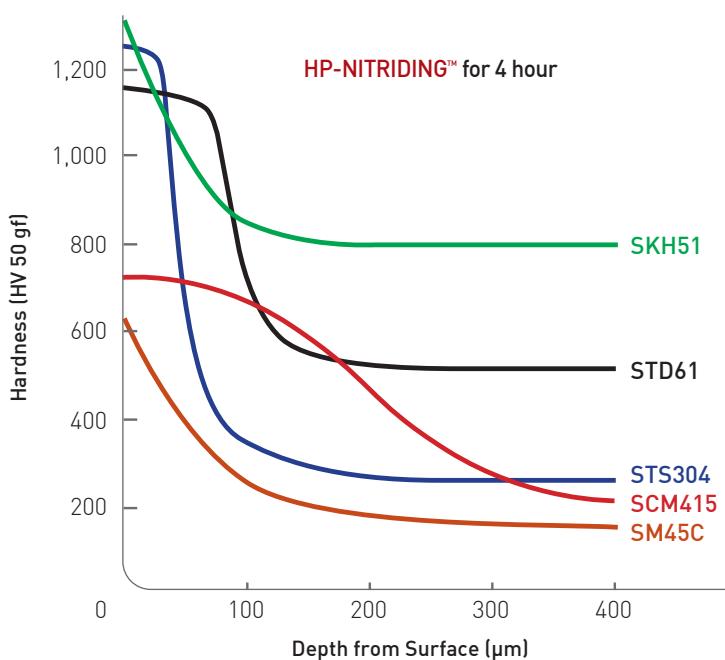


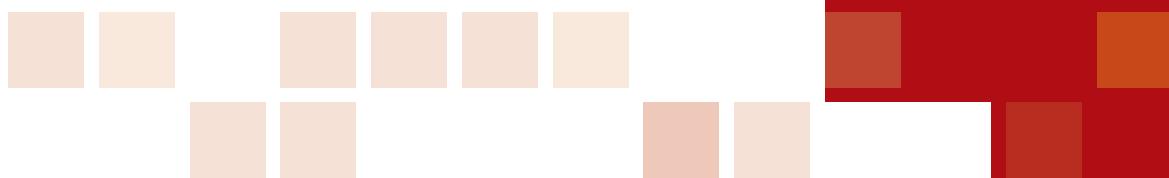
HP-NITRIDING™ is an eco-friendly technology available to rapid nitriding treatment with high density plasma.

## > Characteristics of HP-NITRIDING™

- High-efficiency and rapid process ➔ Quick order acceptance and low nitriding cost
- Enable sufficient nitriding on the inner side of pipe or tube ➔ High efficiency nitriding on inner wall which was impossible by the existed technologies
- No variation of heat treatment ➔ Minimize thermal strain through low temperature process and functional parts-focused nitriding
- Feasible to apply variety materials and configurations ➔ From low carbon steel to high alloy steel
- Customized nitriding ➔ Provides better services to satisfy customer

< Hardness distribution of hardening layer After HP-NITRIDING™ >





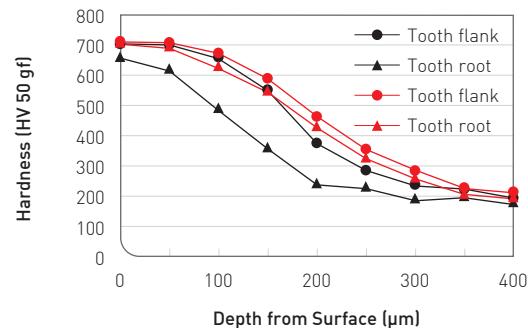
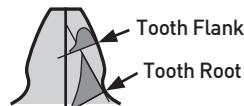
## > Applications

- Vehicle component parts – Ring gears, piston rings, synchronizer rings, yoke pipes and other cylinders.
- Manufacturing tools – Millings, milling cutters, rams, drills, taps, broaches, other molds and punches.
- Sintering parts – Precision gears, bushes and high-alloy sintering parts.

### High nitriding rate, high uniformity nitiriding effects for diverse parts

#### ► Ring gear for vehicle / SCM415

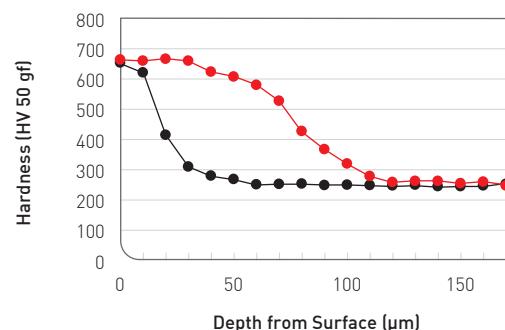
- ( ● ) HP-NITRIDING™ 4hr.  
( ● ) Conventional Plasma Nitriding 20hr.

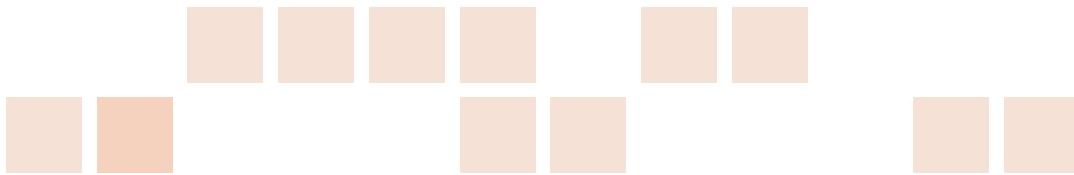


### Nitriding effects of pipe's inner wall and tubes with narrow diameter

#### ► Inner wall nitriding of vehicle yoke pipe / SCM415

- ( ● ) HP-NITRIDING™ 2hr.  
( ● ) Conventional Plasma Nitriding 12hr.





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