HITACHI
Inspire the Next

イオンミリング装置

ArBlade 5000

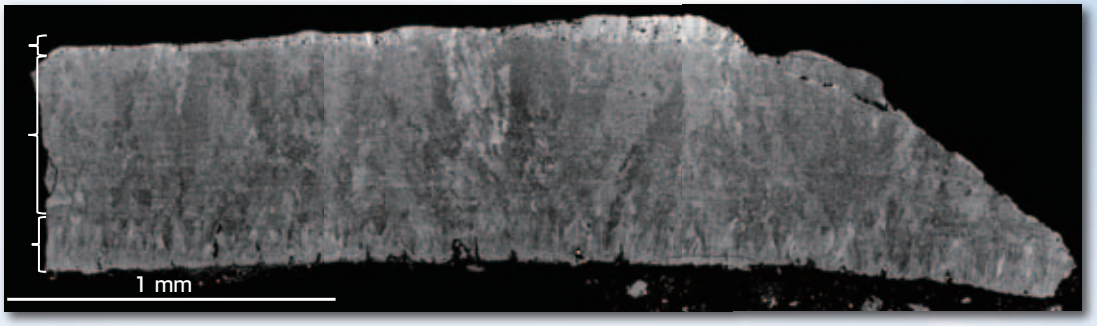
Ion Milling System ArBlade 5000

Science for a better tomorrow

特 長 Features

- **mmオーダーの加工幅で平滑/高スループットな断面試料作製**
  It is possible to expand milling width up to 8 mm with the wide area cross-section milling function.
- **2ndミリング機能によるダメージ層除去**
  2nd milling function can remove damage layers.
- **冷却温度調整機能による熱ダメージ低減**
  Cooling temperature control function to reduce thermal damage.

◆ 広領域イオンミリングのアプリケーション
Application of wide area ion milling



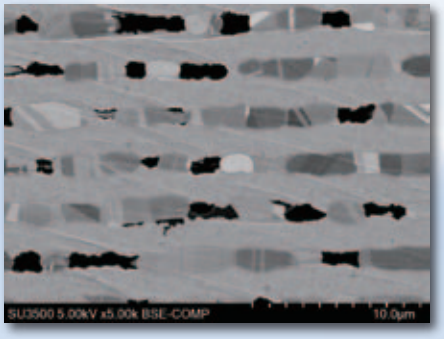
試料：化石(恐竜の卵)
Specimen : Fossil
(Egg shell of dinosaur)

Ion milling condition
Vacc. : 7.0 kV
Milling time : 5 hours

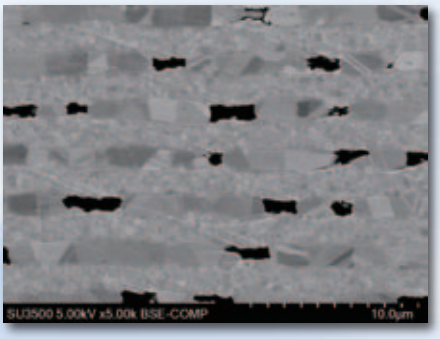
SEM condition
SEM : SU8200
Vacc. : 5.0 kV
Signal : BSE

Specimen Courtesy : Yasuhisa Nakajima
Atmosphere and Ocean Research Institute
The University of Tokyo

◆ 2nd ミリング機能を用いたアプリケーション
Application of 2nd milling function



自動実行
Automatic

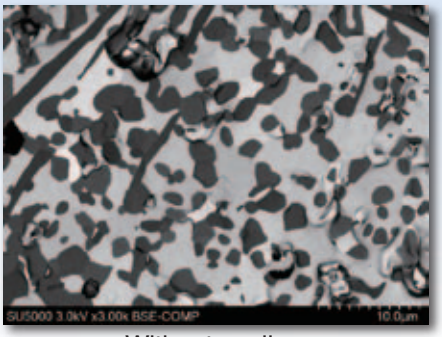


試料：セラミックコンデンサ
Specimen : Ceramic capacitor

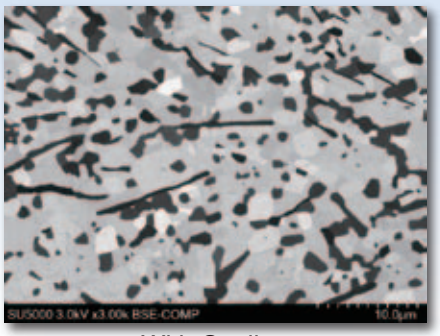
Ion milling condition (Left)
Vacc : 8.0 kV
Milling time : 1 hour
Ion milling condition (Right)
Vacc : 2 kV
Milling time : 1 hour

SEM condition
SEM : SU3500
Vacc. : 5.0 kV　Mag : 5,000x
Signal : BSE

◆ 冷却温度調整機能付きイオンミリングのアプリケーション
Application of ion milling with cooling temperature control function



Without cooling



With Cooling

試料：ウッドメタル
Specimen : Wood's metal

Ion milling condition
Vacc. : 4.0 kV
Temperature : RT (Left)
-100°C (Right)

SEM condition
SEM : SU5000
Vacc. : 3.0 kV　Mag : 3,000x
Signal : BSE