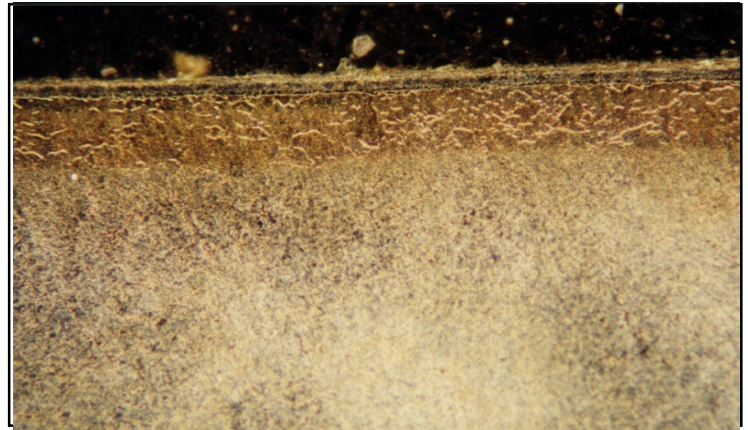


**Material** : DIN 1.2344 Hot Work Tool Steel

**Method No.** : A10

**Results**

In nitrited surface, the white layer and the diffusion zone underneath are clearly seen. Case depth is approx. 50 microns and the hardness is 110<sup>9</sup> kg/mm<sup>2</sup>. Low cutting force with lower feed is recommended. Edge roundness should be avoided.



**DIN 1.2344 Nitrited Surface, Brightfield**  
 Magnification: 180X Etching: Picral  
10%

**Preparation Method:**

- Cutting:** Abrasive Cut-off machine with Metlab Diamond Metal Bonded Wheel
- Mounting:** Mounting Press with Black Epoxy
- Mechanical Preparation:** FORCIPOL Grinding / Polishing Machine + FORCIMAT Automatic Specimen Mover.

Steps	Surface	Abrasive	Lubricant	Force per Sample, (N)/(PSI)	Time min.	Disc Speed, rpm	Relative Rotation
1	S/C Paper Disc	180 Grit	Water	30/6	2 min. or until plane	300	Contra
2	S/C Paper Disc	400 Grit	Water	25/5	2	250	Contra
3	S/C Paper Disc	800 Grit	Water	25/5	2	250	Contra
4	Plan Cloth	6 $\mu$ Diamond Suspension	Blue Lube	15/3	3	150	Contra
5	Mol Cloth	1 $\mu$ Diamond Suspension	Blue Lube	15/3	4	150	Contra

**FOR MORE DETAILED INFORMATION PLEASE REFER TO METLAB PRICE LIST**