

CHAPTER 3

METHODOLOGY

3.1 PROCESS FLOW

Methodology for conducting this research begin with designing the experiment which is include how machine parameters are arrange and combine in order to archive the proper experiment planning. The processes taken are illustrated in 3.1 and will further explain throughout this chapter.

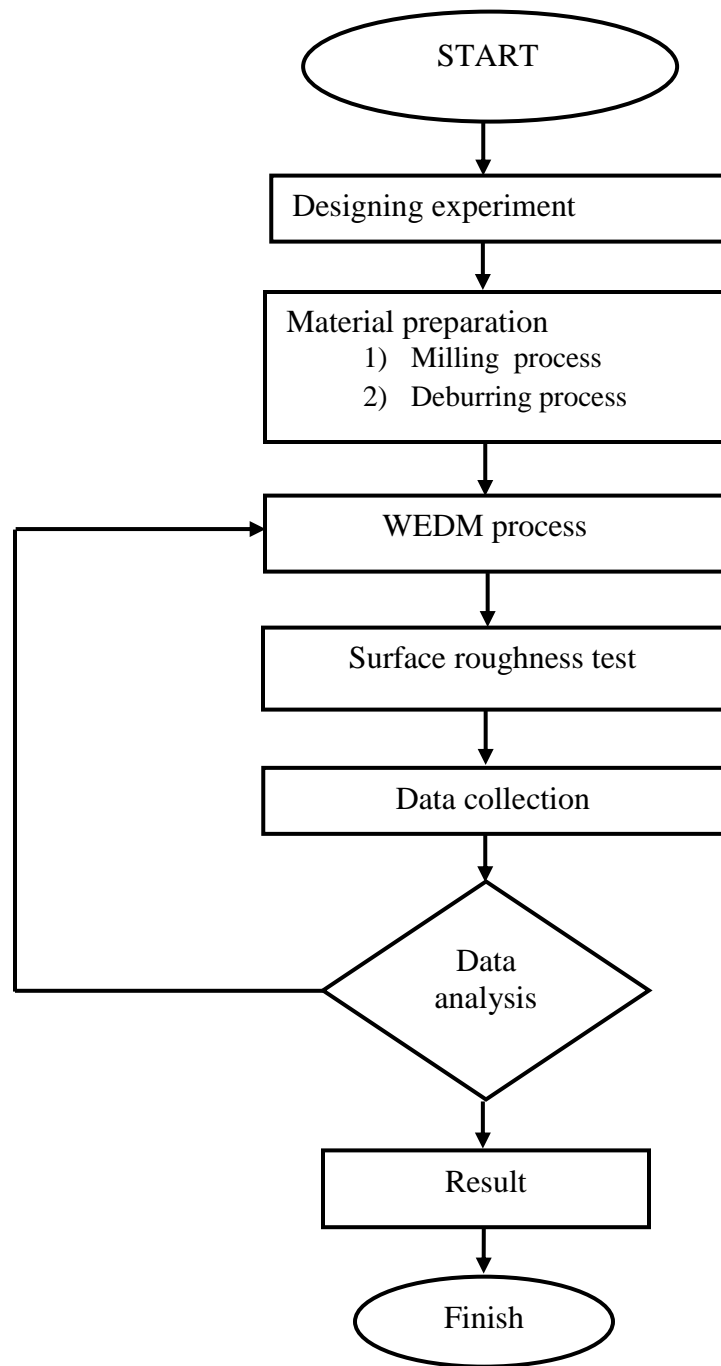


Figure 3.1: Flow chart of experiment

3.2 DESIGNING EXPERIMENT

Designed experiment helps in identification the effects of machining parameters in WEDM towards the P20 steel. Table 3.1 to Table 3.4 shows how experiments were arranged according to WEDM parameters. Experiment number 1 until 20 indicate set of cutting parameters. Every set of cutting parameter is consist of different parameters values and each set of cutting condition will be used to cut three specimen which each is labeled as specimen A, specimen B and specimen C.

Table 3.1: Machine parameters for experiment 1 - 4

PARAMETER			SPECIMEN	EXPERIMENT NO.
Voltage, V	Machine speed feed, mm/min	Wire Speed, m/min		
50	10	10	1A	1
			1B	
			1C	
		20	2A	2
			2B	
			2C	
		30	3A	3
			3B	
			3C	
		40	4A	4
			4B	
			4C	