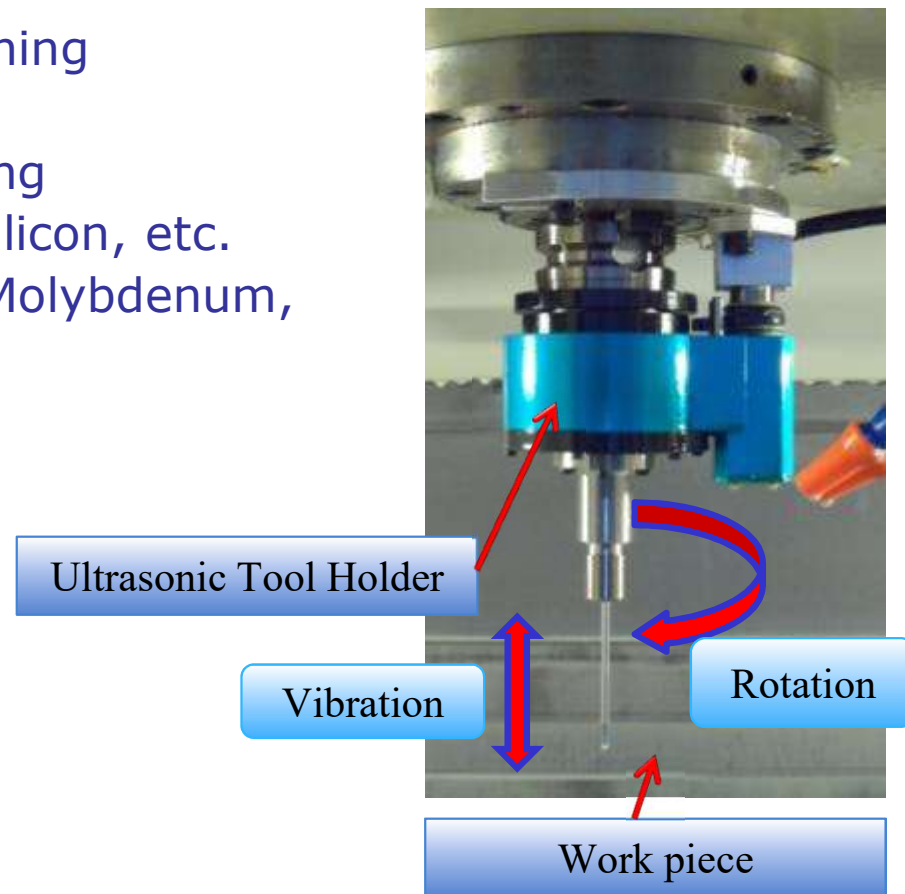
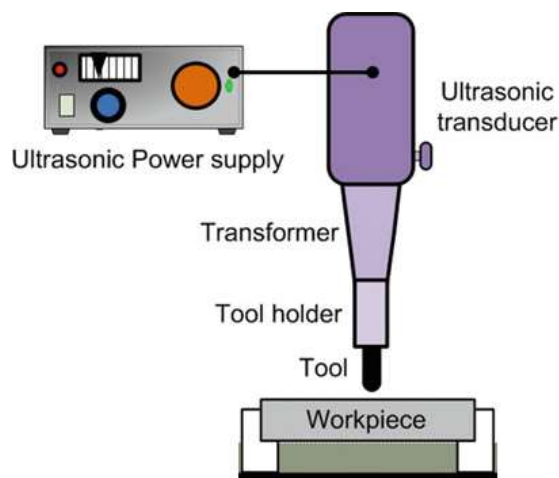




Project – Ultrasonic-Assisted Machining

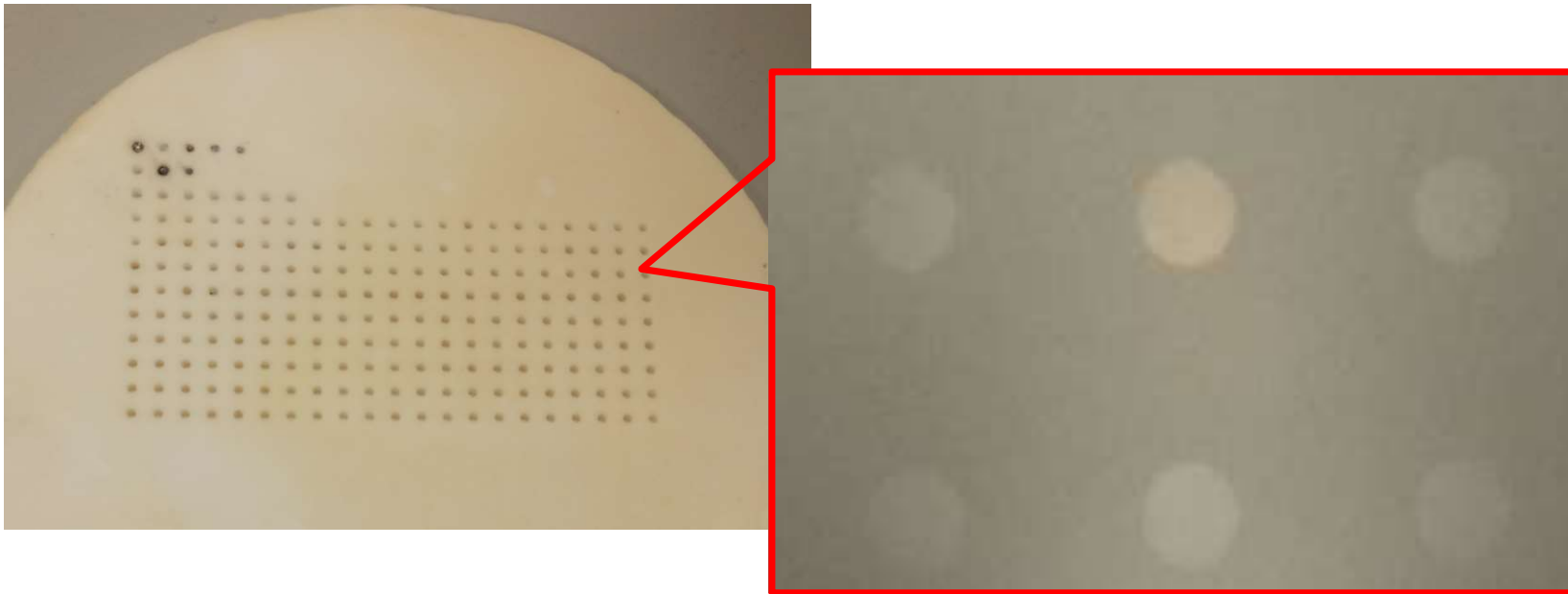
- Ultrasonic tool holder
 - Fast, small and deep hole machining
 - Length / Diameter > 10
 - Hard or ultra-hard material cutting
 - Glass, Ceramics, Vulcanization silicon, etc.
 - Stainless steel, Tungsten steel, Molybdenum, etc.





Project – Ultrasonic-Assisted Machining

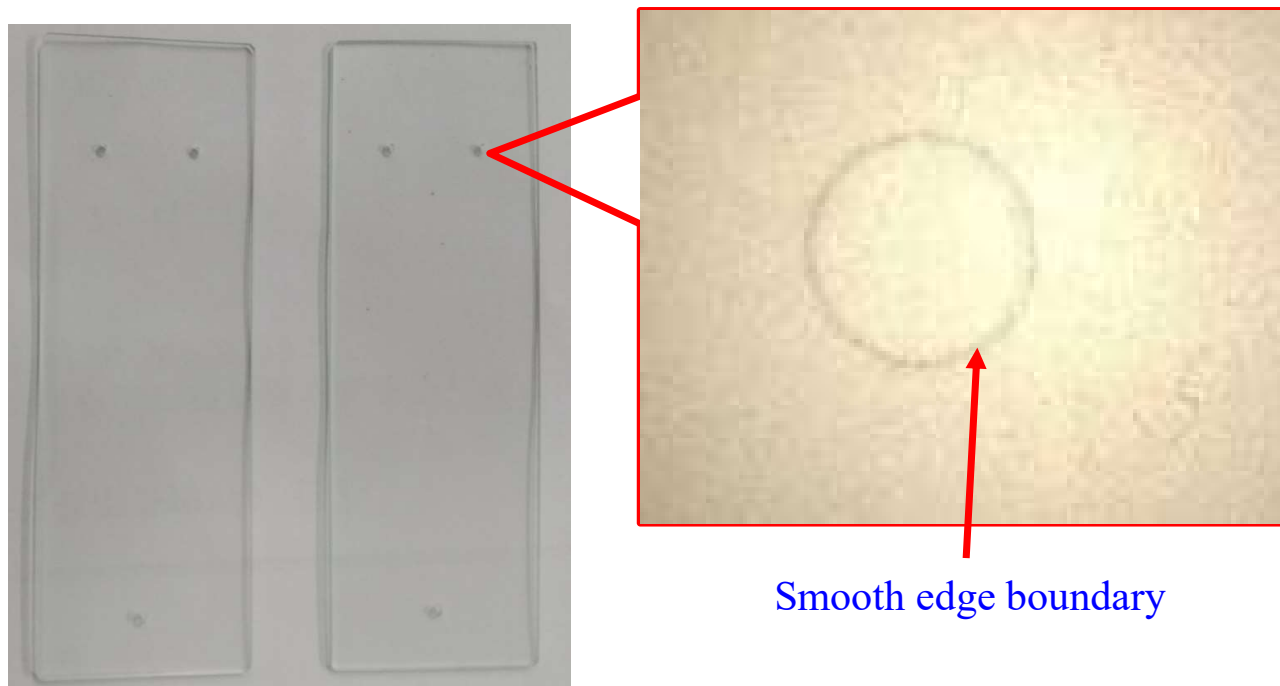
- Examples
 - Alumina, Small hole drilling / milling (blind hole)
 - Hole diameter = 1.2mm; depth = 1.4mm
 - # of holes to be drilled per workpiece = 400





Project – Ultrasonic-Assisted Machining

- Examples
 - Glass, Small hole drilling (thru' hole)
 - Hole diameter = 0.6mm; Glass plate thickness = 1mm
 - # of holes to be drilled per workpiece = 4



23/07/2021

MDMF (CWB)

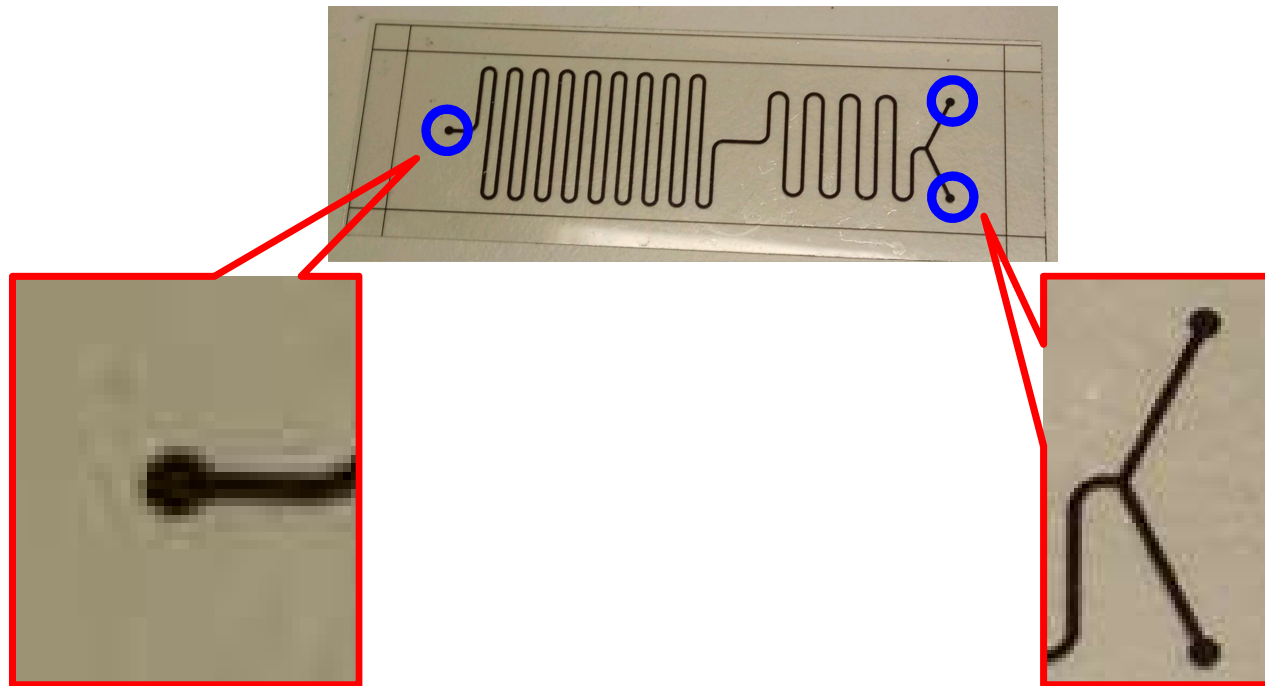
20





Project – Ultrasonic-Assisted Machining

- Examples
 - Glass channel, Small hole drilling (thru' hole)
 - Hole diameter = 1.0mm; depth = 1mm
 - # of holes to be drilled per workpiece = 3





Project – Ultrasonic-Assisted Machining

- Examples
 - Stainless steel, Small hole drilling (blind hole)
 - Hole diameter = 0.2mm and 0.9mm
 - Depth = 5mm and 20mm
 - SMA Shape Memory Alloy, Small hole drilling (thru' hole)
 - Hole diameter = 0.075m
 - Thickness = 2mm

