

Maximum Wear Resistance

ORGAN NEEDLE **INFORMATION**

**PD** PLATING

Uneven quality due to needle abrasion and time lost for changing needles have been continual problems in efforts to improve quality and productivity of sewing industries. The development of Organ's PD/Perfect Durability needles make significant strides to addressing these problems and improving profitability.



PD/Perfect Durability: Titanium Nitride Finish Assures Greatest Wear Resistance

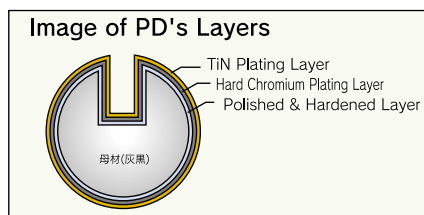
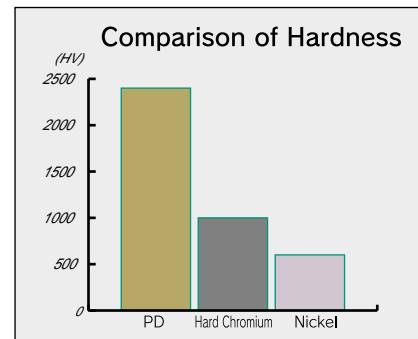
Organ's PD/Perfect Durability plating provides a smoother and more durable finish on needles to make them more resistant to wearing out.



**ORGAN NEEDLE CO., LTD.**

### More Durable Finish / Longer Needle Life

| MATERIALS   | FINISHED PRODUCTS                     |
|---|---------------------------------------|
| Generally Tough Materials                           | Jackets                               |
| - Woven Denim                                       | Jeans                                 |
| - Nylon Fabric                                      | Sport Shoes                           |
| Leather   | Leather Apparel                       |
| Vinyl   | Luggage, Seating, Industrial Products |
| Elastics  | Foundation Garments                   |
| Compound Materials with Plastic, Carbon, Fiberglass | Automobile Components                 |

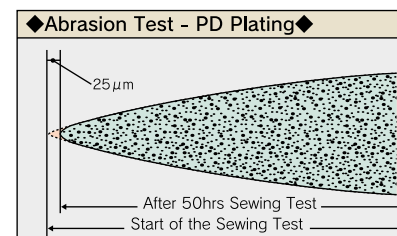
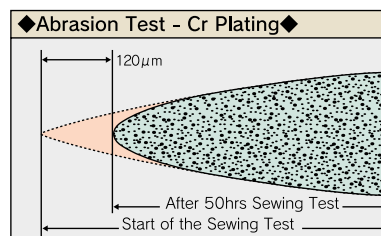


#### ■ PD/Perfect Durability

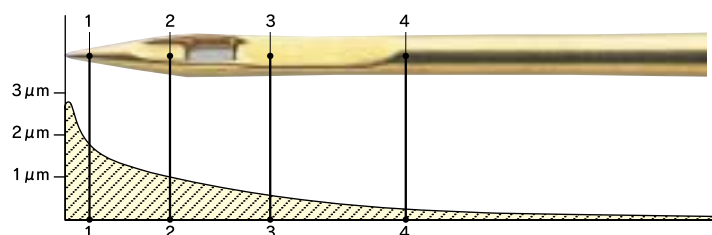
The PD/Perfect Durability finish is uniformly layered with an ultra hard coating (HV2000) of vaporized Titanium Nitride over precision made, highly polished and hardened layer and chromium-plated needles. The result is a needle with the ultimate properties for resistance to wear. (PAT.P)

#### ■ Anti-Abrasion Resistance

Exhaustive tests under high speed sewing conditions during extended periods of time demonstrate that PD/Perfect Durability needles have twice the hardness and up to five times the anti-abrasion resistance as compared to chromium plated needles. The wear resistant properties of PD/Perfect Durability needles are particularly evident when sewing thick or abrasive materials. These tests prove that the PD/Perfect Durability finish provides the most effective protection from wear.



#### Distribution of TiN in thickness



#### ■ PD/Perfect Durability Finish Puts More Titanium Nitride in the Needle Point

Abrasion or damage to the needle's point leads directly to the needle's bending and breaking. Keeping the precisely designed shape of the needle's point is the chief factor to achieving longer needle life. Organ's advanced technology improves the adhesion of Titanium Nitride layers which is especially important in the needle's point. The point of PD/Perfect Durability needles exhibits extremely high anti-abrasion resistance and durability.

※Look for the "PD" designation on ORGAN packaging.

-10pcs-  
DP×17  
Size 19PD

※PD/Perfect Durability needles can be supplied in all types of ORGAN needles. Please contact our representative for further information.



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