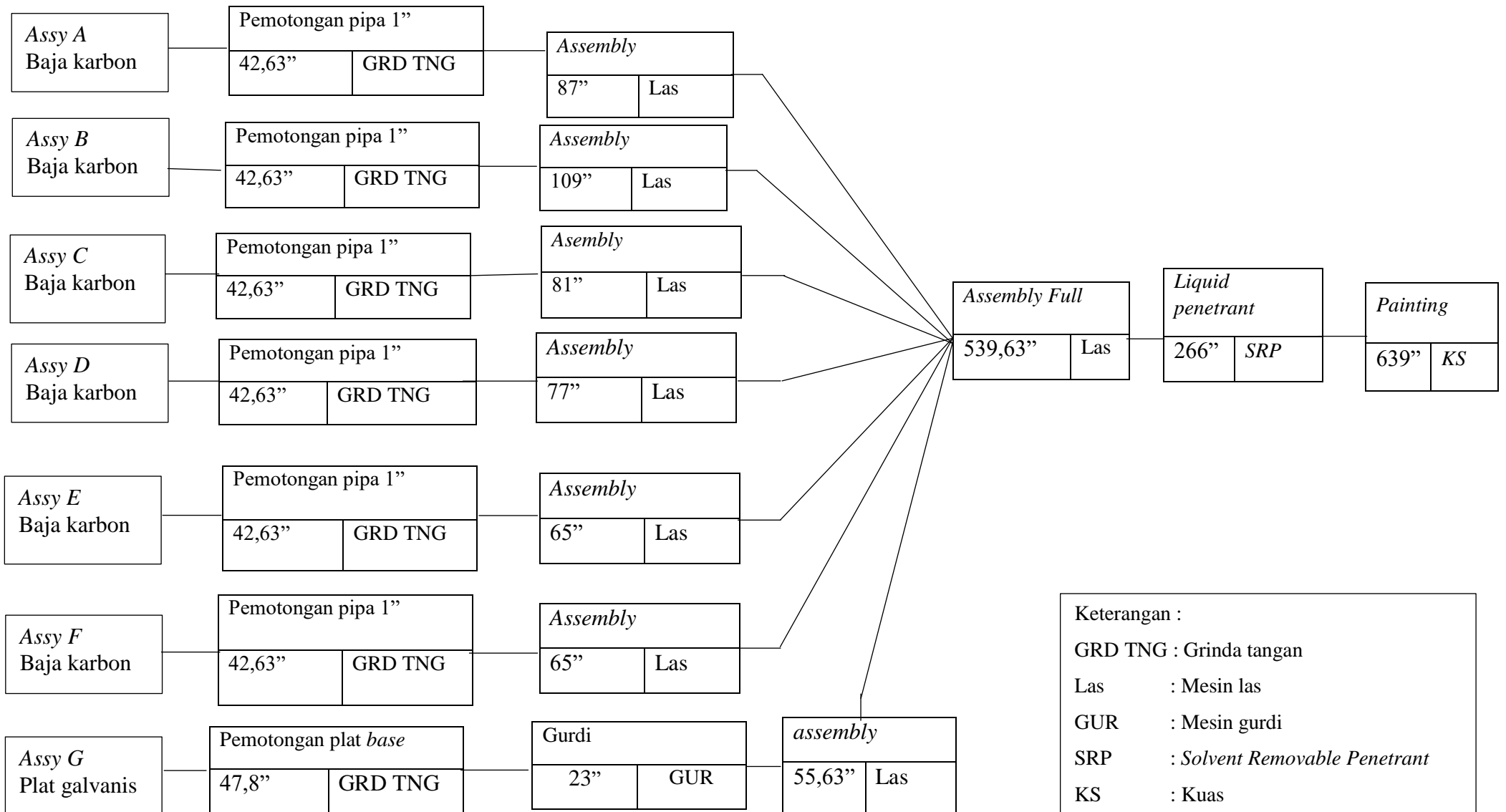


**LAMPIRAN 1**  
***(FLOW OF PROCESS)***

## ALUR PROSES

### RANGKA MOBIL BUGGY LISTRIK WIJAYAKUSUMA 01



**LAMPIRAN 2**  
**(DATA KECEPATAN POTONG PAHAT GURDI)**

## LAMPIRAN 2

Tabel data material, kecepatan potong, sudut mata bor HSS, dan cairan pendingin proses gurdi (Widarto dkk, 2008)

Material	Cutting Speed		Point Angle	LIP Clearance	Coolants
	(Meters/Minute)	(Feet/Minute)			
	MPM	FPM			
Aluminium And Alloys	61.00 - 91.50	200 - 300	90 - 130 deg	12 - 15 deg	Kerosene/Kerosene & Lard Oil/ Soluble Oil
Armor Plate	12.20 - 18.25	40 - 50	135 - 140 deg	6 - 9 deg	Light Machine Oil
Brass	61.00 - 91.50	200 - 300	118 - 118 deg	12 - 15 deg	Dry/Soluble Oil/Kerosene/Lard Oil
Bronze	61.00 - 91.50	200 - 300	110 - 118 deg	12 - 15 deg	Dry/Soluble Oil/Mineral Oil/Lard Oil
Bronze, High Tensile	21.35 - 45.75	70 - 150	100 - 110 deg	12 - 15 deg	Dry/Soluble Oil/Mineral Oil/Lard Oil
Cast Iron, Soft	30.50 - 45.75	100 - 150	90 - 100 deg	12 - 15 deg	Air Jet Dry/ Soluble Oil
Cast Iron, Medium	21.35 - 30.50	70 - 100	100 - 110 deg	12 - 15 deg	Air Jet Dry/ Soluble Oil
Cast Iron, Hard	21.35 - 30.50	70 - 100	100 - 118 deg	8 - 12 deg	Air Jet Dry/ Soluble Oil
Cast Iron, Chilled	9.15 - 12.20	30 - 40	118 - 135 deg	5 - 9 deg	Air Jet Dry/ Soluble Oil
Copper	61.00 - 91.50	200 - 300	100 - 118 deg	12 - 15 deg	Air Jet Dry/ Soluble Oil
Copper Graphite Alloy (Carbon Drills)	18.30 - 21.35	60 - 70	** **	** **	Dry/Soluble Oil/Mineral Oil/Lard Oil
Glass (Carbon Drills)	6.10 - 9.15	20 - 30	** **	** **	Dry/Soluble Oil/Mineral Oil/Lard Oil
Iron, Malleable	15.25 - 27.45	50 - 90	90 - 100 deg	12 - 15 deg	Light Machine Oil
Magnesium And Alloys	76.26 - 122.0	250 - 400	70 - 118 deg	12 - 15 deg	Soluble Oil
Monel Nickel	4.15 - 15.28	30 - 50	118 - 125 deg	10 - 12 deg	Compressed Air/Mineral Oil
Nickel Alloys	12.20 - 18.30	40 - 60	135 - 140 deg	5 - 7 deg	Lard Oil/Soluble Oil
Plastic, Hot Set	30.50 - 91.50	100 - 300	60 - 90 deg	10 - 12 deg	Lard Oil/Soluble Oil
Plastic, Cold Set	30.50 - 91.50	100 - 300	118 - 135 deg	12 - 20 deg	Soap Solution
Steel, Low Carbon, 0.2-0.3ct	24.40 - 33.55	80 - 110	110 - 118 deg	7 - 9 deg	Soap Solution
Steel, Medium carbon 0.4-0.5c	21.35 - 24.40	70 - 80	118 - 125 deg	7 - 9 deg	Dry/Soluble Oil/Sulfur Oil/Lard Oil
Steel (High Carbon 1.2c)	15.25 - 18.30	50 - 60	118 - 145 deg	7 - 9 deg	Dry/Soluble Oil/Sulfur Oil/Lard Oil
Steel, Forged	15.25 - 18.30	50 - 60	118 - 145 deg	7 - 12 deg	Dry/Soluble Oil/Sulfur Oil/Lard Oil
Steel, Alloy	15.25 - 21.35	50 - 70	118 - 125 deg	10 - 12 deg	Mineral Lard Oil
Steel, Alloy 300 to 400 Brinell	6.10 - 9.15	20 - 30	130 - 140 deg	7 - 10 deg	Soluble Oil
Steel, Stainless, Free Machining	9.15 - 24.40	30 - 80	110 - 118 deg	8 - 12 deg	Soluble Oil
Steel, Stainless, Hard	4.57 - 15.25	15 - 50	118 - 135 deg	6 - 8 deg	Soluble Oil
Steel, Manganese	3.66 - 4.57	12 - 15	140 - 150 deg	7 - 10 deg	Soluble Oil
Stone (Carbide Drills)	7.63 - 9.15	25 - 30	** **	** **	Water Solution
Wood	92.50 - 122.2	300 - 400	60 - 70 deg	10 - 15 deg	Dry

**LAMPIRAN 3**  
**(TABEL MINIMUM *DWELL TIME*)**

LAMPIRAN 3

TABEL MINIMUM *DWELL TIMES*

Tabel 2 Tabel minimum *dwell time* (ASME V article 6, 2010 section V)

Material	Form	Type of Distontinuity	Dwell Times	
			Penetrant	Developer
Aluminium, magnesium, steel, brass and bronze, titanium and hightemperature alloys	Castings and welds	Cold shuts, porosity, lack of fusion, cracks (all forms)	5	7
	Wrought materialsextrusions, forging, plate	Laps, cracks (all form)	10	7
Carbide-tipped tools		Lack of fusion, porosity, cracks	5	7
Plastic	All form	Cracks	5	7
Glass	All form	Cracks	5	7
ceramic	All form	Cracks, porosity	5	7

**LAMPIRAN 4**  
**(TARIF LISTRIK)**

**LAMPIRAN 4**  
**TARIF DASAR LISTRIK**  
**JULI – SEPTEMBER 2023**

No.	GOL. TARIF	BATAS DAYA	REGULER		PRA BAYAR (Rp/kWh)
			BIAYA BEBAN (Rp/kVA/bulan)	BIAYA PEMAKAIAN (Rp/kWh) DAN BIAYA kVArh (Rp/kVArh)	
1.	R-1/TR	900 VA-RTM	*)	1.352,00	1.352,00
2.	R-1/TR	1.300 VA	*)	1.444,70	1.444,70
3.	R-1/TR	2.200 VA	*)	1.444,70	1.444,70
4.	R-2/TR	3.500 VA s.d. 5.500 VA	*)	1.699,53	1.699,53
5.	R-3/TR	6.600 VA ke atas	*)	1.699,53	1.699,53
6.	B-2/TR	6.600 VA s.d 200 kVA	*)	1.444,70	1.444,70
7.	B-3/TM	di atas 200 kVA	**)	Blok WBP = Kx 1.035,78 Blok LWBP = 1.035,78 kVArh = 1.114,74 *****)	-
8.	I-3/TM	di atas 200 kVA	**)	Blok WBP = Kx 1.035,78 Blok LWBP = 1.035,78 kVArh = 1.114,74 *****)	-
9.	I-4/TT	30.000 kVA ke atas	***)	Blok WBP dan Blok LWBP = 1.035,78 kVArh = 1.114,74 *****)	-
10.	P-1/TR	6.600 VA s.d 200 kVA	*)	1.699,53	1.699,53
11.	P-2/TM	di atas 200 kVA	**)	Blok WBP = Kx 1.415,01 Blok LWBP = 1.415,01 kVArh = 1.522,88 *****)	-
12.	P-3/TR		*)	1.699,53	1.699,53
13.	L/TR, TM, TT		-	1.644,52	-



**LAMPIRAN 5**  
**(DOKUMENTASI PRODUKSI)**

LAMPIRAN 5  
DOKUMENTASI PRODUKSI



**LAMPIRAN 6**  
**(BIODATA PENULIS)**

LAMPIRAN 6  
BIODATA PENULIS



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Motto : Usaha tanpa do'a itu sombong, do'a tanpa usaha itu bohong

**Riwayat Pendidikan**

- SMP Negeri 2 Cilacap : Tahun 2014-2017
- SMK Negeri 2 Cilacap : Tahun 2017-2020
- Politeknik Negeri Cilacap : Tahun 2020-2023