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| **R. Singh Paper** | **Ongoing Present Work** |
| Materials Used : ABS and PA6 Combination | ABS and PET-G : Separately and Combined |
| Re-inforcement material used : i.e Aluminium(Al) | No-reinforcement material to be used initially |
| Added : 15% Al to ABS Matrix  50% Al to PA6 Matrix  For obtaining the similar MFI | Decided MFI Not to be studied |
| In addition to the tensile properties, flexural, thermal, and photo-micrographic investigations done | Weld tensile Strength and Dimensional Accuracy in Z-direction to be studied |
| 3D Printed parts infill not varied | Infill is varied |
| Re-inforcement material added to 3D printing filament initially using twin-screw Extruder. | Planned to add NiO2 re-inforcement material by making a groove in 3D printed material. |
| Tool-pin angle not considered necessary parameter | Tool-pin angle varied |
| Tool-pin Plunge depth varied | Tool-pin length kept constant |
| Poor surface finish | Better surface finish as compared |
| Resulted in porosity in joints and other welding defects | Porosity in joints to be tested |
| Used ANOVA | Using DOE (Taguchi Technique) |