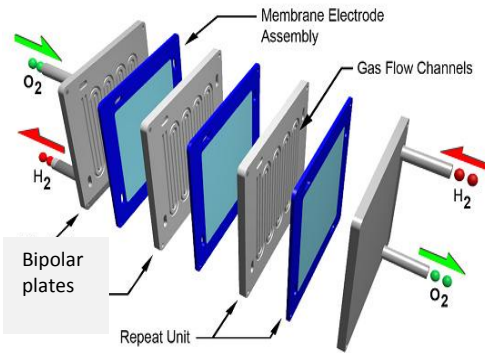


# New technologies: Fuel cells

## Warm Temperature Stamping of PEM Fuel Cell Plates

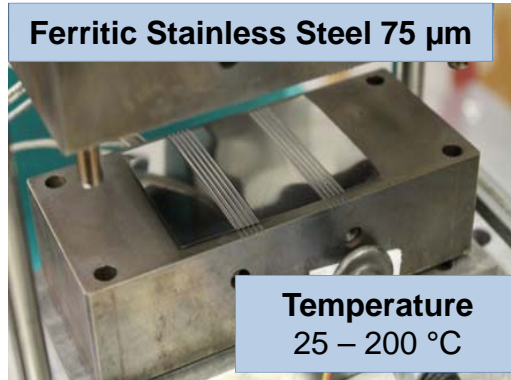


Existing Technology;  
Graphite bipolar plates

New technology;  
Stamped stainless steel

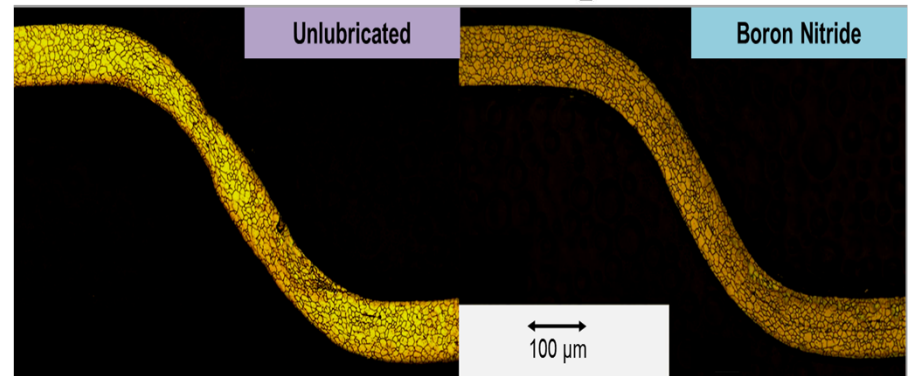
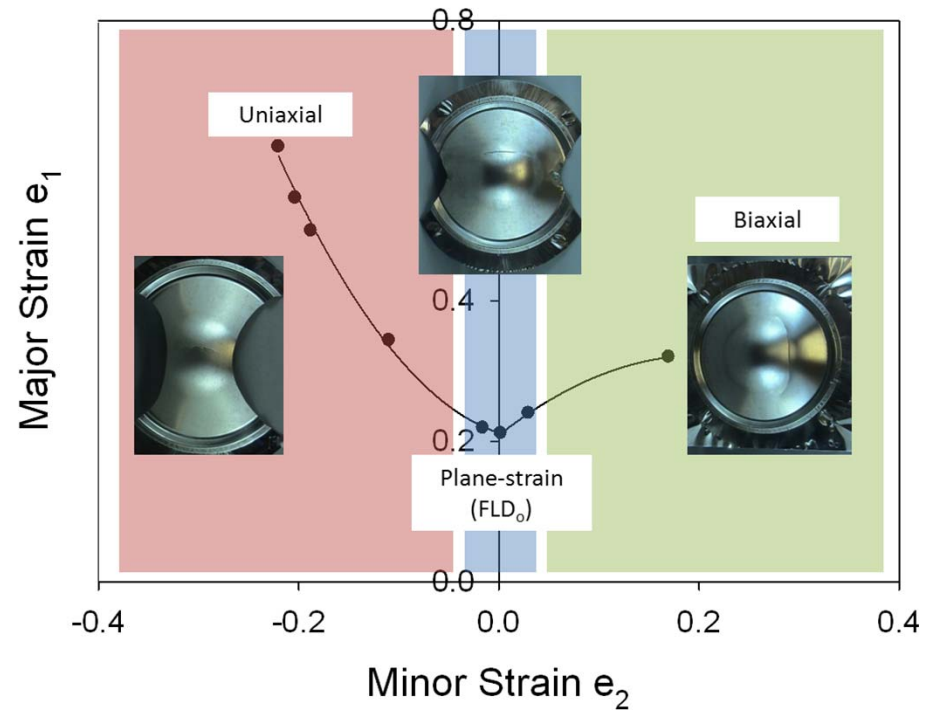


Ferritic Stainless Steel 75  $\mu\text{m}$



Temperature  
25 – 200  $^{\circ}\text{C}$

## Forming limit diagram- 30% Cr Ferritic stainless steel



Necking is prevented by lubrication