

Table XI: Anova result for specimen I

	Speed	feed	doc	Ra	F
Speed	1				
feed	0	1			
doc	0	0	1		
Ra	-0.039	0.957803	-0.03884	1	
F	-0.14136	0.13184	0.437826	0.010318	1

Table XII: Anova result for specimen J

	Speed	feed	doc	Ra	F
Speed	1				
feed	0	1			
doc	0	0	1		
Ra	-0.00454	0.933556	-0.0494	1	
F	-0.24165	0.2352	0.37515	0.110285	1

Table XIII: Anova Result for Specimen P

	Speed	feed	doc	Ra	F
Speed	1				
feed	0	1			
doc	0	0	1		
Ra	-0.0178	0.962842	-0.00105	1	
F	-0.32372	0.082349	0.339674	0.01801	1

The anova result for all the specimens (Table V, VII, IX, XI, XII and XII) shows that the feed is having more influence on surface roughness and also depth of cut is having more influence on resultant tool force.

4. Conclusions

In the machinability studies, ACS addition was found to reduce the surface roughness after machining and also reduced the tool force, this leading to better machinability. This may be due to migration of silicone leads to lubricating action in between cutting tool and specimen.

Over all, the studies indicate that epoxies can be modified by aluminium, spheriglass and ACS for making temporary moulds for limited number of runs. This can help in reducing the lead time for developing plastic products.

5. References

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