lubricants

MDPI

Supplementary material

Thermal Fatigue Resistance Studies of Multilayer CrN and AlTiN Coatings Deposited on Plasma Nitrided H-13 Hot Work Steel

Chetan Gurada [1], Rajesh Mundotia [2], Umesh Mhatre [2], Ashwin Kale [2], and Dushyant Kothari [1,*]

[1] Department of Physics, University of Mumbai, Santacruz (E), Mumbai 400 098, Maharashtra, India
[2] Surface Modification Technologies Pvt. Ltd., Emerald Premises, Sativali Road, Vasai (East), Palghar 401 208, Maharashtra, India
* Correspondence: kothari@physics.mu.ac.in

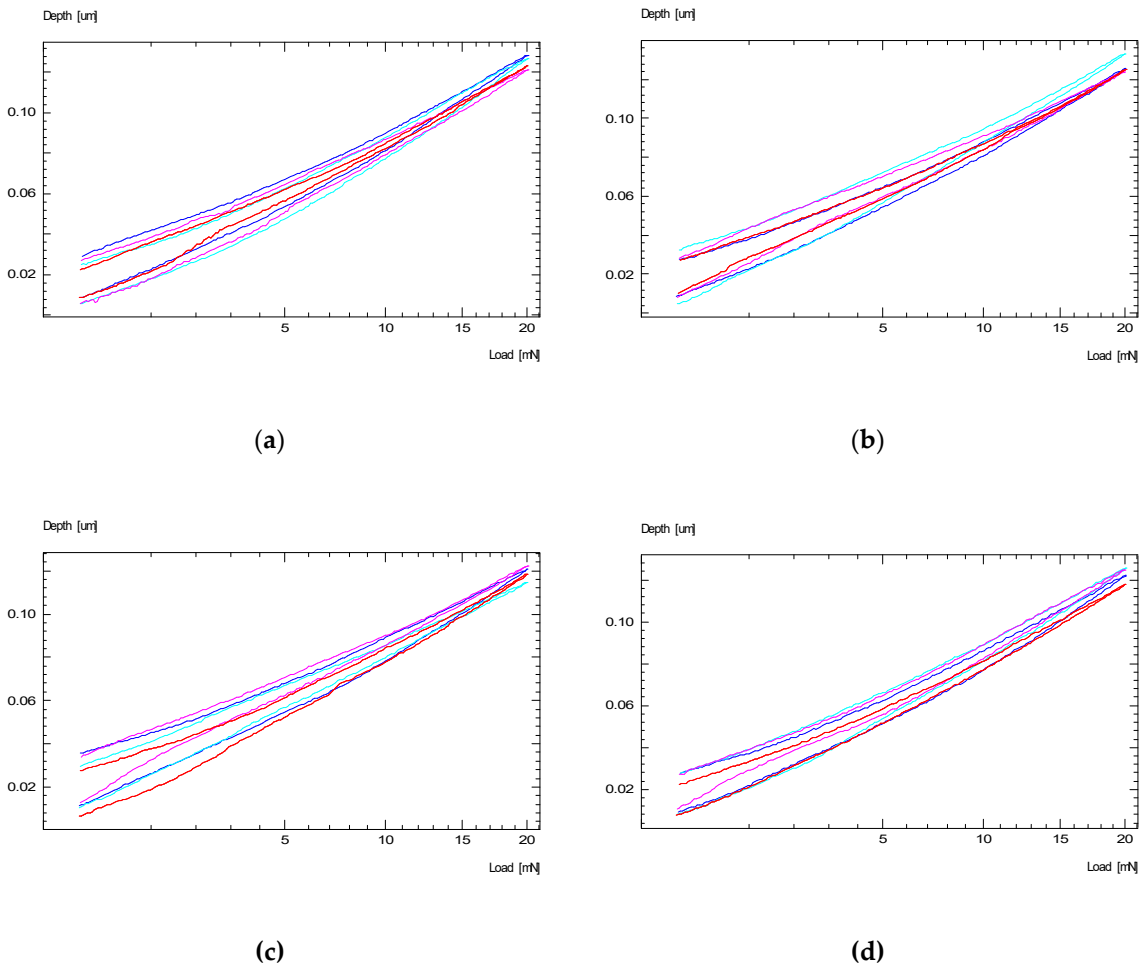


Figure S1. Loading-unloading curves of micro-hardness test carried out on: (a) m-CrN_PN50; (b) m-CrN_PN200; (c) m-AlTiN_PN50; (d) m-AlTiN_PN200.

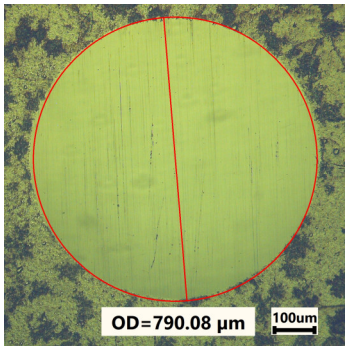
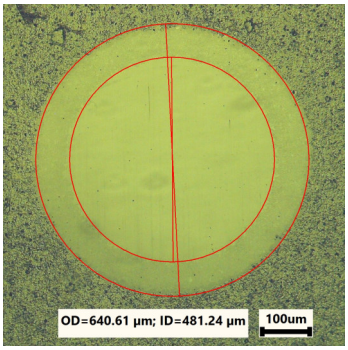
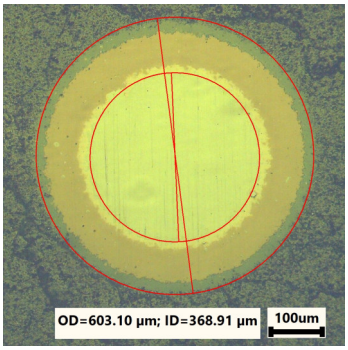
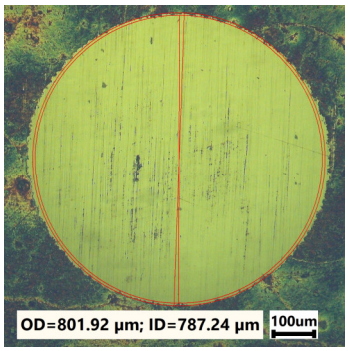
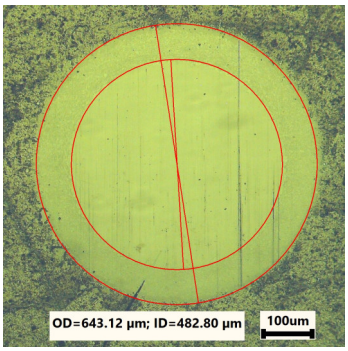
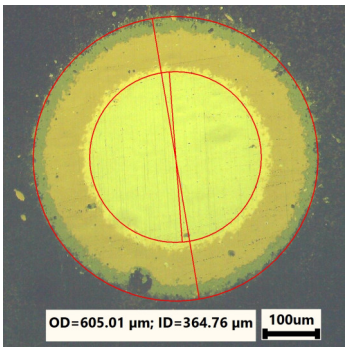
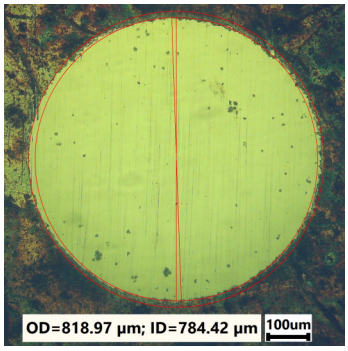
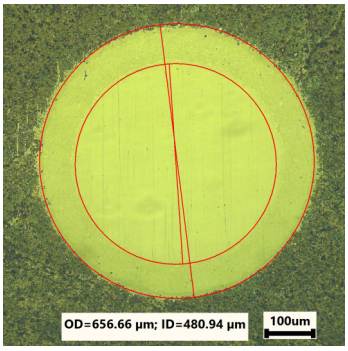
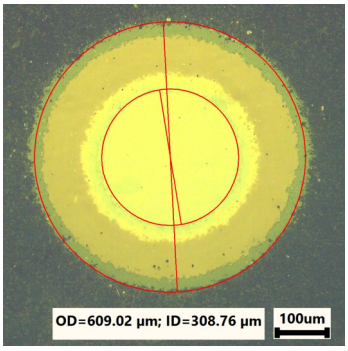
	H-13_PN50	m-CrN_PN50	m-AlTiN_PN50
TF100			
TF300			
TF500			

Figure S2 Optical images (taken at 50x mag.) of wear craters (240 sec) for PN50 samples after thermal fatigue TF100, TF300 and TF500.

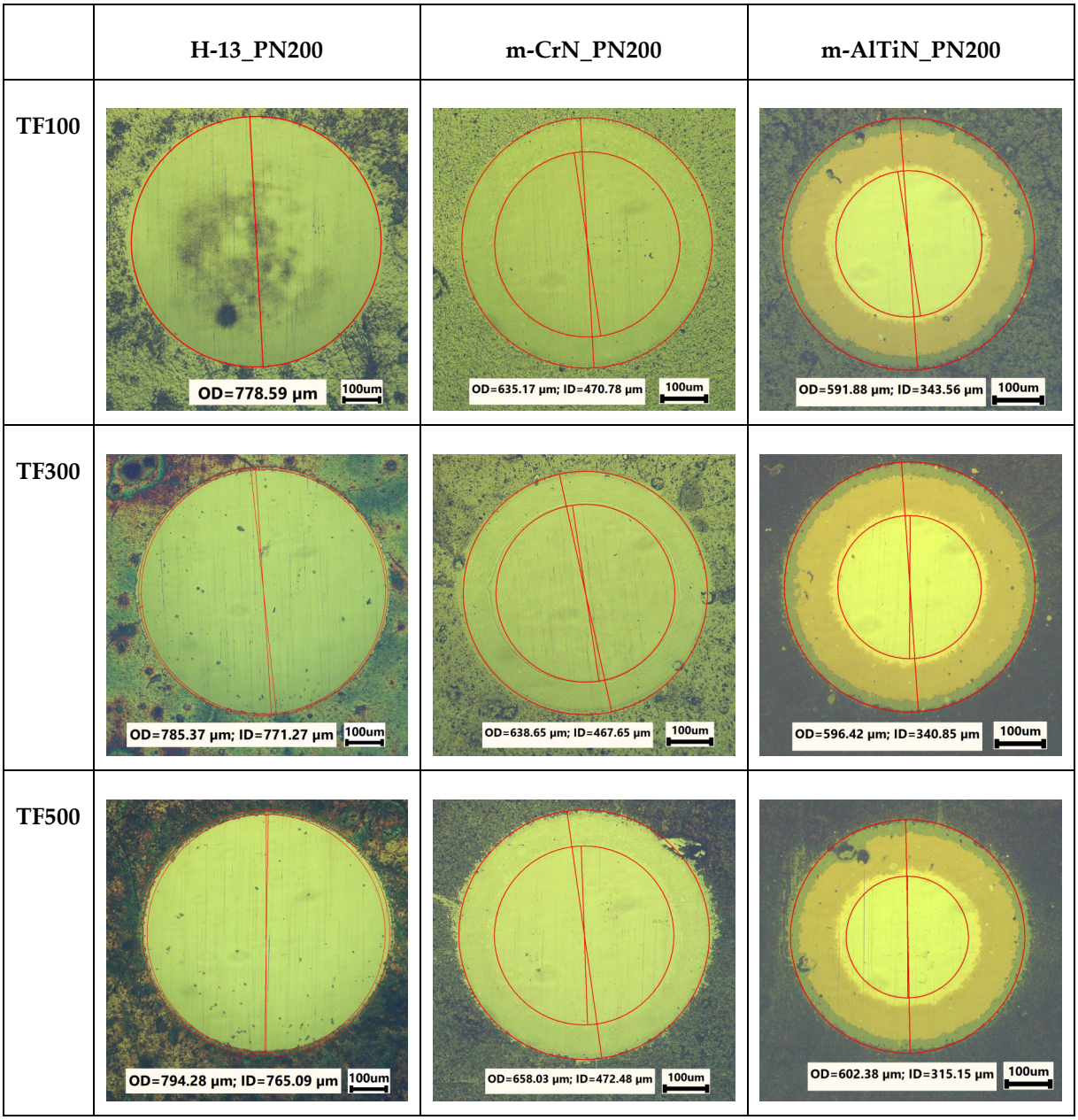


Figure S3 Optical images (taken at 50x mag.) of wear craters (240 sec) for PN200 samples after thermal fatigue TF100, TF300 and TF500.