

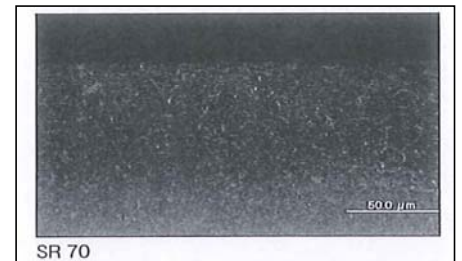
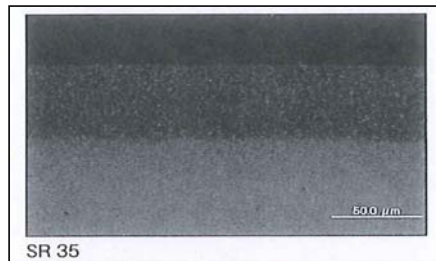
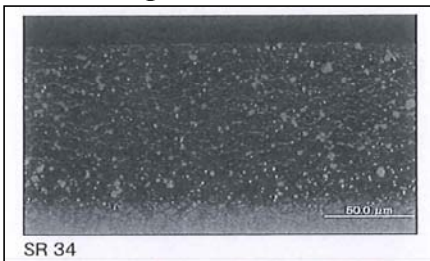
# Gas Nitriding – Piston Rings:



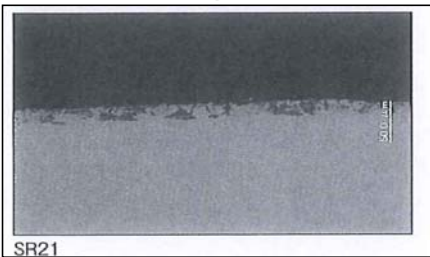
## Typical surface modification and its applications

CLASSIFICATION	TRENTMENT	FEATURES	HARDNESS	APPLICATIONS	
NITRIDING	Gas Nitriding	Nitride Treatment using NH3 gas.	HV1000 – HV2000	Automobile Piston Rings (Top, 2nd, and OIL Ring)	
		Generally after-treatment is required against white layer adhesion.			
	Salt Bath Nitriding	Nitride treatment in Salt Bath.			Applicable to various types of steel: Eccellent in wear resistance.
		High activation capability and short treatment time.			
		White layer becomes porous.			
	Ion Nitriding	Electrifying the work in N2 and H2 gas atmosphere, N2 particles are ionized and then nitride the work.			Pissible to treat in low temperature: Clean finish of treated surface.
Pissible to control compound layer thickness: Excellent in wear resistance.					

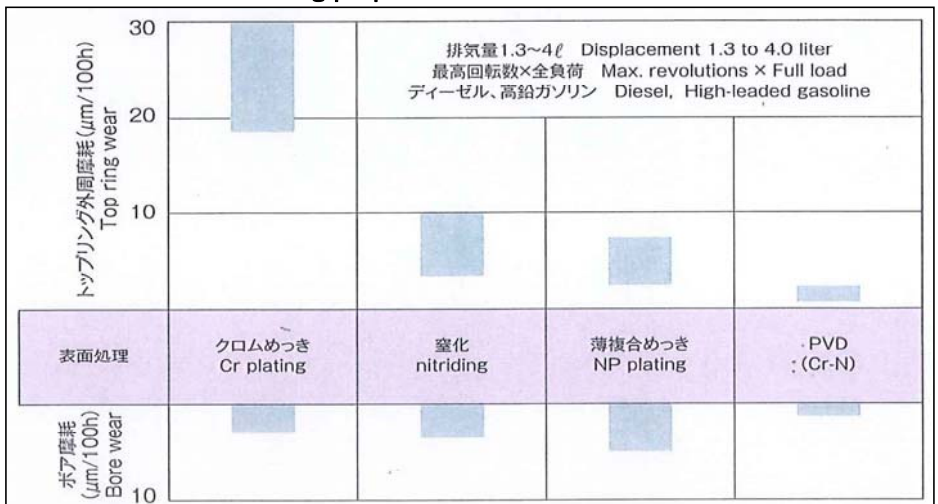
### Gas Nitriding



### Salt Bath Nitriding



### Wear resisting properties of various surface treatments.



Comparison of ring wear & bore wear.