

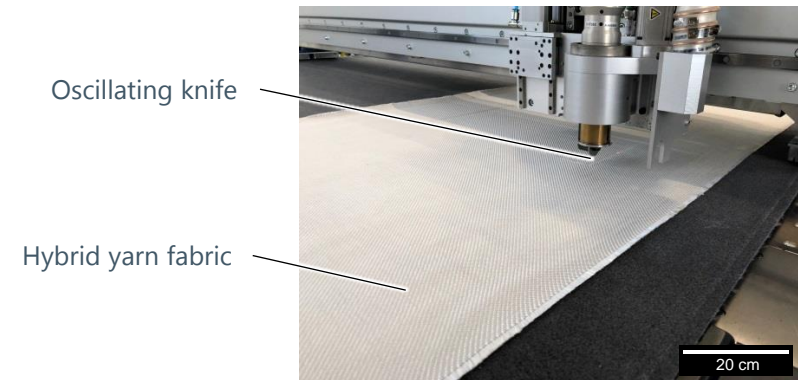
Development of hybrid yarns, fabrics and composites for self-reinforced PLA at ITA

Processing parameters have been successfully identified for

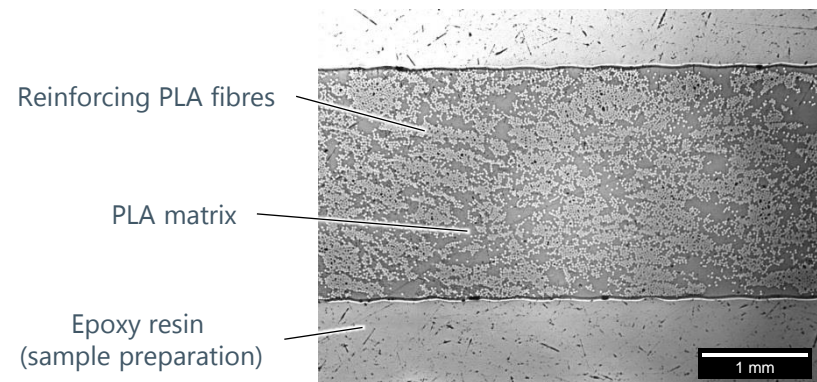
- Commingling of hybrid yarns
- Weaving of hybrid yarn fabrics
- Cutting of hybrid yarn fabrics
- Consolidation of hybrid yarn fabrics to produce self-reinforced PLA composites

Testing

- Mechanical properties of fibres, fabrics and composites
- Draping properties of fabrics
- Microscopy of cross sections of fibres and composites



Cutting of hybrid yarn fabric



Cross section of self-reinforced PLA composite