Appendix: 1

Table: details of results of trail runs

Parameters	Images of the upper surface of FSPed zone	Comments
Low rotational speed		No stirring because of low rotational speed led to insufficient heat generation.
Low rotational speed		Insufficient stirring due to low heat input
High plunge depth		Good surface finish and compression but flash generation due to high plunge depth
Low rotational speed		Insufficient heat generation due to low rotational speed led to improper stirring.
High rotational speed		High heat generation due to high rotational speed.
Optimized process parameters		Good surface finish and compression producing proper surface composite.