

REKAPITULASI

Pekerjaan : Pengadaan dan Pemasangan Jaringan Pipa Distribusi Utama Boster Peramuan
 Lokasi : Jl. Peramuan - Liangganggang - Jl.Soebardjo
 Kabupaten : Banjarbaru
 Provinsi : Kalimantan Selatan
 TA. : 2024

NO	URAIAN PEKERJAAN	HARGA (Rp)
1	2	3
I	PEKERJAAN PERSIAPAN	Rp 21,160,620.20
II	BIAYA PENERAPAN SMKK	Rp 52,363,000.00
III	PEKERJAAN PENGADAAN DAN PEMASANGAN PIPA HDPE DAN ASEORIES	Rp 26,030,730,387.69
IV	PEKERJAAN CROSSING	Rp 534,750,000.00
V	PEKERJAAN PEMASANGAN POMPA & PANEL	Rp 1,464,525,425.10
VI	PEKERJAAN JEMBATAN PIPA DAN STREETBOX	Rp 729,000,000.00
VII	PEKERJAAN LAIN-LAIN	Rp 5,001,594,575.95
JUMLAH		33,834,124,008.93
PPN 11 %		3,721,753,640.98
Total		37,555,877,649.91
PEMBULATAN		37,555,877,000.00

Terbilang : Tiga Puluh Tujuh Milyar Lima Ratus Lima Puluh Lima Juta Delapan Ratus Tujuh Puluh Tujuh Ribu Rupiah

RENCANA ANGGARAN BIAYA

Pekerjaan : Pengadaan dan Pemasangan Jaringan Pipa Distribusi Utama Booster Perumahan
 Lokasi : Jl. Perumahan - Liangganggang - Jl. Soebardjo
 Kabupaten : Banjarbaru
 Provinsi : Kalimantan Selatan
 TA. : 2024

NO	URAIAN PEKERJAAN	NO. ANALISA	VOLUME	SAT	HARGA SATUAN	JUMLAH HARGA
1	2	3	4	5	6	7
I	PEKERJIAN PERSIAPAN					
1	Pengukuran Ulang	A.1b	9,000.00	m'	795.62	Rp 7,160,620.20
2	Direksi Keet (Sewa Bangunan)		1.00	Ls	5,000,000.00	Rp 5,000,000.00
3	Laporan dan dokumentasi		1.00	Ls	4,500,000.00	Rp 4,500,000.00
4	As built drawing		1.00	Ls	4,500,000.00	Rp 4,500,000.00
					Sub Total I	Rp 21,160,620.20
II	BIAYA PENERAPAN SMK	Lampiran 01	1.00	Ls	52,363,000.00	Rp 52,363,000.00
					Sub Total II	Rp 52,363,000.00
III	PEKERJIAN PENGADAAN DAN PEMASANGAN PIPA HDPE DAN ASEORIES					
III.1	Pekerjaan Galian Pipa					
III.1.1	Pekerjaan Bongkaran Beton	A.1h	7.50	m³	397,588.35	Rp 2,981,912.63
III.1.2	Pekerjaan Pembongkaran aspal	D.1a	8.00	m³	1,027,371.57	Rp 8,218,972.54
						Rp 11,200,885.16
III.2	Pekerjaan Pengembalian					
III.2.1	Pekerjaan Pengecoran Beton (Beton K-175)	B.4c	5.99	m³	1,691,537.26	Rp 10,128,079.32
III.2.3	Pekerjaan Aspal Laston Lapis Aus (AC-WC) tebal 4 cm	D.2b	8.00	m³	4,382,091.33	Rp 35,056,730.60
						Rp 45,184,809.92
III.3	PERPIPAAN					
III.3.1	Pengadaan Pipa					
III.3.1.1	Pipa HDPE S-10 PN-8 Dia. 400 mm	HS	9,000.00	m'	2,332,018.63	Rp 20,988,167,687.94
						Rp 20,988,167,687.94
III.3.2	Pemasangan Pipa					
III.3.2.1	Pipa HDPE S-10 PN-8 Dia. 400 mm	F.1k	9,000.00	m'	411,877.72	Rp 3,706,899,488.65
						Rp 3,706,899,488.65
III.4	ASEORIES					
III.4.1	Pengadaan dan Pemasangan					
III.4.1.1	Stub Flange HDPE 400 mm	HS	23.00	bh	8,179,295.05	Rp 188,123,786.12
III.4.1.2	Moer Baut M.20 x 100 mm	HS	384.00	bh	30,178.37	Rp 11,588,493.50
III.4.1.3	Packing Karet 400 mm	HS	34.00	bh	122,854.44	Rp 4,177,050.85
III.4.1.4	All Flange Bend DCI 400 x 90°	HS	7.00	bh	46,177,279.66	Rp 323,240,957.61
III.4.1.5	Tee All Flange DCI 400 mm	HS	2.00	bh	38,431,574.77	Rp 76,863,149.54
III.4.1.6	Flange Steel 400 mm	HS	9.00	bh	4,021,531.11	Rp 36,193,779.97
III.4.1.7	Water Meter (Elektromagnetic) 400 mm	HS	1.00	bh	195,118,343.75	Rp 195,118,343.75
III.4.1.8	Dismantling Joint 400 mm	HS	1.00	bh	61,289,161.29	Rp 61,289,161.29
III.4.1.9	Gate Valve 400 mm	HS	4.00	bh	61,289,161.29	Rp 245,156,645.17
III.4.1.10	Pipa GI Medium 400 mm	HS	10.00	bh	4,490,708.89	Rp 44,907,088.89
III.4.1.11	All Flange Bend DCI 400 x 45°	HS	2.00	bh	46,177,279.66	Rp 92,354,559.32
III.4.1.12	Street Box	HS	1.00	bh	264,500.00	Rp 264,500.00
						Rp 1,279,277,516.01
					Sub Total III	Rp 26,030,730,387.69
IV	PEKERJAAN CROSSING					
1	Pekerjaan HDD dia. 16" (400 mm)	HS	93.00	m	5,750,000	Rp 534,750,000.00
					Sub Total IV	Rp 534,750,000.00
V	PEKERJAAN PEMASANGAN POMPA & PANEL					
V.1	Pengadaan					
V.1.1	Pompa Centrifugal Short Couple (Q:100 l/s, H:70 m)	HS	2	bh	300,000,000	Rp 600,000,000.00
V.1.2	Panel VSD 135 Kw (1 Set)	HS	2	set	170,000,000	Rp 340,000,000.00
V.1.3	Pipa GI Medium dia. 16" (400 mm)	HS	20	m'	4,490,709	Rp 89,814,177.79
V.1.4	Pipa GI Medium dia. 10" (250 mm)	HS	6	m'	2,993,083	Rp 17,958,496.18
V.1.5	Pipa GI Medium dia. 2" (63 mm)	HS	0.3	m'	361,795	Rp 108,538.57
V.1.6	Pipa GI Medium dia. 1/2" (15 mm)	HS	1	m'	87,330	Rp 87,329.89
V.1.7	Flange Steel 16" (400 mm)	HS	2	bh	4,021,531	Rp 8,043,062.22
V.1.8	Flange Steel 10" (250 mm)	HS	8	bh	2,112,151	Rp 16,897,210.24
V.1.9	Flange Steel 2" (63 mm)	HS	2	bh	262,709	Rp 525,418.43
V.1.10	Long Bend All Flange Steel 10"x45" (250 mm x 45°)	HS	2	bh	19,421,509	Rp 38,843,018.93
V.1.11	Gate Valve 2" (63 mm)	HS	1	bh	3,683,536	Rp 3,683,536.15

NO	URAIAN PEKERJAAN	NO. ANALISA	VOLUME	SAT	HARGA SATUAN	JUMLAH HARGA
1	2	3	4	5	6	7
V.1.12	Gate Valve 10" (250 mm)	HS	2 bh		18,706,150	Rp 37,412,300.94
V.1.13	Gate Valve 16" (400 mm)	HS	2 bh		63,611,267	Rp 127,222,533.84
V.1.14	Combination Air Valve 2" (63 mm)	HS	1 bh		30,107,361	Rp 30,107,360.57
V.1.15	Wafer Check Valve 250 mm	HS	2 bh		12,515,147	Rp 25,030,293.87
V.1.16	Flexible Rubber Joint 400 mm	HS	2 bh		16,767,301	Rp 33,534,602.49
V.1.17	Flexible Rubber joint 250 mm	HS	2 bh		13,896,473	Rp 27,792,945.98
V.1.18	Concentric Reducer DCI All Flange 250 x 160 mm	HS	2 bh		4,622,450	Rp 9,244,899.10
V.1.19	Excentric Reducer DCI All Flange 400 x 200 mm	HS	2 bh		8,012,246	Rp 16,024,491.77
V.1.20	Flange Blank 400 mm	HS	1 bh		4,587,763	Rp 4,587,762.69
V.1.21	Rubber Packing 400 mm	HS	8 bh		122,854	Rp 982,835.50
V.1.22	Rubber Packing 250 mm	HS	10 bh		89,778	Rp 897,782.42
V.1.23	Rubber Packing 200 mm	HS	2 bh		75,603	Rp 151,205.46
V.1.24	Rubber Packing 160 mm	HS	2 bh		66,152	Rp 132,304.78
V.1.25	Rubber Packing 63 mm	HS	2 bh		42,527	Rp 85,053.07
V.1.26	Moer Baut M.20 x 100 mm	HS	240 bh		30,178	Rp 7,242,808.44
V.1.27	Moer Baut M.16 x 100 mm	HS	48 bh		23,078	Rp 1,107,723.64
V.1.28	Shock GI 15 mm	HS	1 bh		7,749	Rp 7,749.28
V.1.29	Double Nipple 15 mm	HS	2 bh		10,272	Rp 20,544.22
V.1.30	Knee GI 15 mm	HS	1 bh		11,216	Rp 11,215.98
V.1.31	Brass Gate Valve 15 mm	HS	1 bh		132,400	Rp 132,400.20
V.1.32	Manometer 10 bar	HS	1 bh		835,822	Rp 835,822.46
V.2	Upah Perakitan & Commisioning					
V.2.1	Upah Perakitan Pipa & aksesoris Pipa Header & Pompa		1 ls		15,000,000	Rp 15,000,000.00
V.2.2	Upah Perakitan Pompa & Panel		1 ls		8,000,000	Rp 8,000,000.00
V.2.3	Commisioning		1 ls		3,000,000	Rp 3,000,000.00
					Sub Total V	Rp 1,464,525,425.10
VI	PEKERJAAN JEMBATAN PIPA DAN STREETBOX					
1	Pekerjaan Sipil Streetbox	Lampiran 03	4.00	Unit	1,000,000.00	Rp 4,000,000.00
2	Pekerjaan Sipil Chamber Water Meter	Lampiran 04	1.00	Unit	25,000,000.00	Rp 25,000,000.00
3	Pekerjaan Jembatan Pipa 1	Lampiran 05	1.00	Unit	350,000,000.00	Rp 350,000,000.00
4	Pekerjaan Jembatan Pipa 2	Lampiran 06	1.00	Unit	350,000,000.00	Rp 350,000,000.00
					Sub Total VI	Rp 729,000,000.00
VII	PEKERJAAN LAIN-LAIN					
1	Pekerjaan Interkoneksi dengan Pipa Eksisting (Dia. 400 mm)	F.3i	1.00	titik	1,594,575.95	Rp 1,594,575.95
2	Pekerjaan Pengadaan dan Pemasangan Sambung Langganan		2000	titik	2,500,000	Rp 5,000,000,000.00
					Sub Total VII	Rp 5,001,594,575.95
					JUMLAH	Rp 33,834,124,008.93
					PPN 11%	Rp 3,721,753,640.98
					TOTAL	Rp 37,555,877,649.91
					PEMBULATAN	Rp 37,555,877,000.00

A. PEKERJAAN PERSIAPAN

A.1b 1m' Pengukuran Trase Pipa

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7	8	9
A	TENAGA							
	Pembantu juru Ukur		OH	0.004	144,898.94	580	100.00%	580
	Juru Ukur		OH	0.0004	179,946.25	72	100.00%	72
				JUMLAH TENAGA KERJA		652		
B	BAHAN							
				JUMLAH HARGA BAHAN				
C	PERALATAN							
	Meter roll 100 m		Sewa-hari	0.004	23,000.00	92	100.00%	92
				JUMLAH HARGA ALAT		92		
D	Jumlah (A+B+C)					744		
E	Overhead & Profit (7 %)			15% x D (maksimum)		52		
F	Harga Satuan Pekerjaan (D+E)					796	100.00%	744

A.1h 1 m3 Pembongkaran 1 m3 beton secara konvensional

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	3.600	144,898.94	521,636	100.00%	521,636
	Mandor		OH	0.36	204,889.75	73,760	100.00%	73,760
			0	JUMLAH TENAGA KERJA		595,397		
B	BAHAN							
	Cuka bibit		liter	1.2	42,000.00	50,400	100.00%	50,400
				JUMLAH HARGA BAHAN		50,400		
C	PERALATAN							
	Godam/palu		bh	0.02	23,000.00	460	100.00%	460
	Gergaji besi		bh	0.1	23,000.00	2,300	100.00%	2,300
	Pahat beton		bh	0.03	23,000.00	690	100.00%	690
	Linggis		bh	0.05	23,000.00	1,150	100.00%	1,150
				JUMLAH HARGA ALAT		4,600		
D	Jumlah (A+B+C)					650,397		
E	Overhead & Profit (7 %)			15% x D (maksimum)		45,528		
F	Harga Satuan Pekerjaan (D+E)					695,924	100.00%	650,397

A.1i 1 m3 Pembongkaran beton dengan jack hammer

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.200	144,898.94	173,879	100.00%	173,879
	Mandor		OH	0.12	204,889.75	24,587	100.00%	24,587
				JUMLAH TENAGA KERJA		198,466		
B	BAHAN							
	BBM non subsidi		liter	2.5	16,100.00	40,250	57.58%	23,176
				JUMLAH HARGA BAHAN		40,250		
C	PERALATAN							
	Jack hammer		sewa-hari	0.25	531,449.59	132,862	75.00%	99,647
				JUMLAH HARGA ALAT		132,862		
D	Jumlah (A+B+C)					371,578		
E	Overhead & Profit (7 %)			15% x D (maksimum)		26,010		
F	Harga Satuan Pekerjaan (D+E)					397,588	86.47%	321,288

A.1j 1 m3 Pembongkaran pasangan batu dan pembersihan batu (manual)

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.400	144,898.94	202,859	100.00%	202,859
	Mandor		OH	0.14	204,889.75	28,685	100.00%	28,685
				JUMLAH TENAGA KERJA		231,543		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					231,543		
E	Overhead & Profit (7 %)			15% x D (maksimum)		16,208		
F	Harga Satuan Pekerjaan (D+E)					247,751	100.00%	231,543

A.1k 1 m3 Pembongkaran pasangan batu dengan jack hammer

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.600	144,898.94	86,939	100.00%	86,939
	Mandor		OH	0.06	204,889.75	12,293	100.00%	12,293
				JUMLAH TENAGA KERJA		99,233		
B	BAHAN							
	BBM non subsidi		liter	2.5	16,100.00	40,250	57.58%	23,176
				JUMLAH HARGA BAHAN		40,250		
C	PERALATAN							
	Jack hammer		sewa-hari	0.25	531,449.59	132,862		
				JUMLAH HARGA ALAT		132,862		
D	Jumlah (A+B+C)					272,345		
E	Overhead & Profit (7 %)			15% x D (maksimum)		19,064		
F	Harga Satuan Pekerjaan (D+E)					291,409	44.95%	122,409

B PEKERJAAN TANAH

B.1 PERMUKAAN TANAH

B.1b 1 m2 tebas tebang berupa memotong dan membersihkan lokasi dari tanaman/tumbuhan Ø<15 cm

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.075	144,898.94	10,867	100.00%	10,867
	Mandor		OH	0.0075	204,889.75	1,537	100.00%	1,537
				JUMLAH TENAGA KERJA		12,404		
B	BAHAN							
	Minyak tanah		liter	0.01	20,582.01	206	100.00%	206
				JUMLAH HARGA BAHAN		206		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					12,610		
E	Overhead & Profit (7 %)			15% x D (maksimum)		883		
F	Harga Satuan Pekerjaan (D+E)					13,493	100.00%	12,610

B.2 GALIAN TANAH
B.2a 1 m3 galian tanah biasa sedalam ≤ 1 m

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.563	144,898.94	81,578	100.00%	81,578
	Mandor		OH	0.0563	204,889.75	11,535	100.00%	11,535
				JUMLAH TENAGA KERJA		93,113		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					93,113		
E	Overhead & Profit (7 %)			15% x D (maksimum)		6,518		
F	Harga Satuan Pekerjaan (D+E)					99,631	100.00%	93,113

B.2b 1 m3 galian tanah biasa sedalam > 1 m - 2 m

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.675	144,899	97,807	100.00%	97,807
	Mandor		OH	0.0675	204,889.75	13,830	100.00%	13,830
				JUMLAH TENAGA KERJA		111,637		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					111,637		
E	Overhead & Profit (7 %)			15% x D (maksimum)		7,815		
F	Harga Satuan Pekerjaan (D+E)					119,451	100.00%	111,637

B.2d 1 m3 galian tanah dengan alat (EXAVATOR) Untuk Galian Pipa

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		jam	0.4481	144,898.94	64,936	100.00%	64,936
	Mandor		jam	0.0747	204,889.75	15,303	100.00%	15,303
				JUMLAH TENAGA KERJA		80,240		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
	Excavator		jam	0.07469136	290,260.44	21,680	75.00%	16,260
	Dump truck		jam	0.14190241	577,746.56	81,984	75.00%	61,488
				JUMLAH HARGA ALAT		103,664		
D	Jumlah (A+B+C)					183,903		
E	Overhead & Profit (7 %)			15% x D (maksimum)		12,873		
F	Harga Satuan Pekerjaan (D+E)					196,776	85.91%	157,987

B.2h 1 m3 Timbunan tanah atau urugan tanah kembali

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.3300	144,898.94	47,817	100.00%	47,817
	Mandor		OH	0.0330	204,889.75	6,761	100.00%	6,761
				JUMLAH TENAGA KERJA		54,578		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					54,578		
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,820		

F	Harga Satuan Pekerjaan (D+E)					58,398	100.00%	54,578
---	------------------------------	--	--	--	--	--------	---------	--------

B.2i 1 m3 Pemadatan tanah

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.2333	144,898.94	33,805	100.00%	33,805
	Tukang		OH	0.0467	204889.75	9,568	100.00%	9,568
	Mandor		OH	0.0233	178,165.00			
				JUMLAH TENAGA KERJA		43,373		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
C	PERALATAN							
	Stamper		Sewa-hari	0.05	482,890.90	24,145	75.00%	18,108
				JUMLAH HARGA ALAT		24,145		
D	Jumlah (A+B+C)					67,518		
E	Overhead & Profit (7 %)			15% x D (maksimum)		4,726		
F	Harga Satuan Pekerjaan (D+E)					72,244	91.06%	61,482

B.2j 1 m3 Pengurangan pasir

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.3000	144,898.94	43,470	100.00%	43,470
	Mandor		OH	0.0100	204,889.75	2,049	100.00%	2,049
				JUMLAH TENAGA KERJA		45,519		
B	BAHAN							
	Pasir Urug		m3	1.2	167,788.10	201,346	100.00%	201,346
				JUMLAH HARGA BAHAN		201,346		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
	Jumlah (A+B+C)					246,864		
E	Overhead & Profit (7 %)			15% x D (maksimum)		17,281		
F	Harga Satuan Pekerjaan (D+E)					264,145	100.00%	246,864

B.2k 1 m3 Pemadatan Pasir

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.1000	144,898.94	14,490	100.00%	14,490
	Mandor		OH	0.0100	204,889.75	2,049	100.00%	2,049
				JUMLAH TENAGA KERJA		16,539		
B	BAHAN							
				JUMLAH HARGA BAHAN		-		
	PERALATAN							
	Stampor		Sewa-hari	0.1	477,071.73	47,707	75.00%	35,780
				JUMLAH HARGA ALAT		47,707		
D	Jumlah (A+B+C)					64,246		
E	Overhead & Profit (7 %)			15% x D (maksimum)		4,497		
F	Harga Satuan Pekerjaan (D+E)					68,743	81.44%	52,319

B.3 PEKERJAAN PONDASI DAN PEMANCANGAN
B.3c 1 m pancang cerucuk galam dia. 8-10 cm

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	0.0300	144,898.94	4,347	100.00%	4,347
	Mandor		OH	0.0030	204,889.75	615	100.00%	615
	Operator Tripod		OH	0.0050	179,946.25	900	100.00%	900
				JUMLAH TENAGA KERJA		5,861		
B	BAHAN							
	Kayu galam dia. 8-10 cm		m	1.05	5,145.50	5,403	100.00%	5,403
				JUMLAH HARGA BAHAN		5,403		
C	PERALATAN							
	tripod tinggi 5 m		Sewa-hari	0.005	373,750.00	1,869	100.00%	1,869
	alat pancang hammer 0,5 ton		Sewa-hari	0.005	1,211,822.85	6,059	100.00%	6,059
	alat penyambung tiang pancang dolken		Sewa-hari	0.25	31,625.00	7,906	100.00%	7,906
				JUMLAH HARGA ALAT		15,834		
D	Jumlah (A+B+C)					27,098		
E	Overhead & Profit (7 %)			15% x D (maksimum)		1,897		
F	Harga Satuan Pekerjaan (D+E)					28,995	100.00%	27,098

B.4 PEKERJAAN BETON
B.4b 1 m3 Beton untuk lantai kerja campuran (K-175) manual

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.6000	144,898.94	231,838	100.00%	231,838
	Tukang Batu		OH	0.2750	179,946.25	49,485	100.00%	49,485
	Kepala Tukang		OH	0.0280	213,934.50	5,990	100.00%	5,990
	Mandor		OH	0.1650	204,889.75	33,807	100.00%	33,807
					JUMLAH TENAGA KERJA	321,121		
B	BAHAN							
	Semen Portland		Kg	326	1,800.93	587,102	85.14%	499,858
	Pasir beton		Kg	760	321.59	244,411	100.00%	244,411
	Kerikil		Kg	1029	257.28	264,736	100.00%	264,736
	Air		Liter	215	48.24	10,371	100.00%	10,371
					JUMLAH HARGA BAHAN	1,106,621		
C	PERALATAN							
					JUMLAH HARGA ALAT	-		
D	Jumlah (A+B+C)					1,427,741		
E	Overhead & Profit (7 %)			15% x D (maksimum)		99,942		
F	Harga Satuan Pekerjaan (D+E)					1,527,683	93.89%	1,340,498

B.4c 1 m3 Beton untuk lantai kerja campuran (K-175) dengan molen

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.6000	144,899	231,838	100.00%	231,838
	Tukang Batu		OH	0.2750	179,946	49,485	100.00%	49,485
	Kepala Tukang		OH	0.0280	213,935	5,990	100.00%	5,990
	Mandor		OH	0.1650	204,890	33,807	100.00%	33,807
					JUMLAH TENAGA KERJA	321,121		
B	BAHAN							
	Semen Portland		Kg	326	1,800.93	587,102	85.14%	499,858
	Pasir beton		Kg	760	321.59	244,411	100.00%	244,411
	Kerikil		Kg	1029	257.28	264,736	100.00%	264,736
	Air		Liter	215	48.24	10,371	100.00%	10,371
					JUMLAH HARGA BAHAN	1,106,621		
C	PERALATAN							
	Molen 0,3 m3		Sewa-hari	0.25	612,539.45	153,135		
					JUMLAH HARGA ALAT	153,135		
D	Jumlah (A+B+C)					1,580,876		
E	Overhead & Profit (7 %)			15% x D (maksimum)		110,661		
F	Harga Satuan Pekerjaan (D+E)					1,691,537	84.79%	1,340,498

B.4d 1 m3 Beton untuk lantai kerja campuran (K-225) manual

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.6500	144,898.94	239,083	100.00%	239,083
	Tukang Batu		OH	0.2750	179,946.25	49,485	100.00%	49,485
	Kepala Tukang		OH	0.0280	213,934.50	5,990	100.00%	5,990
	Mandor		OH	0.1650	204,889.75	33,807	100.00%	33,807
				JUMLAH TENAGA KERJA		328,365		
B	BAHAN							
	Semen Portland		Kg	371	1,800.93	668,143	85.14%	568,857
	Pasir beton		Kg	698	321.59	224,473	100.00%	224,473
	Kerikil		Kg	1047	257.28	269,367	100.00%	269,367
	Air		Liter	215	48.24	10,371	100.00%	10,371
				JUMLAH HARGA BAHAN		1,172,354		
C	PERALATAN							
				JUMLAH HARGA ALAT		-		
D	Jumlah (A+B+C)					1,500,720		
E	Overhead & Profit (7 %)			15% x D (maksimum)		105,050		
F	Harga Satuan Pekerjaan (D+E)					1,605,770	93.38%	1,401,434

B.4e 1 m3 Beton untuk lantai kerja campuran (K-225) dengan molen

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
1	2	3	4	5	6	7		
A	TENAGA							
	Pekerja		OH	1.6500	144,898.94	239,083	100.00%	239,083
	Tukang Batu		OH	0.2750	179,946.25	49,485	100.00%	49,485
	Kepala Tukang		OH	0.0280	213,934.50	5,990	100.00%	5,990
	Mandor		OH	0.1650	204,889.75	33,807	100.00%	33,807
				JUMLAH TENAGA KERJA		328,365		
B	BAHAN							
	Semen Portland		Kg	371	1,800.93	668,143	85.14%	568,857
	Pasir beton		Kg	698	321.59	224,473	100.00%	224,473
	Kerikil		Kg	1047	257.28	269,367	100.00%	269,367
	Air		Liter	215	48.24	10,371	100.00%	10,371
				JUMLAH HARGA BAHAN		1,172,354		
C	PERALATAN							
	Molen 0,3 m3		Sewa-hari	0.25	612,539.45	153,135	100.00%	153,135
				JUMLAH HARGA ALAT		153,135		
D	Jumlah (A+B+C)					1,653,855		
E	Overhead & Profit (7 %)			15% x D (maksimum)		115,770		
F	Harga Satuan Pekerjaan (D+E)					1,769,625	94.00%	1,554,569

B.4l Pembesian 10 kg dengan besi polos atau besi ulir

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
A	TENAGA							
	Pekerja		OH	0.07	144,898.94	10,143	100.00%	10,143
	Tukang besi		OH	0.07	179,946.25	12,596	100.00%	12,596
	Kepala tukang		OH	0.007	213,934.50	1,498	100.00%	1,498
	Mandor		OH	0.0035	204,889.75	717	100.00%	717
				JUMLAH TENAGA KERJA		24,954		
B	BAHAN							
	Besi beton (polos/ulir)		kg	10.500	16,722.88	175,590	45.27%	79,490
	Kawat beton		kg	0.15	22,511.57	3,377	48.52%	1,638
				JUMLAH HARGA BAHAN		178,967		
C	PERALATAN							
				JUMLAH HARGA ALAT				
D	Jumlah (A+B+C)					203,921		
E	Overhead & Profit (7 %)			15% x D (maksimum)		14,274		
F	Harga Satuan Pekerjaan (D+E)				B.4l	218,195	52.02%	106,082
F	Harga Satuan Pekerjaan Per 1 kg					21,820		

B.4m 1 m2 Bekisting dengan multiplex 12 mm (tanpa perancah)

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)	TKDN	Jumlah Biaya TKDN
A	TENAGA							
	Pekerja		OH	0.2	144,898.94	28,980	100.00%	28,980
	Tukang kayu		OH	0.1	179,946.25	17,995	100.00%	17,995
	Kepala tukang		OH	0.01	213,934.50	2,139	100.00%	2,139
	Mandor		OH	0.02	204,889.75	4,098	100.00%	4,098
				JUMLAH TENAGA KERJA		53,212		
B	BAHAN							
	Multiplex 12 mm		Lbr	0.128	236,049.90	30,214	85.06%	25,700
	Kaso 5/7 cm		m3	0.005	6,431,877.34	32,159	100.00%	32,159
	paku 5 cm - 7 cm		kg	0.22	28,943.45	6,368	58.75%	3,741
	Minyak Bekisting		L	0.2	73,507.17	14,701	100.00%	14,701
				JUMLAH HARGA BAHAN		83,443		
C	PERALATAN							
				JUMLAH HARGA ALAT				
D	Jumlah (A+B+C)					136,654		
E	Overhead & Profit (7 %)			15% x D (maksimum)		9,566		
F	Harga Satuan Pekerjaan (D+E)				B.4m	146,220	94.77%	129,514

C.1 PASANGAN DINDING

C.1a Pemasangan 1 m2 dinding bata merah (5x11x22) cm tebal 1 batu campuran 1 SP: 4 PP

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.6	144,898.94	86,939
	Tukang batu		OH	0.2	179,946.25	35,989
	Kepala tukang		OH	0.02	213,934.50	4,279
	Mandor		OH	0.03	204,889.75	6,147
				JUMLAH TENAGA KERJA		133,354
B	BAHAN					
	Bata merah		bh	140.01	1,286.38	180,109
	Semen Portland		kg	26.55	1,800.93	47,815
	Pasir Pasang		m3	0.09	321,593.87	29,908
				JUMLAH HARGA BAHAN		257,832
C	PERALATAN					
				JUMLAH HARGA ALAT		
D	Jumlah (A+B+C)					391,186
E	Overhead & Profit (7 %)			15% x D (maksimum)		27,383
F	Harga Satuan Pekerjaan (D+E)				C.1a	418,569

100.00%

86,939

100.00%

35,989

100.00%

4,279

100.00%

6,147

100.00%

180,109

85.14%

40,709

100.00%

29,908

98.18%

384,081

C.2 PASANGAN PLESTERAN

C.2a Pemasangan 1 m2 plesteran 1 SP: 4 PP tebal 15 mm

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.3	144,898.94	43,470
	Tukang batu		OH	0.15	179,946.25	26,992
	Kepala tukang		OH	0.015	213,934.50	3,209
	Mandor		OH	0.015	204,889.75	3,073
				JUMLAH TENAGA KERJA		76,744
B	BAHAN					
	Semen Portland		kg	6.24	1,800.93	11,238
	Pasir Pasang		m3	0.024	321,593.87	7,718
				JUMLAH HARGA BAHAN		18,956
C	PERALATAN					
				JUMLAH HARGA ALAT		
D	Jumlah (A+B+C)					95,700
E	Overhead & Profit (7 %)			15% x D (maksimum)		6,699
F	Harga Satuan Pekerjaan (D+E)				C.2a	102,399

100.00%

43,470

100.00%

26,992

100.00%

3,209

100.00%

3,073

85.14%

9,568

100.00%

7,718

98.26%

94,030

C.2c Pemasangan 1 m2 acian

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.2	144,898.94	28,980
	Tukang batu		OH	0.1	179,946.25	17,995
	Kepala tukang		OH	0.01	213,934.50	2,139
	Mandor		OH	0.01	204,889.75	2,049
				JUMLAH TENAGA KERJA		51,163
B	BAHAN					
	Semen Portland		kg	3.25	1,800.93	5,853
				JUMLAH HARGA BAHAN		5,853
C	PERALATAN					
				JUMLAH HARGA ALAT		
D	Jumlah (A+B+C)					57,016
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,991
F	Harga Satuan Pekerjaan (D+E)				C.2c	61,007

100.00%

28,980

100.00%

17,995

100.00%

2,139

100.00%

2,049

85.14%

4,983

98.47%

56,146

C.6 PEKERJAAN BESI DAN ALUMINIUM
C.6a Pemasangan 1 kg besi profil

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)		
A	TENAGA							
	Pekerja		OH	0.06	144,898.94	8,694	100.00%	8,694
	Tukang las		OH	0.06	179,946.25	10,797	100.00%	10,797
	Kepala tukang		OH	0.006	213,934.50	1,284	100.00%	1,284
	Mandor		OH	0.003	204,889.75	615	100.00%	615
					JUMLAH TENAGA KERJA	21,389		
B	BAHAN							
	Besi Profil		Kg	1	23,154.76	26,628	53.10%	14,139
					JUMLAH HARGA BAHAN	26,628		
C	PERALATAN							
					JUMLAH HARGA ALAT			
D	Jumlah (A+B+C)					48,017		
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,361		
F	Harga Satuan Pekerjaan (D+E)				C.6a	51,378	73.99%	35,528

C.6b Pengerjaan 100 kg pekerjaan perakitan

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)		
A	TENAGA							
	Pekerja	L.01	OH	0.1	144,898.94	14,490	100.00%	14,490
	Tukangkonstruksibesi	L.03	OH	0.1	179,946.25	17,995	100.00%	17,995
	Kepala tukang	L.03	OH	0.001	213,934.50	214	100.00%	214
	Mandor	L.04	OH	0.005	204,889.75	1,024	100.00%	1,024
					JUMLAH TENAGA KERJA	33,723		
B	BAHAN							
	Solar		Liter	1.000	8,050.00	8,050	66.43%	5,348
	Minyak pelumas		Liter	0.1	50,811.83	5,081	32.91%	1,672
					JUMLAH HARGA BAHAN	13,131		
C	PERALATAN							
					JUMLAH HARGA ALAT	-		
D	Jumlah (A+B+C)					46,854		
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,280		
F	Harga Satuan Pekerjaan (D+E)				C.6b	50,134	86.96%	40,743
	Harga Satuan Pekerjaan / 1 kg					501		

C.6c Pengerjaan 10 cm pengelasan dengan las listrik

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)		
A	TENAGA							
	Pekerja	L.01	OH	0.04	144,898.94	5,796	100.00%	5,796
	Tukangkonstruksibesi	L.03	OH	0.02	179,946.25	3,599	100.00%	3,599
	Kepala tukang	L.03	OH	0.002	213,934.50	428	100.00%	428
	Mandor	L.04	OH	0.002	204,889.75	410	100.00%	410
					JUMLAH TENAGA KERJA	10,233		
B	BAHAN							
	Kawat las listrik		Kg	0.4	25,438.00	10,175	36.93%	3,758
	Solar		Liter	0.3	8,050.00	2,415	66.43%	1,604
	Minyak pelumas		Liter	0.04	50,811.83	2,032	32.91%	669
					JUMLAH HARGA BAHAN	14,623		
C	PERALATAN							
	Welding Set		Jam	0.17	94,241.37	16,021	75.00%	12,016
					JUMLAH HARGA ALAT	16,021		
D	Jumlah (A+B+C)					40,876		
E	Overhead & Profit (7 %)			15% x D (maksimum)		2,861		
F	Harga Satuan Pekerjaan (D+E)					43,738	69.18%	28,279
	Harga Satuan Pekerjaan / 1 cm					4,374		

C.8 PEKERJAAN PENGECATAN
C.8c 1 m2 Pengecatan bidang kayu/besi Baru

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.07	144,898.94	10,143
	Tukang Cat		OH	0.009	179,946.25	1,620
	Kepala Tukang		OH	0.006	213,934.50	1,284
	Mandor		OH	0.003	204,889.75	615
					JUMLAH TENAGA KERJA	13,661
B	BAHAN					
	Cat Manie		kg	0.2	53,384.58	10,677
	Cat penutup		kg	0.26	87,473.53	22,743
	Kuas		buah	0.01	25,727.51	257
	Thiner A		liter	0.03	28,750.00	863
	Ampelas		kg	0.2	12,863.75	2,573
					JUMLAH HARGA BAHAN	37,113
C	PERALATAN					
					JUMLAH HARGA ALAT	-
D	Jumlah (A+B+C)					50,773
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,554
F	Harga Satuan Pekerjaan (D+E)					54,327

100.00%

10,143

100.00%

1,620

100.00%

1,284

100.00%

615

46.52%

4,967

36.92%

8,397

100.00%

257

0.00%

0

100.00%

2,573

58.80%

29,854

D PEKERJAAN ASPAL
D.1 GALIAN BERASPAL
D.1a 1 m3 Galian perkerasan beraspal

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja	L.01	jam	1.25	144,898.94	181,124
	Mandor	L.04	jam	0.625	204,889.75	128,056
					JUMLAH TENAGA KERJA	309,180
B	BAHAN					
					JUMLAH HARGA BAHAN	-
C	PERALATAN					
	Jack hammer		jam	0.5926	531,449.59	314,937
	Compressor		jam	0.5926	228,568.92	135,450
	Dump truck		jam	0.3472	577,746.56	200,594
					JUMLAH HARGA ALAT	650,981
D	Jumlah (A+B+C)					960,160
E	Overhead & Profit (7 %)			15% x D (maksimum)		67,211
F	Harga Satuan Pekerjaan (D+E)					1,027,372

100.00%

181,124

100.00%

128,056

75.00%

236,203

75.00%

101,587

75.00%

150,445

83.05%

797,415

D.1b 1 m3 Galian perkerasan berbutir

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja	L.01	jam	1.5	144,898.94	217,348
	Mandor	L.04	jam	0.25	204,889.75	51,222
					JUMLAH TENAGA KERJA	268,571
B	BAHAN					
					JUMLAH HARGA BAHAN	-
C	PERALATAN					
	Jack hammer		jam	0.2677	531,449.59	142,269
	Compressor		jam	0.2677	228,568.92	61,188
	Dump truck		jam	0.226	577,746.56	130,571
					JUMLAH HARGA ALAT	334,028
D	Jumlah (A+B+C)					602,599
E	Overhead & Profit (7 %)			15% x D (maksimum)		42,182
F	Harga Satuan Pekerjaan (D+E)					644,780

100.00%

217,348

100.00%

51,222

75.00%

106,702

75.00%

45,891

75.00%

97,928

86.14%

519,092

D.2 LAPISAN ASPAL
D.2a 1 Liter Lapis perekat aspal cair

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)		
A	TENAGA							
	Pekerja		jam	0.0189	144,898.94	2,739	100.00%	2,739
	Mandor		jam	0.0047	204,889.75	963	100.00%	963
					JUMLAH TENAGA KERJA	3,702		
B	BAHAN							
	Aspal Emulsi (kerosene)		Liter	1.7895	21,804.06	39,018	35.59%	13,887
					JUMLAH HARGA BAHAN	39,018		
C	PERALATAN							
	Asp. Distributor		jam	0.00002	477,937.20	10	75.00%	7
	Compressor		jam	0.00474	228,568.92	1,083	75.00%	813
					JUMLAH HARGA ALAT	1,093		
D	Jumlah (A+B+C)					43,813		
E	Overhead & Profit (7 %)			15% x D (maksimum)		3,067		
F	Harga Satuan Pekerjaan (D+E)					46,880	42.01%	18,408

D.2b Laston Lapis Aus (AC-WC) / Ton

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)		
A	TENAGA							
	Pekerja		jam	0.241	144,898.94	34,921	100.00%	34,921
	Mandor		jam	0.0201	204,889.75	4,118	100.00%	4,118
					JUMLAH TENAGA KERJA	39,039		
B	BAHAN							
	Agregat Kasar		m3	0.3341	321,593.87	107,445	100.00%	107,445
	Agregat Halus		m3	0.4236	385,912.64	163,473	100.00%	163,473
	Semen		kg	9.588	1,800.93	17,267	85.14%	14,701
	Aspal		kg	59.16	21,804.06	1,289,928	32.48%	418,969
					JUMLAH HARGA BAHAN	1,578,113		
C	PERALATAN							
	Wheel Loader		jam	0.0128	751,775.96	9,623	75.00%	7,217
	AMP		jam	0.0201	1,956,231.88	39,320	75.00%	29,490
	Genset		jam	0.0201	541,692.13	10,888	75.00%	8,166
	Dump truck		jam	0.0945	577,746.56	54,597	75.00%	40,948
	Aspal Finisher		jam	0.0125	1,334,480.41	16,681	75.00%	12,511
	Tandem Roller		jam	0.0286	597,283.66	17,082	75.00%	12,812
	P. Tyre Roller		jam	0.0229	604,082.57	13,833	75.00%	10,375
	Alat Bantu		ls	1	1,437.50	1,438	100.00%	1,438
					JUMLAH HARGA ALAT	163,462		
D	Jumlah (A+B+C)					1,780,614		
E	Overhead & Profit (7 %)			15% x D (maksimum)		124,643		
F	Harga Satuan Pekerjaan (D+E)					1,905,257	48.67%	866,582
	Harga Satuan Pekerjaan /m3					4,382,091		

El.5.1.1 Lapis Fondasi Agregat Kelas A

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.0494	144,898.94	7,158
	Mandor		OH	0.0071	204,889.75	1,455
				JUMLAH TENAGA KERJA		8,613
B	BAHAN					
	Agregat A		m3	1.2608	540,277.70	681,182
				JUMLAH HARGA BAHAN		681,182
C	PERALATAN					
	Wheel Loader		jam	0.0071	751,775.96	5,338
	Dump Truck 10 Ton		jam	0.1893	577,746.56	109,367
	Motor Grader		jam	0.0106	934,627.11	9,907
	Vibro Roller		jam	0.0136	477,071.73	6,488
				JUMLAH HARGA ALAT		131,100
D	Jumlah (A+B+C)					820,895
E	Overhead & Profit (7 %)			15% x D (maksimum)		57,463
F	Harga Satuan Pekerjaan (D+E)					878,358

100.00%

7,158

100.00%

1,455

100.00%

681,182

75.00%

4,003

75.00%

82,026

75.00%

7,430

75.00%

4,866

96.01%

788,120

El.5.1.2 Lapis Fondasi Agregat Kelas B

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.0494	144,898.94	7,158
	Mandor		OH	0.0071	204,889.75	1,455
				JUMLAH TENAGA KERJA		8,613
B	BAHAN					
	Agregat B		m3	1.2608	450,231.41	567,652
				JUMLAH HARGA BAHAN		567,652
C	PERALATAN					
	Wheel Loader		jam	0.0071	751,775.96	5,338
	Dump Truck 10 Ton		jam	0.1893	577,746.56	109,367
	Motor Grader		jam	0.0106	934,627.11	9,907
	Vibro Roller		jam	0.0136	477,071.73	6,488
				JUMLAH HARGA ALAT		131,100
D	Jumlah (A+B+C)					707,365
E	Overhead & Profit (7 %)			15% x D (maksimum)		49,516
F	Harga Satuan Pekerjaan (D+E)					756,880

100.00%

7,158

100.00%

1,455

100.00%

567,652

75.00%

4,003

75.00%

82,026

75.00%

7,430

75.00%

4,866

95.37%

674,590

PEKERJAAN PEMASANGAN PIPA

F.1k 1 m' Upah pemasangan pipa HDPE dia.400 mm (16")

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	0.29000	144,898.94	42,021
	Tukang pipa		OH	0.14500	179,946.25	26,092
	Mandor		OH	0.02900	204,889.75	5,942
				JUMLAH TENAGA KERJA		74,055
B	BAHAN					
	Pekerjaan galian dengan Alat		m3	1.14	196,776.49	224,325
	Pekerjaan pengurugan kembali		m3	1.14	58,398.47	66,574
	Pekerjaan pemadatan		m3	0.12	72,244.07	8,669
	Pekerjaan pengetesan		m	1	8,408.94	8,409
				JUMLAH HARGA BAHAN		307,978
C	PERALATAN					
	Buttfusion / alat las		Sewa-hari	0.00295	442,848.48	1,304
	Genset		Sewa-hari	0.00295	541,692.13	1,596
				JUMLAH HARGA ALAT		2,900
D	Jumlah (A+B+C)					384,932
E	Overhead & Profit (7 %)			15% x D (maksimum)		26,945
F	Harga Satuan Pekerjaan (D+E)					411,878

100.00%

42,021

100.00%

26,092

100.00%

5,942

#REF!

#REF!

#REF!

#REF!

#REF!

#REF!

99.12%

8,335

75.00%

978

75.00%

1,197

#REF!

#REF!

F.3i 1 Titik Upah Koneksi pipa dia.400 mm (16")

No	Uraian	Kode	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	TENAGA					
	Pekerja		OH	1.25	144,898.94	181,124
	Mandor		OH	0.125	204,889.75	25,611
	Tukang		OH	0.25	179,946.25	44,987
				JUMLAH TENAGA KERJA		251,721
B	BAHAN					
	Pekerjaan galian		m3	4.5	196,776.49	885,494
	Pekerjaan pengurugan kembali		m3	4.5	58,398.47	262,793
	Pekerjaan pemadatan		m3	0.6	72,244.07	43,346
				JUMLAH HARGA BAHAN		1,191,634
C	PERALATAN					
	Alat Potong		jam	0.5	11,265.89	5,633
	Pompa Air		jam	3	13,756.57	41,270
				JUMLAH HARGA ALAT		46,903
D	Jumlah (A+B+C)					1,490,258
E	Overhead & Profit (7 %)			15% x D (maksimum)		104,318
F	Harga Satuan Pekerjaan (D+E)					1,594,576

100.00%

181,124

100.00%

25,611

100.00%

44,987

100.00%

885,494

100.00%

262,793

#REF!

#REF!

100.00%

5,633

75.00%

30,952

#REF!

#REF!

T. 1k	Pengetesan 1 m' Pipa dia. 400 mm (16")					
No	Uraian	Kode	Satuan	Koefisien	Harga	Jumlah
					Satuan	Harga
					(Rp)	(Rp)
A	TENAGA					
	Pekerja		OH	0.0080	144,899	1,159
	Mandor		OH	0.0008	204,890	164
	JUMLAH TENAGA KERJA					1,323
B	BAHAN					
	Air test		m3	0.1134	48,239	5,468
	Bahan Bakar		m3	0.06	16,100	966
	Oli		m3	0.002	50,812	102
	JUMLAH HARGA BAHAN					6,536
C	PERALATAN					
	JUMLAH HARGA ALAT					
D	Jumlah (A+B+C)					7,859
E	Overhead & Profit (7 %)			15% x D (maksimum)		550
F	Harga Satuan Pekerjaan (D+E)					8,409

100.00%

1,159

100.00%

164

100.00%

5,468

99.86%

966

32.91%

33

99.12%

7,789

Pembantu juru Ukur	0.004
Juru Ukur	0.0004
Pekerja	#REF!
Tukang	#REF!
Kepala Tukang	0.1890
Mandor	#REF!

DAFTAR HARGA SATUAN UPAH, BAHAN DAN SEWA ALAT

No	KETERANGAN	SPEK	HARGA	SATUAN
A.	HARGA UPAH			
1	Pekerja		Rp 125,999	Hari
2	Tukang		Rp 156,475	Hari
3	Kepala Tukang		Rp 186,030	Hari
4	Mandor		Rp 178,165	Hari
5	Juru Ukur		Rp 156,475	Hari
6	Pembantu Juru Ukur		Rp 125,999	Hari
7	Operator Tripod		Rp 156,475	Hari
B.	HARGA SATUAN BAHAN			
1	Pipa HDPE S-10 PN-8 Dia. 400 mm	400 mm	Rp 2,027,842	m
2	Pipa GI Medium dia. 16" (400 mm)	400 mm	Rp 3,904,964	m
3	Pipa GI Medium dia. 10" (250 mm)	250 mm	Rp 2,602,681	m
4	Pipa GI Medium dia. 2" (63 mm)	63 mm	Rp 314,605	m
5	Pipa GI Medium dia. 1/2" (15 mm)	15 mm	Rp 75,939	m
6	Rubber Packing 400 mm	400 mm	Rp 106,830	bh
7	Rubber Packing 250 mm	250 mm	Rp 78,068	bh
8	Rubber Packing 200 mm	200 mm	Rp 65,742	bh
9	Rubber Packing 160 mm	160 mm	Rp 57,524	bh
10	Rubber Packing 63 mm	63 mm	Rp 36,980	bh
11	Flange Steel 16" (400 mm)	400 mm	Rp 3,496,984	bh
12	Flange Steel 10" (250 mm)	250 mm	Rp 1,836,653	bh
13	Flange Steel 2" (63 mm)	63 mm	Rp 228,443	bh
14	Flange Blank 400 mm	400 mm	Rp 3,989,359	bh
15	Gate Valve 2" (63 mm)	63 mm	Rp 3,203,075	bh
16	Gate Valve 10" (250 mm)	250 mm	Rp 16,266,218	bh
17	Gate Valve 16" (400 mm)	400 mm	Rp 55,314,145	bh
18	Flexible Rubber Joint 400 mm	400 mm	Rp 14,580,262	bh
19	Flexible Rubber joint 250 mm	250 mm	Rp 12,083,890	bh
20	Concentric Reducer DCI All Flange 250 x 160 mm	250 mm x 160 mm	Rp 4,019,521	bh
21	Excentric Reducer DCI All Flange 400 x 200 mm	400 mm x 200 mm	Rp 6,967,170	bh
22	Stub Flange HDPE 400 mm	400 mm	Rp 7,112,430	bh
23	All Flange Bend DCI 400 x 45°	400 mm x 45°	Rp 40,154,156	bh
24	All Flange Bend DCI 400 x 90°	400 mm x 90°	Rp 40,154,156	bh
25	Tee All Flange DCI 400 mm	400 mm	Rp 33,418,761	bh
26	Water Meter (Elektromagnetic) 400 mm	400 mm	Rp 169,668,125	bh
27	Dismantling Joint 400 mm	400 mm	Rp 53,294,923	bh
28	Street Box		Rp 557,644	bh
29	Moer Baut M.20 x 100 mm		Rp 26,242	bh
30	Moer Baut M.16 x 100 mm		Rp 20,067	bh
31	Pengaman pipa dari besi beton dia. 12 mm		Rp 1,000,000	bh
32	Klem penjepit pipa dari besi plat		Rp 500,000	bh
33	Long Bend All Flange DCI 10"x45° (250 mm x 45°)	250 mm x 45°	Rp 16,888,269	bh
34	Combination Air Valve 2" (63 mm)	63 mm	Rp 26,180,314	bh
35	Wafer Check Valve 250 mm	250 mm	Rp 10,882,736	bh
36	Shock GI 15 mm	15 mm	Rp 6,739	bh
37	Double Nipple 15 mm	15 mm	Rp 8,932	bh

No	KETERANGAN	SPEK	HARGA	SATUAN
38	Knee GI 15 mm	15 mm	Rp 9,753	bh
39	Brass Gate Valve 15 mm	15 mm	Rp 115,131	bh
40	Manometer 10 bar		Rp 726,802	m
41	Besi Baja Profil		Rp 20,135	kg
42	Besi beton (polos/ulir)		Rp 14,542	kg
43	Cat Dasar Besi/ meni		Rp 46,421	kg
44	Cat Besi		Rp 76,064	kg
45	Kuas 4"		Rp 22,372	bh
46	Amplas		Rp 11,186	lbr
47	Angker Baut 16 mm		Rp 32,000	bh
48	Klem penjepit dari besi plat		Rp 50,000	bh
49	Pengaman pipa dari besi beton dia. 12 mm		Rp 300,000	bh
50	Street Box		Rp 230,000	bh
51	Kawat beton		Rp 19,575	kg
52	Semen Portland		Rp 1,566	kg
53	Kerikil		Rp 224	kg
54	Pasir beton		Rp 280	kg
55	Pasir Urug		Rp 167,788	m3
56	Pasir Pasang		Rp 279,647	m3
57	Bata Merah		Rp 1,119	bh
58	Balok Meranti 5/7		Rp 13,563	m
59	Multiplex 12 mm		Rp 205,261	lbr
60	Kaso 5/7 cm		Rp 5,592,937	m3
61	paku 5 cm - 7 cm		Rp 25,168	kg
62	paku 2" - 3"		Rp 22,372	kg
63	Kayu papan 3/20		Rp 7,550	m
64	Cuka bibit		Rp 30,000	liter
65	Paving block t:8 cm		Rp 169,857	m2
66	Paving block segi enam		Rp 131,842	m2
67	Air		Rp 42	liter
68	Air		Rp 41,947	m3
69	Kayu galam dia. 4-6 cm, p:4 m		Rp 3,635	bt
70	Kayu galam dia. 8-10 cm		Rp 4,474	m
71	BBM non subsidi		Rp 14,000	liter
72	Solar		Rp 7,000	liter
73	Minyak Pelumas		Rp 44,184	liter
74	Minyak Tanah/karosene		Rp 17,897	liter
75	Minyak Bekisting		Rp 63,919	liter
76	Thiner A		Rp 25,000	kg
77	Godam/palu		Rp 20,000	bh
78	Gergaji besi		Rp 20,000	bh
79	Pahat beton		Rp 20,000	bh
80	Linggis		Rp 20,000	bh
81	Kawat las listrik		Rp 22,120	kg
82	Aspal		Rp 18,960	kg
83	Kerosene		Rp 17,897	Liter
84	Agregat Kasar		Rp 279,647	m3
85	Agregat Halus		Rp 335,576	m3
86	Bahan Agregat Base Kelas A		Rp 469,807	m3
87	Bahan Agregat Base Kelas B		Rp 391,506	m3

No	KETERANGAN	SPEK	HARGA	SATUAN
88	Bahan Agregat Base Kelas C		Rp 391,506	m3
89	Gorong-gorong 100x100		Rp 341,169	m'
90	Gorong-gorong 80x100		Rp 285,240	m'
91	Gorong-gorong 60x100		Rp 285,240	m'
92	Gorong-gorong 40x100		Rp 139,823	m'
93	HDD 16"		Rp 5,000,000	m'
94	Begel		Rp 30,000	bh
C.	HARGA SATUAN SEWA ALAT DAN JASA			
1	Sewa Meter roll 100 m		Rp 20,000	Hari
2	Jack hammer		Rp 462,130	Hari
3	Excavator		Rp 252,400	Jam
4	Vibro Roller		Rp 414,845	Jam
5	Stamper		Rp 419,905	Hari
6	tripod tinggi 5 m		Rp 325,000	Hari
7	alat pancang hammer 0,5 ton		Rp 1,053,759	Hari
8	alat penyambung tiang pancang dolken		Rp 27,500	Hari
9	Molen 0,3 m3		Rp 532,643	Hari
10	Welding Set		Rp 81,949	Jam
11	Compressor		Rp 198,756	jam
12	Dump truck		Rp 502,388	jam
13	Wheel Loader		Rp 653,718	jam
14	AMP		Rp 1,701,071	jam
15	Genset 135 KVA		Rp 486,746	jam
16	Genset 5 -10 KVA		Rp 471,037	Hari
17	Aspal Finisher		Rp 1,160,418	jam
18	Aspal Distributor		Rp 415,598	jam
19	Tandem Roller		Rp 519,377	jam
20	P. Tyre Roller		Rp 525,289	jam
21	Buttfusion / alat las		Rp 385,086	Hari
22	Pompa Air		Rp 11,962	Jam
23	Alat Bantu		Rp 1,250	ls
24	Alat Potong		Rp 2,000	ls
25	Alat Potong		Rp 9,796	jam
26	Motor Grader		Rp 812,719	jam

	PDAM	VINILON (ragampipa.co	VINILON (Panji pratama)	SUPRALON (ragampipa.c	SUPRALON	RUCIKA	UNILON
144,899 Rp	125,999						
179,946 Rp	156,475						
213,935 Rp	186,030						
204,890 Rp	178,165						
179,946 Rp	156,475						
144,899 Rp	125,999						
179,946 Rp	156,475						
2,332,019		870241.11	880900	941744.6	1058140	845400	
4,490,709		228106.11	230900	245462	275800	221400	
2,993,083		193972.5				187935	185287.5
361,795							
87,330							
122,854							
89,778							
75,603							
66,152							
42,527							
4,021,531							
2,112,151							
262,709							
4,587,763							
3,683,536							
18,706,150							
63,611,267							
16,767,301							
13,896,473							
4,622,450							
8,012,246							
8,179,295							
46,177,280							
46,177,280							
38,431,575							
195,118,344							
61,289,161							
641,290							
30,178							
23,078							
1,150,000							
575,000							
19,421,509							
30,107,361							
12,515,147							
7,749							
10,272							

	PDAM	VINILON (ragampipa.co	VINILON (Panji pratama)	SUPRALON (ragampipa.c	SUPRALON	RUCIKA	UNILON
11,216							
132,400							
835,822							
23,155	20,135						
16,723	14,542						
53,385	46,421						
87,474	76,064						
25,728	22,372						
12,864	11,186						
36,800							
57,500	50000						
345,000	300000						
264,500							
22,512	19,575						
1,801	1,566						
257	224						
322	280						
192,956	167,788						
321,594	279,647						
1,286	1,119						
15,597	13,563						
236,050	205,261						
6,431,877	5,592,937						
28,943	25,168						
25,728	22,372						
8,683	7,550						
34,500	30,000						
195,335	169,857						
151,618	131,842						
48	42						
48,239	41,947						
4,181	3,635						
5,146	4,474						
16,100	14,000						
8,050	7,000						
50,812	44,184						
20,582	17,897						
73,507	63,919						
28,750	25,000						
23,000	20,000						
23,000	20,000						
23,000	20,000						
23,000	20,000						
25,438	22,120						
21,804	18,960						
20,582	17,897						
321,594	279,647						
385,913	335,576						
540,278	469,807						
450,231	391,506						

	PDAM	VINILON (ragampipa.co	VINILON (Panji pratama)	SUPRALON (ragampipa.c	SUPRALON	RUCIKA	UNILON
450,231	391,506						
392,345	341,169						
328,026	285,240						
328,026	285,240						
160,797	139,823						
5,750,000							
34,500	30,000						
23,000							
531,450							
290,260							
477,072							
482,891							
373,750							
1,211,823							
31,625							
612,539							
94,241							
228,569							
577,747							
751,776							
1,956,232							
559,758							
541,692							
1,334,480							
477,937							
597,284							
604,083							
442,848							
13,757							
1,438							
2,300							
11,266							
934,627							

BUSUR KILAT	ADHILOGAM KARYA	CIPTA SUKSES BERSAMA	DPU	TOKOPEDIA
-------------	-----------------	----------------------	-----	-----------

1,417,060		2,409,000	
564,452		959,567	
143,863		244,567	
446,480			
17,984,264	12,275,000	18,509,089	
17,984,264	17,962,000	18,509,089	
	15,257,000	9,622,376	
	14,825,000	8,909,608	
	9,215,000	5,483,339	
	3,985,000	4,094,489	
1,752,200		2,697,200	
912,000		1,489,400	
600,000		1,089,000	
762,300		1,236,400	
475,900		646,800	
		7,260,000	9,095,000
		4,694,800	6,345,000

75000
50000

BUSUR KILAT

ADHILOGAM KARYA

CIPTA SUKSES BERSAMA

DPU

TOKOPEDIA

45000

20000

200000

32000

230000

BUSUR KILAT

ADHILOGAM KARYA

CIPTA SUKSES BERSAMA

DPU

TOKOPEDIA

	diambil	overhead	1.07
Rp	125,999		
Rp	156,475		
Rp	186,030		
Rp	178,165		
Rp	156,475		
Rp	125,999		
Rp	156,475		
Rp	845,400	904,578.00	
Rp	221,400	236,898.00	
Rp	189,065	202,299.55	
Rp	1,913,030		
Rp	762,009		
Rp	194,215		
Rp	446,480		
Rp	16,256,118		
Rp	18,151,784		
Rp	12,439,688		
Rp	11,867,304		
Rp	7,349,170		
	#DIV/0!		
Rp	4,039,745		
Rp	2,224,700		
Rp	1,200,700		
Rp	844,500		
Rp	999,350		
Rp	561,350		
Rp	8,177,500		
Rp	5,519,900		
Rp	75,000		
Rp	50,000		

	diambil	overhead	1.07
Rp	45,000		
Rp	20,000		
Rp	200,000		
Rp	20,135		
Rp	14,542		
Rp	46,421		
Rp	76,064		
Rp	22,372		
Rp	11,186		
Rp	32,000		
Rp	50,000		
Rp	300,000		
Rp	230,000		
Rp	19,575		
Rp	1,566		
Rp	224		
Rp	280		
Rp	167,788		
Rp	279,647		
Rp	1,119		
Rp	13,563		
Rp	205,261		
Rp	5,592,937		
Rp	25,168		
Rp	22,372		
Rp	7,550		
Rp	30,000		
Rp	169,857		
Rp	131,842		
Rp	42		
Rp	41,947		
Rp	3,635		
Rp	4,474		
Rp	14,000		
Rp	7,000		
Rp	44,184		
Rp	17,897		
Rp	63,919		
Rp	25,000		
Rp	20,000		
Rp	20,000		
Rp	20,000		
Rp	20,000		
Rp	22,120		
Rp	18,960		
Rp	17,897		
Rp	279,647		
Rp	335,576		
Rp	469,807		
Rp	391,506		

[illegible]

LAMPIRAN 1A
PERHITUNGAN BIAYA JASA KONSTRUKSI

A	Harga Kontrak	Rp. 25,000,000,000.00 (A)
B	Harga Kontrak dikurang PPN 11%	Rp. 22,522,522,522.52 (A/1,11)

No	Uraian	NKKK	Besar luran
1	2	3	4
1	NKKK ≤ Rp. 100.000.000,00	Rp. 100,000,000.00 x 0.24%	Rp. 240,000.00
2	Rp. 100.000.000,00 < NKKK ≤ Rp. 500.000.000,00	Rp. 400,000,000.00 x 0.19%	Rp. 760,000.00
3	Rp. 500.000.000,00 < NKKK ≤ Rp. 1.000.000.000,00	Rp. 500,000,000.00 x 0.15%	Rp. 750,000.00
4	Rp. 1.000.000.000,00 < NKKK ≤ Rp. 5.000.000.000,00	Rp. 4,000,000,000.00 x 0.12%	Rp. 4,800,000.00
5	NKKK > Rp. 5.000.000.000,00	Rp. 17,522,522,522.52 x 0.10%	Rp. 17,522,522.52
		Rp. 22,522,522,522.52 Jumlah	Rp. 24,072,522.52
		Pembulatan	Rp. 24,073,000.00

Ket : NKKK = Nilai Kontrak Kerja Konstruksi setelah dikurangi pajak

LAMPIRAN 1
RINCIAN RENCANA BIAYA SISTEM MANAJEMEN KESELAMATAN DAN KESEHATAN KERJA (SMK3) KONSTRUKSI
LOKASI KAWASAN CEMPAKA
TAHUN ANGGARAN 2022

NO	URAIAN PEKERJAAN	NO.ANALISA	VOLUME	SATUAN	HARGA SATUAN	JUMLAH HARGA	TKDN	JUMLAH BIAYA TKDN
1	2	3	4	5	6	7		
	SISTEM MANAJEMEN KESELAMATAN DAN KESEHATAN KERJA (SMK3) KONSTRUKSI	-						
I.	Penyiapan RK3							
1	Pembuatan Dokumen Rencana Keselamatan Kerja							
2	Pembuatan Manual, Prosedur, Instruksi Kerja, Ijin Kerja	-	1	Set	Rp 4,500,000.00	Rp 4,500,000.00	100.00% Rp	4,500,000.00
3	Penyiapan Formulir							
	Sub Total I					Rp 4,500,000.00		
II.	Sosialisasi dan Promosi K3							
1	Spanduk (Banner)	-	1	Lbr	Rp 350,000.00	Rp 350,000.00	100.00% Rp	350,000.00
2	Poster	-	1	Lbr	Rp 150,000.00	Rp 150,000.00	100.00% Rp	150,000.00
3	Papan Informasi K3	-	1	Bh	Rp 200,000.00	Rp 200,000.00	100.00% Rp	200,000.00
	Sub Total II					Rp 700,000.00		
III.	ALAT PELINDUNG DIRI							
1	Topi pelindung (Safety Helmet)	-	14	bh	Rp 75,000.00	Rp 1,050,000.00	100.00% Rp	1,050,000.00
2	Rompi Keselamatan (Safety Vest)	-	14	bh	Rp 30,000.00	Rp 420,000.00	100.00% Rp	420,000.00
3	Sarung Tangan (Safety Gloves)	-	14	psg	Rp 10,000.00	Rp 140,000.00	100.00% Rp	140,000.00
4	Sepatu Boot	-	4	psg	Rp 120,000.00	Rp 480,000.00	100.00% Rp	480,000.00
5	Kaca Mata / Pelindung Las (Goggles / Welding Protectors)	-	2	bh	Rp 100,000.00	Rp 200,000.00	100.00% Rp	200,000.00
6	Sarung Tangan Las (Welding Gloves)	-	2	psg	Rp 100,000.00	Rp 200,000.00	100.00% Rp	200,000.00
7	Sepatu Keselamatan (Safety Shoes)	-	10	psg	Rp 400,000.00	Rp 4,000,000.00	100.00% Rp	4,000,000.00
	Sub Total III					Rp 6,490,000.00		
IV.	ASURANSI DAN PERJINAN							
1	Asuransi dan Perijinan	-	1	Ls	Rp 24,073,000.00	Rp 24,073,000.00	100.00% Rp	24,073,000.00
	Sub Total IV					Rp 24,073,000.00		
V.	FASILITAS SARANA KESEHATAN							
1	Peralatan P3K	-	1	Ls	Rp 1,000,000.00	Rp 1,000,000.00	100.00% Rp	1,000,000.00
	Sub Total V					Rp 1,000,000.00		
VI.	RAMBU - RAMBU							
1	Rambu-rambu	-	8	bh	Rp 100,000.00	Rp 800,000.00	100.00% Rp	800,000.00
2	Pita Pengaman/Pembatas Proyek (Safety Line)	-	5	bh	Rp 50,000.00	Rp 250,000.00	100.00% Rp	250,000.00
3	Tongkat Pengatur Lalu Lintas (Warning Light Stick)	-	4	bh	Rp 150,000.00	Rp 600,000.00	100.00% Rp	600,000.00
4	Kerucut Lalu Lintas (Traffic Cone)	-	6	bh	Rp 100,000.00	Rp 600,000.00	100.00% Rp	600,000.00
	Sub Total VI					Rp 2,250,000.00		
VII.	PERSONIL K3							
1	Petugas K3 (1 orang selama 4 bulan)	-	4	OB	Rp 3,150,000.00	Rp 12,600,000.00	100.00% Rp	12,600,000.00
	Sub Total VII					Rp 12,600,000.00		
VIII.	KEGIATAN DAN PERALATAN TERKAIT PENGENDALIAN RESIKO KESELAMATAN KONSTRUKSI							
1	Alat pemadam api ringan (APAR) 9 kg		1	bh	Rp 550,000	Rp 550,000.00	44.00% Rp	242,000.00
2	Bendera K3		2	bh	Rp 100,000	Rp 200,000.00	100.00% Rp	200,000.00
	Sub Total VIII					Rp 750,000.00		
	TOTAL					Rp 52,363,000.00	99.41% Rp	52,055,000.00

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023
I	PIPA HDPE					
I.1	PIPA HDPE SDR - 11, PN - 16					
	1	Pipa HDPE 20 mm	Ø ½ "	meter	SNI 4829.2.2015, S - 5, PN - 16	Rp 8.893
	2	Pipa HDPE 25 mm	Ø ¾ "	meter	SNI 4829.2.2015, S - 5, PN - 16	Rp 12.976
	3	Pipa HDPE 32 mm	Ø 1 "	meter	SNI 4829.2.2015, S - 5, PN - 16	Rp 21.589
	4	Pipa HDPE 50 mm	Ø 1½ "	meter	SNI 4829.2.2015, S - 5, PN - 16	Rp 51.427
	5	Pipa HDPE 63 mm	Ø 2 "	meter	SNI 4829.2.2015, S - 5, PN - 16	Rp 81.181
						Rp -
I.2	PIPA HDPE SDR - 13,6, PN - 12.5					Rp -
	2	Pipa HDPE 25 mm	Ø ¾ "	meter	SNI 4829.2.2015, S - 6.3, PN - 12.5	Rp 11.466
	3	Pipa HDPE 32 mm	Ø 1 "	meter	SNI 4829.2.2015, S - 6.3, PN - 12.5	Rp 18.205
	4	Pipa HDPE 50 mm	Ø 1½ "	meter	SNI 4829.2.2015, S - 6.3, PN - 12.5	Rp 42.450
	5	Pipa HDPE 63 mm	Ø 2 "	meter	SNI 4829.2.2015, S - 6.3, PN - 12.5	Rp 67.283
						Rp -

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPESIFIKASI	HARGA 2023
I.3	PIPA HDPE SDR - 17, PN - 10					Rp -
	1	Pipa HDPE 63 mm	Ø 2 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 55.594
	2	Pipa HDPE 90 mm	Ø 3 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 112.502
	3	Pipa HDPE 110 mm	Ø 4 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 167.033
	4	Pipa HDPE 160 mm	Ø 6 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 339.687
	5	Pipa HDPE 200 mm	Ø 8 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 541.760
	6	Pipa HDPE 250 mm	Ø 10 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 841.793
	7	Pipa HDPE 315 mm	Ø 12 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 1,339.145
	8	Pipa HDPE 355 mm	Ø 14 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 1,704.923
	9	Pipa HDPE 400 mm	Ø 16 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 2,153.169
	10	Pipa HDPE 500 mm	Ø 20 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 3,364.823
	11	Pipa HDPE 630 mm	Ø 24 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 5,339.940
	12	Pipa HDPE 710 mm	Ø 28 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 6,902.831
	13	Pipa HDPE 800 mm	Ø 32 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 8,750.513
	14	Pipa HDPE 1000 mm	Ø 40 "	meter	SNI 4829.2.2015, S - 8, PN - 10	Rp 12,813.418
						Rp -
I.4	PIPA HDPE S - 10, PN - 8					Rp -
	1	Pipa HDPE 63 mm	Ø 2 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 44.604
	2	Pipa HDPE 90 mm	Ø 3 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 91.892
	3	Pipa HDPE 110 mm	Ø 4 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 137.279
	4	Pipa HDPE 160 mm	Ø 6 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 279.199
	5	Pipa HDPE 200 mm	Ø 8 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 444.555
	6	Pipa HDPE 250 mm	Ø 10 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 686.477
	7	Pipa HDPE 315 mm	Ø 12 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 1,179.925
	8	Pipa HDPE 355 mm	Ø 14 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 1,382.490
	9	Pipa HDPE 400 mm	Ø 16 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 1,763.341
	10	Pipa HDPE 500 mm	Ø 20 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 2,748.341
	11	Pipa HDPE 630 mm	Ø 24 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 4,344.034
	12	Pipa HDPE 710 mm	Ø 28 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 5,626.914
	13	Pipa HDPE 800 mm	Ø 32 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 7,135.581
	14	Pipa HDPE 1000 mm	Ø 40 "	meter	SNI 4829.2.2015, S - 10, PN - 8	Rp 10,440.223
						Rp -
II	PIPA PVC					Rp -
II.1	PIPA PVC S. 10					Rp -
	1	Pipa PVC - SCJ	Ø 2 "	meter	SNI 06.0084.2002, S.10 + SCJ	Rp 59.523
	2	Pipa PVC - SCJ	Ø 3 "	meter	SNI 06.0084.2002, S.10 + SCJ	Rp 122.555
	3	Pipa PVC - SCJ	Ø 4 "	meter	SNI 06.0084.2002, S.10 + SCJ	Rp 182.372
	4	Pipa PVC - SCJ	Ø 6 "	meter	SNI 06.0084.2002, S.10 + SCJ	Rp 387.581
	5	Pipa PVC - RRJ	Ø 6 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 402.356
	6	Pipa PVC - RRJ	Ø 8 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 641.570
	7	Pipa PVC - RRJ	Ø 10 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 1,000.269
	8	Pipa PVC - RRJ	Ø 12 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 1,599.641
	9	Pipa PVC - RRJ	Ø 14 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 2,047.579
	10	Pipa PVC - RRJ	Ø 16 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 2,627.977
	10	Pipa PVC - RRJ	Ø 20 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 4,201.843
	10	Pipa PVC - RRJ	Ø 24 "	meter	SNI 06.0084.2002, S.10 + RRJ	Rp 6,480.704
						Rp -
II.2	PIPA PVC-O					Rp -
	2	Pipa PVC-O	Ø 3 "	meter	SNI ISO 16422:2014	Rp 123.020
	3	Pipa PVC-O	Ø 4 "	meter	SNI ISO 16422:2014	Rp 173.426
	4	Pipa PVC-O	Ø 6 "	meter	SNI ISO 16422:2014	Rp 347.027
	5	Pipa PVC-O	Ø 8 "	meter	SNI ISO 16422:2014	Rp 538.942
	6	Pipa PVC-O	Ø 10 "	meter	SNI ISO 16422:2014	Rp 842.646
	7	Pipa PVC-O	Ø 12 "	meter	SNI ISO 16422:2014	Rp 1,319.253
	9	Pipa PVC-O	Ø 16 "	meter	SNI ISO 16422:2014	Rp 2,158.601
	10	Pipa PVC-O	Ø 20 "	meter	SNI ISO 16422:2014	Rp 3,426.942
						Rp -
III	PIPA STEEL					Rp -
	1	Pipa Steel	Ø 2 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 197.897
	2	Pipa Steel	Ø 3 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 328.734
	3	Pipa Steel	Ø 4 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 479.464
	4	Pipa Steel	Ø 6 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 781.333
	5	Pipa Steel	Ø 8 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 1,314.116
	6	Pipa Steel	Ø 10 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 1,647.157
	7	Pipa Steel	Ø 12 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 1,934.261
	8	Pipa Steel	Ø 14 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 2,128.262
	9	Pipa Steel	Ø 16 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 2,437.514
	10	Pipa Steel	Ø 20 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 3,309.900
	11	Pipa Steel	Ø 24 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 3,980.493
						Rp -
V	PIPA GI					Rp -
	1	Pipa GI Medium	Ø ½ "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 66.034
	2	Pipa GI Medium	Ø ¾ "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 84.080
	3	Pipa GI Medium	Ø 1 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 130.017
	4	Pipa GI Medium	Ø 1½ "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 191.950
	5	Pipa GI Medium	Ø 2 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 273.569
	6	Pipa GI Medium	Ø 3 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 454.445
	7	Pipa GI Medium	Ø 4 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 657.468
	8	Pipa GI Medium	Ø 6 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 1,073.359
	9	Pipa GI Medium	Ø 8 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 1,805.885
	10	Pipa GI Medium	Ø 10 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 2,263.201
	11	Pipa GI Medium	Ø 12 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 2,694.677
	12	Pipa GI Medium	Ø 14 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 2,964.965
	13	Pipa GI Medium	Ø 16 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 3,395.621
	14	Pipa GI Medium	Ø 20 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 4,578.900
	15	Pipa GI Medium	Ø 24 "	meter	SNI 0039.2013, MEDIUM. ASTM A53	Rp 5,506.246
						Rp -
VII	WATER METER WITH COUPLING					Rp -
	1	Water Meter Single Jet Setara Itron	Ø ½ "	buah	SNI 2547.2008/ISO 4064, Single jet, Calss B	Rp 471.624
	2	Water Meter Single Jet Setara Itron	Ø ¾ "	buah	SNI 2547.2008/ISO 4064, Single jet, Calss B	Rp 1,143.331
	3	Water Meter Single Jet Setara Itron	Ø 1 "	buah	SNI 2547.2008/ISO 4064, Single jet, Calss B	Rp 3,179.888
	4	Water Meter Single Jet Setara Itron	Ø 1 ½ "	buah	SNI 2547.2008/ISO 4064, Single jet, Calss B	Rp 4,287.489
						Rp -

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG				SATUAN	SPEKIFIKASI	HARGA 2023
VIII	WATER METER WITH FLANGE PN.10						Rp -
	1	Water Meter Woltman	Ø	2 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 10,042,817
	2	Water Meter Woltman	Ø	3 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 12,405,833
	3	Water Meter Woltman	Ø	4 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 13,882,718
	4	Water Meter Woltman	Ø	6 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 26,111,325
	5	Water Meter Woltman	Ø	8 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 32,541,804
	6	Water Meter Woltman	Ø	10 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 64,346,738
	7	Water Meter Woltman	Ø	12 "	buah	ISO 4064, Woltman, Calss B, WRAS	Rp 71,981,097
							Rp -
VIII	WATER METER ELEKTROMAGNETIK PN.10 AC POWER						Rp -
	1	Water Meter Elektromagnetik	Ø	2 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 64,762,500
	2	Water Meter Elektromagnetik	Ø	3 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 71,252,500
	3	Water Meter Elektromagnetik	Ø	4 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 74,937,500
	4	Water Meter Elektromagnetik	Ø	6 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 80,272,500
	5	Water Meter Elektromagnetik	Ø	8 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 91,602,500
	6	Water Meter Elektromagnetik	Ø	10 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 98,147,500
	7	Water Meter Elektromagnetik	Ø	12 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 108,625,000
	8	Water Meter Elektromagnetik	Ø	14 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 124,162,500
	9	Water Meter Elektromagnetik	Ø	16 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 147,537,500
	10	Water Meter Elektromagnetik	Ø	20 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 182,435,000
	11	Water Meter Elektromagnetik	Ø	24 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 216,133,500
							Rp -
VIII	WATER METER ELEKTROMAGNETIK PN.10 BATTERY POWER						Rp -
	1	Water Meter Elektromagnetik	Ø	2 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 86,597,500
	2	Water Meter Elektromagnetik	Ø	3 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 90,972,750
	3	Water Meter Elektromagnetik	Ø	4 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 101,733,500
	4	Water Meter Elektromagnetik	Ø	6 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 106,430,500
	5	Water Meter Elektromagnetik	Ø	8 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 108,625,000
	6	Water Meter Elektromagnetik	Ø	10 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 118,541,500
	7	Water Meter Elektromagnetik	Ø	12 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 127,050,000
	8	Water Meter Elektromagnetik	Ø	14 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 138,462,500
	9	Water Meter Elektromagnetik	Ø	16 "	buah	OIML R49, ISO 4064 CLASS C, PN 16 EN 1092, IP 68, WRAS	Rp 156,876,500
							Rp -
IX	ACCESSORIES & FITTING						Rp -
IX.1	BRASS GATE VALVE						Rp -
	1	Brass Gate Valve	Ø	½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 100,114
	2	Brass Gate Valve	Ø	¾ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 148,772
	3	Brass Gate Valve	Ø	1 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 265,105
	4	Brass Gate Valve	Ø	1½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 512,313
	5	Brass Gate Valve	Ø	2 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 2,122,240
							Rp -
IX.2	BRASS BALL VALVE						Rp -
	1	Brass Ball Valve	Ø	½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 130,036
	2	Brass Ball Valve	Ø	¾ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 174,500
	3	Brass Ball Valve	Ø	1 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 272,096
	4	Brass Ball Valve	Ø	1½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 670,034
	5	Brass Ball Valve	Ø	2 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 1,080,555
							Rp -
IX.3	LOCKABLE ANGLE VALVE						Rp -
	1	Magnetic Lockable Angle Valve	Ø	½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 187,923
	2	Magnetic Lockable Angle Valve	Ø	¾ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 255,597
	3	Magnetic Lockable Angle Valve	Ø	1 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 448,833
							Rp -
IX.4	TAP KRAN						Rp -
	1	Tap Kran Besi Setara Onda	Ø	½ "	buah	Ball valve, handle,Bahan metal dan drat sesuai BS 21	Rp 54,531
	2	Tap Kran Besi Setara Onda	Ø	¾ "	buah	Ball valve, handle,Bahan metal dan drat sesuai BS 21	Rp 76,064
							Rp -
IX.5	GATE VALVE						Rp -
	1	Gate Valve (Risilient)	Ø	2 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 2,321,069
	2	Gate Valve (Risilient)	Ø	3 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 3,132,045
	3	Gate Valve (Risilient)	Ø	4 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 3,579,480
	4	Gate Valve (Risilient)	Ø	6 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 6,498,993
	5	Gate Valve (Risilient)	Ø	8 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 9,273,089
	6	Gate Valve (Risilient)	Ø	10 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 14,144,537
	7	Gate Valve (Risilient)	Ø	12 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 18,904,126
	8	Gate Valve (Risilient)	Ø	14 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 39,038,699
	9	Gate Valve (Risilient)	Ø	16 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 48,099,257
	10	Gate Valve (Risilient)	Ø	20 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 84,735,230
	11	Gate Valve (Risilient)	Ø	24 "	buah	Flange PN 10, EPDAM Seal, WRAS	Rp 147,853,532
							Rp -
IX.6	BUTTERFLY VALVE						Rp -
	1	Butterfly Valve Wafer Type	Ø	2 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 1,816,138
	2	Butterfly Valve Wafer Type	Ø	3 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 2,087,284
	3	Butterfly Valve Wafer Type	Ø	4 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 2,271,180
	4	Butterfly Valve Wafer Type	Ø	6 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 3,805,434
	5	Butterfly Valve (gear box)	Ø	6 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 4,480,614
	6	Butterfly Valve (gear box)	Ø	8 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 7,731,676
	7	Butterfly Valve (gear box)	Ø	10 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 11,965,305
	8	Butterfly Valve (gear box)	Ø	12 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 17,794,935
	9	Butterfly Valve (gear box)	Ø	16 "	buah	Wafer type, PN 10, EPDM Seat, WRAS	Rp 39,059,728
							Rp -
IX.7	CHECK VALVE						Rp -
	1	Brass Check Valve	Ø	½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 102,574
	2	Brass Check Valve	Ø	¾ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 147,866
	3	Brass Check Valve	Ø	1 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 164,432
	4	Brass Check Valve	Ø	1½ "	buah	JIS B0203, BS-21, atau EN 10242	Rp 425,063
	5	Brass Check Valve	Ø	2 "	buah	JIS B0203, BS-21, atau EN 10242	Rp 553,701
	6	Wafer Check Valve Single Door	Ø	2 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 1,017,915
	7	Wafer Check Valve Single Door	Ø	3 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 1,342,305
	8	Wafer Check Valve Single Door	Ø	4 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 2,158,874
	9	Wafer Check Valve Single Door	Ø	6 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 3,478,807

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023	
	10	Wafer Check Valve Single Door	Ø 8 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 5,290,918	
	11	Wafer Check Valve Single Door	Ø 10 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 9,463,249	
	12	Wafer Check Valve Single Door	Ø 12 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 12,673,595	
	13	Wafer Check Valve Single Door	Ø 14"	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 22,707,323	
	14	Wafer Check Valve Single Door	Ø 16 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 28,445,677	
	15	Wafer Check Valve Single Door	Ø 20 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 46,577,978	
	16	Wafer Check Valve Single Door	Ø 24 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 74,643,335	
	17	Wafer Check Valve Dual Plate	Ø 2 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 1,051,472	
	18	Wafer Check Valve Dual Plate	Ø 3 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 1,521,279	
	19	Wafer Check Valve Dual Plate	Ø 4 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 1,879,227	
	20	Wafer Check Valve Dual Plate	Ø 6 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 3,747,268	
	21	Wafer Check Valve Dual Plate	Ø 8 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 6,252,903	
	22	Wafer Check Valve Dual Plate	Ø 10 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 9,116,487	
	23	Wafer Check Valve Dual Plate	Ø 12 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 12,349,204	
	24	Wafer Check Valve Dual Plate	Ø 14"	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 22,002,613	
	25	Wafer Check Valve Dual Plate	Ø 16 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 33,826,082	
	26	Wafer Check Valve Dual Plate	Ø 20 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 51,399,089	
	27	Wafer Check Valve Dual Plate	Ø 24 "	buah	Cast Iron, Wafer type, Gasket EPDM, Disk SS304	Rp 70,951,996	
	28	Swing Check Valve All Flange	Ø 6 "	buah	Flange EN 1092, Cast Iron	Rp 7,729,439	
	29	Swing Check Valve All Flange	Ø 8 "	buah	Flange EN 1092, Cast Iron	Rp 13,389,491	
	30	Swing Check Valve All Flange	Ø 10 "	buah	Flange EN 1092, Cast Iron	Rp 20,783,353	
	31	Swing Check Valve All Flange	Ø 12 "	buah	Flange EN 1092, Cast Iron	Rp 25,582,093	
	32	Swing Check Valve All Flange	Ø 14"	buah	Flange EN 1092, Cast Iron	Rp 56,030,041	
	33	Swing Check Valve All Flange	Ø 16 "	buah	Flange EN 1092, Cast Iron	Rp 74,162,342	
						Rp -	
	IX.8	AIR VALVE					Rp -
		2	Combination Air Valve	Ø 2 "	buah	Body DCI, Flange Conection, PN 16	Rp 22,765,490
		5	Combination Air Valve	Ø 3"	buah	Body DCI, Flange Conection, PN 16	Rp 29,333,835
		6	Combination Air Valve	Ø 4 "	buah	Body DCI, Flange Conection, PN 16	Rp 38,677,395
		7	Combination Air Valve	Ø 6 "	buah	Body DCI, Flange Conection, PN 16	Rp 61,680,026
		8	Brass air vent	Ø ½ "	buah	Body Brass, Thread Conection, PN 16	Rp 117,452
		9	Brass air vent	Ø ¾ "	buah	Body Brass, Thread Conection, PN 16	Rp 134,230
		10	Brass air vent	Ø 1 "	buah	Body Brass, Thread Conection, PN 16	Rp 173,381
11		Single Orifice Air Valve	Ø 2 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 3,400,506	
12		Single Orifice Air Valve	Ø 3 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 4,429,606	
13		Single Orifice Air Valve	Ø 4 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 6,297,647	
14		Double Orifice Air Valve	Ø 2 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 3,780,825	
15		Double Orifice Air Valve	Ø 3 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 5,100,758	
16		Double Orifice Air Valve	Ø 4 "	buah	Body Cast Iron, Flange Conection, PN 16, ABS Float	Rp 6,991,171	
						Rp -	
IX.9		FOOT VALVE					Rp -
		1	Foot Valve	Ø 2 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 1,085,030
	2	Foot Valve	Ø 3 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 1,655,509	
	3	Foot Valve	Ø 4 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 2,270,732	
	4	Foot Valve	Ø 6 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 4,273,004	
	5	Foot Valve	Ø 8 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 6,437,470	
	6	Foot Valve	Ø 10 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 9,709,338	
	9	Foot Valve	Ø 12 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 13,646,766	
	10	Foot Valve	Ø 14 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 20,917,584	
	11	Foot Valve	Ø 16 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 25,951,227	
	12	Foot Valve	Ø 18 "	buah	Cast Iron, Flange EN 1092, SS304	Rp 57,607,249	
						Rp -	
	IX.10	STREET BOX					Rp -
	1	Street Box	Ø 6 "	buah	Cast Iron	Rp 323,272	
IX.11	DOP, END CAP, PLOEG						
	1	Dop PVC	Ø 2 "	buah	SNI 06.0135.1987	Rp 22,867	
	2	Dop PVC	Ø 3 "	buah	SNI 06.0135.1987	Rp 48,592	
	3	Dop PVC	Ø 4 "	buah	SNI 06.0135.1987	Rp 91,181	
	4	Dop PVC	Ø 6 "	buah	SNI 06.0135.1987	Rp 179,074	
	5	Dop PVC	Ø 8 "	buah	SNI 06.0135.1987	Rp 379,729	
	6	Dop GI	Ø ½ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 5,992	
	7	Dop GI	Ø ¾ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 6,938	
	8	Dop GI	Ø 1 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 10,088	
	9	Dop GI	Ø 1½ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 19,906	
	10	Dop GI	Ø 2 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 21,225	
	11	End Cap HDPE	Ø 2 "	buah	SNI 4829.2.2015	Rp 96,462	
	12	End Cap HDPE	Ø 3 "	buah	SNI 4829.2.2015	Rp 196,852	
	13	End Cap HDPE	Ø 4 "	buah	SNI 4829.2.2015	Rp 310,203	
	14	End Cap HDPE	Ø 6 "	buah	SNI 4829.2.2015	Rp 617,622	
	15	End Cap HDPE	Ø 8 "	buah	SNI 4829.2.2015	Rp 1,041,674	
	16	End Cap HDPE	Ø 10 "	buah	SNI 4829.2.2015	Rp 1,627,469	
	17	End Cap HDPE	Ø 12 "	buah	SNI 4829.2.2015	Rp 3,014,291	
	18	End Cap HDPE	Ø 14 "	buah	SNI 4829.2.2015	Rp 4,594,188	
	19	End Cap HDPE	Ø 16 "	buah	SNI 4829.2.2015	Rp 5,249,378	
	20	End Cap HDPE	Ø 20 "	buah	SNI 4829.2.2015	Rp 8,202,154	
	21	End Cap HDPE	Ø 24 "	buah	SNI 4829.2.2015	Rp 16,277,174	
	22	End Cap HDPE	Ø 30 "	buah	SNI 4829.2.2015	Rp 34,995,856	
	23	Ploeg GI	Ø ½ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 6,183	
	24	Ploeg GI	Ø ¾ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 7,500	
	25	Ploeg GI	Ø 1 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 10,582	
	26	Ploeg GI	Ø 1½ "	buah	SNI 0139 : 2008, ISO 7-1	Rp 20,289	
	27	Dop Push on	Ø ½ "	buah	ISO 14236.2000	Rp 12,899	
	28	Dop Push on	Ø ¾ "	buah	ISO 14236.2000	Rp 18,483	
	29	Dop Push on	Ø 1 "	buah	ISO 14236.2000	Rp 23,005	
IX.12	TEE						
	1	Tee PVC	Ø 2 "	buah	SNI 06.0135.1987	Rp 69,408	
	2	Tee PVC	Ø 3 "	buah	SNI 06.0135.1987	Rp 140,431	
	3	Tee PVC	Ø 4 "	buah	SNI 06.0135.1987	Rp 231,524	
	4	Tee PVC	Ø 6 "	buah	SNI 06.0135.1987	Rp 525,062	

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPESIFIKASI	HARGA 2023
5	Tee PVC	Ø	8 "	buah	SNI 06.0135.1987	Rp 1,333,471
6	Tee PVC	Ø	10 "	buah	SNI 06.0135.1987	Rp 1,467,937
7	Tee Reducer PVC	Ø	3 x 2 "	buah	SNI 06.0135.1987	Rp 148,319
8	Tee Reducer PVC	Ø	4 x 2 "	buah	SNI 06.0135.1987	Rp 245,055
9	Tee Reducer PVC	Ø	4 x 3 "	buah	SNI 06.0135.1987	Rp 268,724
10	Tee Reducer PVC	Ø	6 x 2 "	buah	SNI 06.0135.1987	Rp 460,394
11	Tee Reducer PVC	Ø	6 x 3 "	buah	SNI 06.0135.1987	Rp 527,414
12	Tee Reducer PVC	Ø	6 x 4 "	buah	SNI 06.0135.1987	Rp 578,869
13	Tee Reducer PVC	Ø	8 x 2 "	buah	SNI 06.0135.1987	Rp 1,273,512
14	Tee Reducer PVC	Ø	8 x 3 "	buah	SNI 06.0135.1987	Rp 1,369,990
15	Tee Reducer PVC	Ø	8 x 4 "	buah	SNI 06.0135.1987	Rp 1,479,332
16	Tee Reducer PVC	Ø	8 x 6 "	buah	SNI 06.0135.1987	Rp 1,543,651
17	Tee Reducer PVC	Ø	10 x 3 "	buah	SNI 06.0135.1987	Rp 3,073,151
18	Tee Reducer PVC	Ø	10 x 4 "	buah	SNI 06.0135.1987	Rp 3,439,382
19	Tee Reducer PVC	Ø	10 x 6 "	buah	SNI 06.0135.1987	Rp 2,588,445
20	Tee Reducer PVC	Ø	10 x 8 "	buah	SNI 06.0135.1987	Rp 2,790,663
21	Tee HDPE	Ø	2 "	buah	SNI 4829.2.2015, Segmented	Rp 200,915
22	Tee HDPE	Ø	3 "	buah	SNI 4829.2.2015, Segmented	Rp 319,245
23	Tee HDPE	Ø	4 "	buah	SNI 4829.2.2015, Segmented	Rp 442,899
24	Tee HDPE	Ø	6 "	buah	SNI 4829.2.2015, Segmented	Rp 837,084
25	Tee HDPE	Ø	8 "	buah	SNI 4829.2.2015, Segmented	Rp 1,222,694
26	Tee HDPE	Ø	10 "	buah	SNI 4829.2.2015, Segmented	Rp 2,046,668
27	Tee HDPE	Ø	12 "	buah	SNI 4829.2.2015, Segmented	Rp 3,110,131
28	Tee HDPE	Ø	14 "	buah	SNI 4829.2.2015, Segmented	Rp 5,322,026
29	Tee HDPE	Ø	16 "	buah	SNI 4829.2.2015, Segmented	Rp 7,140,419
30	Tee HDPE	Ø	20 "	buah	SNI 4829.2.2015, Segmented	Rp 12,149,179
31	Tee HDPE	Ø	24 "	buah	SNI 4829.2.2015, Segmented	Rp 22,739,941
32	Tee Reducer HDPE	Ø	3 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 250,340
33	Tee Reducer HDPE	Ø	4 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 333,115
34	Tee Reducer HDPE	Ø	4 x 3 "	buah	SNI 4829.2.2015, Segmented	Rp 337,478
35	Tee Reducer HDPE	Ø	6 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 1,082,457
36	Tee Reducer HDPE	Ø	6 x 3 "	buah	SNI 4829.2.2015, Segmented	Rp 953,819
37	Tee Reducer HDPE	Ø	6 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 947,779
38	Tee Reducer HDPE	Ø	8 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 1,557,633
39	Tee Reducer HDPE	Ø	8 x 3 "	buah	SNI 4829.2.2015, Segmented	Rp 1,553,270
40	Tee Reducer HDPE	Ø	8 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 1,418,704
41	Tee Reducer HDPE	Ø	8 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 1,291,297
42	Tee Reducer HDPE	Ø	10 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 2,428,789
43	Tee Reducer HDPE	Ø	10 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 2,276,102
44	Tee Reducer HDPE	Ø	10 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 2,233,595
45	Tee Reducer HDPE	Ø	12 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 4,158,125
46	Tee Reducer HDPE	Ø	12 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 3,813,376
47	Tee Reducer HDPE	Ø	12 x 10 "	buah	SNI 4829.2.2015, Segmented	Rp 3,747,380
48	Tee Reducer HDPE	Ø	14 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 6,860,744
49	Tee Reducer HDPE	Ø	14 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 6,443,175
50	Tee Reducer HDPE	Ø	14 x 10 "	buah	SNI 4829.2.2015, Segmented	Rp 6,028,850
51	Tee Reducer HDPE	Ø	14 x 12 "	buah	SNI 4829.2.2015, Segmented	Rp 5,960,952
52	Tee Reducer HDPE	Ø	16 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 8,650,484
53	Tee Reducer HDPE	Ø	16 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 5,445,619
54	Tee Reducer HDPE	Ø	16 x 10 "	buah	SNI 4829.2.2015, Segmented	Rp 7,754,383
55	Tee Reducer HDPE	Ø	16 x 12 "	buah	SNI 4829.2.2015, Segmented	Rp 7,667,022
56	Tee Reducer HDPE	Ø	16 x 14 "	buah	SNI 4829.2.2015, Segmented	Rp 7,618,922
57	Tee Reducer HDPE	Ø	20 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 16,054,637
58	Tee Reducer HDPE	Ø	20 x 10 "	buah	SNI 4829.2.2015, Segmented	Rp 15,527,447
59	Tee Reducer HDPE	Ø	20 x 12 "	buah	SNI 4829.2.2015, Segmented	Rp 13,647,661
60	Tee Reducer HDPE	Ø	20 x 14 "	buah	SNI 4829.2.2015, Segmented	Rp 13,507,054
61	Tee Reducer HDPE	Ø	20 x 16 "	buah	SNI 4829.2.2015, Segmented	Rp 13,330,206
62	Tee Reducer HDPE	Ø	24 x 10 "	buah	SNI 4829.2.2015, Segmented	Rp 28,804,184
63	Tee Reducer HDPE	Ø	24 x 12 "	buah	SNI 4829.2.2015, Segmented	Rp 27,423,735
64	Tee Reducer HDPE	Ø	24 x 14 "	buah	SNI 4829.2.2015, Segmented	Rp 27,369,036
65	Tee Reducer HDPE	Ø	24 x 16 "	buah	SNI 4829.2.2015, Segmented	Rp 27,309,080
66	Tee Reducer HDPE	Ø	24 x 20 "	buah	SNI 4829.2.2015, Segmented	Rp 23,894,033
67	Tee GI	Ø	½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 10,868
68	Tee GI	Ø	¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 14,418
69	Tee GI	Ø	1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 25,255
70	Tee GI	Ø	1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 43,662
71	Tee GI	Ø	2"	buah	SNI 0139 : 2008, ISO 7-1	Rp 64,971
72	Tee Reducer GI	Ø	¾" x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 18,082
73	Tee Reducer GI	Ø	1" x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 27,782
74	Tee Reducer GI	Ø	1" x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 27,782
75	Tee Reducer GI	Ø	1½" x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 52,923
76	Tee Reducer GI	Ø	1½" x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 52,923
77	Tee Reducer GI	Ø	1½" x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 52,923
78	Tee Reducer GI	Ø	2" x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 74,963
79	Tee Reducer GI	Ø	2" x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 74,963
80	Tee Reducer GI	Ø	2" x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 74,963
81	Tee Reducer GI	Ø	2 x 1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 74,963
82	Tee Steel Butt Welding	Ø	2 "	buah	ASTM A53, Sch 40	Rp 60,895
83	Tee Steel Butt Welding	Ø	3 "	buah	ASTM A53, Sch 40	Rp 180,199
84	Tee Steel Butt Welding	Ø	4 "	buah	ASTM A53, Sch 40	Rp 296,396
85	Tee Steel Butt Welding	Ø	6 "	buah	ASTM A53, Sch 40	Rp 643,409
86	Tee Steel Butt Welding	Ø	8 "	buah	ASTM A53, Sch 40	Rp 1,092,129
87	Tee Steel Butt Welding	Ø	10 "	buah	ASTM A53, Sch 40	Rp 1,825,601
88	Tee Steel Butt Welding	Ø	12 "	buah	ASTM A53, Sch 40	Rp 2,937,359
89	Tee Steel Butt Welding	Ø	14 "	buah	ASTM A53, Sch 40	Rp 3,996,064
90	Tee Steel Butt Welding	Ø	16 "	buah	ASTM A53, Sch 40	Rp 5,118,890
91	Tee Steel Butt Welding	Ø	18 "	buah	ASTM A53, Sch 40	Rp 10,388,028
92	Tee Steel Butt Welding	Ø	20 "	buah	ASTM A53, Sch 40	Rp 11,279,204
93	Tee Steel Butt Welding	Ø	22 "	buah	ASTM A53, Sch 40	Rp 21,214,995
94	Tee Reducer Steel Butt Welding	Ø	3 x 2 "	buah	ASTM A53, Sch 40	Rp 69,905
95	Tee Reducer Steel Butt Welding	Ø	4 x 2 "	buah	ASTM A53, Sch 40	Rp 174,762

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023
	96	Tee Reducer Steel Butt Welding	Ø 4 x 3 "	buah	ASTM A53, Sch 40	Rp 174,762
	97	Tee Reducer Steel Butt Welding	Ø 6 x 2 "	buah	ASTM A53, Sch 40	Rp 559,238
	98	Tee Reducer Steel Butt Welding	Ø 6 x 3 "	buah	ASTM A53, Sch 40	Rp 559,238
	99	Tee Reducer Steel Butt Welding	Ø 6 x 4 "	buah	ASTM A53, Sch 40	Rp 559,238
	100	Tee Reducer Steel Butt Welding	Ø 8 x 2 "	buah	ASTM A53, Sch 40	Rp 978,666
	101	Tee Reducer Steel Butt Welding	Ø 8 x 3 "	buah	ASTM A53, Sch 40	Rp 978,666
	102	Tee Reducer Steel Butt Welding	Ø 8 x 4 "	buah	ASTM A53, Sch 40	Rp 978,666
	103	Tee Reducer Steel Butt Welding	Ø 8 x 6 "	buah	ASTM A53, Sch 40	Rp 978,666
	104	Tee Reducer Steel Butt Welding	Ø 10 x 3 "	buah	ASTM A53, Sch 40	Rp 1,444,698
	105	Tee Reducer Steel Butt Welding	Ø 10 x 4 "	buah	ASTM A53, Sch 40	Rp 1,444,698
	106	Tee Reducer Steel Butt Welding	Ø 10 x 6 "	buah	ASTM A53, Sch 40	Rp 1,537,904
	107	Tee Reducer Steel Butt Welding	Ø 10 x 8 "	buah	ASTM A53, Sch 40	Rp 1,537,904
	108	Tee All Flange CI	Ø 8 "	buah	Cast Iron GGG 50	Rp 7,703,260
	109	Tee All Flange CI	Ø 10 "	buah	Cast Iron GGG 50	Rp 10,873,838
	110	Tee All Flange CI	Ø 12 "	buah	Cast Iron GGG 50	Rp 18,057,106
	111	Tee All Flange CI	Ø 14 "	buah	Cast Iron GGG 50	Rp 19,373,194
	112	Tee All Flange CI	Ø 16 "	buah	Cast Iron GGG 50	Rp 29,059,792
	113	Tee All Flange CI	Ø 20 "	buah	Cast Iron GGG 50	Rp 41,364,761
	114	Tee All Flange CI	Ø 24 "	buah	Cast Iron GGG 50	Rp 66,678,762
	115	Tee Reducer All Flange CI	Ø 6 x 2 "	buah	Cast Iron GGG 50	Rp 4,256,580
	116	Tee Reducer All Flange CI	Ø 6 x 3 "	buah	Cast Iron GGG 50	Rp 4,347,694
	117	Tee Reducer All Flange CI	Ø 6 x 4 "	buah	Cast Iron GGG 50	Rp 4,505,073
	118	Tee Reducer All Flange CI	Ø 8 x 4 "	buah	Cast Iron GGG 50	Rp 7,132,649
	119	Tee Reducer All Flange CI	Ø 8 x 6 "	buah	Cast Iron GGG 50	Rp 7,132,649
	120	Tee Reducer All Flange CI	Ø 10 x 4 "	buah	Cast Iron GGG 50	Rp 9,663,589
	121	Tee Reducer All Flange CI	Ø 10 x 6 "	buah	Cast Iron GGG 50	Rp 10,330,836
	122	Tee Reducer All Flange CI	Ø 10 x 8 "	buah	Cast Iron GGG 50	Rp 10,652,956
	123	Tee Reducer All Flange CI	Ø 12 x 6 "	buah	Cast Iron GGG 50	Rp 12,516,648
	124	Tee Reducer All Flange CI	Ø 12 x 8 "	buah	Cast Iron GGG 50	Rp 12,516,648
	125	Tee Reducer All Flange CI	Ø 12 x 10 "	buah	Cast Iron GGG 50	Rp 16,428,100
	126	Tee Reducer All Flange CI	Ø 14 x 8 "	buah	Cast Iron GGG 50	Rp 18,942,474
	127	Tee Reducer All Flange CI	Ø 14 x 10 "	buah	Cast Iron GGG 50	Rp 19,304,169
	128	Tee Reducer All Flange CI	Ø 14 x 12 "	buah	Cast Iron GGG 50	Rp 18,061,418
	129	Tee Reducer All Flange CI	Ø 16 x 8 "	buah	Cast Iron GGG 50	Rp 23,266,240
	130	Tee Reducer All Flange CI	Ø 16 x 10 "	buah	Cast Iron GGG 50	Rp 26,800,352
	131	Tee Reducer All Flange CI	Ø 16 x 12 "	buah	Cast Iron GGG 50	Rp 28,677,850
	132	Tee Reducer All Flange CI	Ø 16 x 14 "	buah	Cast Iron GGG 50	Rp 28,921,740
	133	Tee Reducer All Flange CI	Ø 20 x 8 "	buah	Cast Iron GGG 50	Rp 34,209,104
	134	Tee Reducer All Flange CI	Ø 20 x 10 "	buah	Cast Iron GGG 50	Rp 35,640,236
	135	Tee Reducer All Flange CI	Ø 20 x 12 "	buah	Cast Iron GGG 50	Rp 36,740,044
	136	Tee Reducer All Flange CI	Ø 20 x 16 "	buah	Cast Iron GGG 50	Rp 38,898,245
	137	Tee Reducer All Flange CI	Ø 24 x 10 "	buah	Cast Iron GGG 50	Rp 49,468,371
	138	Tee Reducer All Flange CI	Ø 24 x 12 "	buah	Cast Iron GGG 50	Rp 56,656,240
	139	Tee Reducer All Flange CI	Ø 24 x 16 "	buah	Cast Iron GGG 50	Rp 62,698,284
	140	Tee Reducer All Flange CI	Ø 24 x 20 "	buah	Cast Iron GGG 50	Rp 65,114,182
	141	Equal tee Push on	Ø ½"	buah	ISO 14236.2000	Rp 25,797
	142	Equal tee Push on	Ø ¾"	buah	ISO 14236.2000	Rp 33,377
	143	Equal tee Push on	Ø 1"	buah	ISO 14236.2000	Rp 44,679
	144	Reducer tee Push on	Ø ¾" x ½"	buah	ISO 14236.2000	Rp 37,632
	145	Reducer tee Push on	Ø 1" x ½"	buah	ISO 14236.2000	Rp 45,743
	146	Reducer tee Push on	Ø 1" x ¾"	buah	ISO 14236.2000	Rp 48,669
	147	Male tee Push on (Tee drat luar)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 35,770
	148	Male tee Push on (Tee drat luar)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 42,153
	149	Female tee Push on (Tee drat dalam)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 29,121
	150	Female tee Push on (Tee drat dalam)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 31,515
	151	Female tee Push on (Tee drat dalam)	Ø 1"	buah	ISO 14236.2000, Plastic Thread	Rp 58,110
	152	Male tee Push on (Tee drat luar)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 50,530
	153	Male tee Push on (Tee drat luar)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 59,041
	154	Female tee Push on (Tee drat dalam)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 43,882
	155	Female tee Push on (Tee drat dalam)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 51,328
IX.13 FLANGE SOCKET PVC						
	1	Flange Socket PVC (SCJ)	Ø 2 "	buah	SNI 06.0135.1987	Rp 189,364
	2	Flange Socket PVC (SCJ)	Ø 3 "	buah	SNI 06.0135.1987	Rp 228,666
	3	Flange Socket PVC (SCJ)	Ø 4 "	buah	SNI 06.0135.1987	Rp 314,416
	4	Flange Socket PVC (SCJ)	Ø 6 "	buah	SNI 06.0135.1987	Rp 621,686
	5	Flange Socket PVC (SCJ)	Ø 8 "	buah	SNI 06.0135.1987	Rp 1,000,414
	6	Flange Socket PVC (SCJ)	Ø 10 "	buah	SNI 06.0135.1987	Rp 2,358,119
	7	Flange Socket PVC (RRJ)	Ø 2 "	buah	SNI 06.0135.1987	Rp 232,239
	8	Flange Socket PVC (RRJ)	Ø 3 "	buah	SNI 06.0135.1987	Rp 257,249
	9	Flange Socket PVC (RRJ)	Ø 4 "	buah	SNI 06.0135.1987	Rp 357,291
	10	Flange Socket PVC (RRJ)	Ø 6 "	buah	SNI 06.0135.1987	Rp 664,561
	11	Flange Socket PVC (RRJ)	Ø 8 "	buah	SNI 06.0135.1987	Rp 1,071,872
	12	Flange Socket PVC (RRJ)	Ø 10 "	buah	SNI 06.0135.1987	Rp 2,715,410
IX.14 BEND/ELBOW/KNIE						
	1	Bend PVC (SCJ)	Ø 2 x 45 °	buah	SNI 06.0135.1987	Rp 97,183
	2	Bend PVC (SCJ)	Ø 2 x 90 °	buah	SNI 06.0135.1987	Rp 102,900
	3	Bend PVC (SCJ)	Ø 3 x 45 °	buah	SNI 06.0135.1987	Rp 142,916
	4	Bend PVC (SCJ)	Ø 3 x 90 °	buah	SNI 06.0135.1987	Rp 150,062
	5	Bend PVC (SCJ)	Ø 4 x 45 °	buah	SNI 06.0135.1987	Rp 205,799
	6	Bend PVC (SCJ)	Ø 4 x 90 °	buah	SNI 06.0135.1987	Rp 219,377
	7	Bend PVC (SCJ)	Ø 6 x 45 °	buah	SNI 06.0135.1987	Rp 643,123
	8	Bend PVC (SCJ)	Ø 6 x 90 °	buah	SNI 06.0135.1987	Rp 714,582
	9	Bend PVC (RRJ)	Ø 6 x 45 °	buah	SNI 06.0135.1987	Rp 761,029
	10	Bend PVC (RRJ)	Ø 6 x 90 °	buah	SNI 06.0135.1987	Rp 828,915
	11	Bend PVC (RRJ)	Ø 8 x 45 °	buah	SNI 06.0135.1987	Rp 1,207,643
	12	Bend PVC (RRJ)	Ø 8 x 90 °	buah	SNI 06.0135.1987	Rp 1,393,434
	13	Bend PVC (RRJ)	Ø 10 x 45 °	buah	SNI 06.0135.1987	Rp 2,643,952
	14	Bend PVC (RRJ)	Ø 10 x 90 °	buah	SNI 06.0135.1987	Rp 2,858,326
	15	Bend PVC (RRJ)	Ø 12 x 45 °	buah	SNI 06.0135.1987	Rp 3,072,701

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG	SATUAN	SPEKIFIKASI	HARGA 2023
16	Bend PVC (RRJ) Ø 12 x 90 °	buah	SNI 06.0135.1987	Rp 3,144,159
19	Bend PVC-O (RRJ) Ø 3 x 45 °	buah	SNI ISO 16422:2014	Rp 356,158
20	Bend PVC-O (RRJ) Ø 3 x 90 °	buah	SNI ISO 16422:2014	Rp 360,856
21	Bend PVC-O (RRJ) Ø 4 x 45 °	buah	SNI ISO 16422:2014	Rp 567,012
22	Bend PVC-O (RRJ) Ø 4 x 90 °	buah	SNI ISO 16422:2014	Rp 733,905
23	Bend PVC-O (RRJ) Ø 6 x 45 °	buah	SNI ISO 16422:2014	Rp 1,278,657
24	Bend PVC-O (RRJ) Ø 6 x 90 °	buah	SNI ISO 16422:2014	Rp 1,293,423
25	Bend PVC-O (RRJ) Ø 8 x 45 °	buah	SNI ISO 16422:2014	Rp 2,581,028
26	Bend PVC-O (RRJ) Ø 8 x 90 °	buah	SNI ISO 16422:2014	Rp 2,688,189
27	Bend PVC-O (RRJ) Ø 10 x 45 °	buah	SNI ISO 16422:2014	Rp 4,033,850
28	Bend PVC-O (RRJ) Ø 10 x 90 °	buah	SNI ISO 16422:2014	Rp 4,033,850
29	Bend PVC-O (RRJ) Ø 12 x 45 °	buah	SNI ISO 16422:2014	Rp 6,277,512
30	Bend PVC-O (RRJ) Ø 12 x 90 °	buah	SNI ISO 16422:2014	Rp 6,277,512
37	Bend HDPE BUTT FUSION Ø 2 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 156,338
38	Bend HDPE BUTT FUSION Ø 2 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 227,423
39	Bend HDPE BUTT FUSION Ø 3 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 263,960
40	Bend HDPE BUTT FUSION Ø 3 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 380,157
41	Bend HDPE BUTT FUSION Ø 4 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 379,785
42	Bend HDPE BUTT FUSION Ø 4 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 467,150
43	Bend HDPE BUTT FUSION Ø 6 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 727,258
44	Bend HDPE BUTT FUSION Ø 6 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 949,461
45	Bend HDPE BUTT FUSION Ø 8 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 900,000
46	Bend HDPE BUTT FUSION Ø 8 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 1,157,498
47	Bend HDPE BUTT FUSION Ø 10 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 1,269,097
48	Bend HDPE BUTT FUSION Ø 10 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 1,842,875
49	Bend HDPE BUTT FUSION Ø 12 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 1,599,047
50	Bend HDPE BUTT FUSION Ø 12 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 2,386,081
51	Bend HDPE BUTT FUSION Ø 14 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 2,132,311
52	Bend HDPE BUTT FUSION Ø 14 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 2,944,449
53	Bend HDPE BUTT FUSION Ø 16 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 2,284,300
54	Bend HDPE BUTT FUSION Ø 16 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 3,147,514
55	Bend HDPE BUTT FUSION Ø 20 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 3,655,178
56	Bend HDPE BUTT FUSION Ø 20 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 5,035,998
57	Bend HDPE BUTT FUSION Ø 24 x 45 °	buah	SNI 4829.2.2015, Segmented	Rp 6,579,246
58	Bend HDPE BUTT FUSION Ø 24 x 90 °	buah	SNI 4829.2.2015, Segmented	Rp 9,064,747
81	Bend Steel Ø 2 x 45 °	buah	ASTM A53, Sch 40	Rp 25,849
82	Bend Steel Ø 2 x 90 °	buah	ASTM A53, Sch 40	Rp 61,143
83	Bend Steel Ø 3 x 45 °	buah	ASTM A53, Sch 40	Rp 61,765
84	Bend Steel Ø 3 x 90 °	buah	ASTM A53, Sch 40	Rp 75,559
85	Bend Steel Ø 4 x 45 °	buah	ASTM A53, Sch 40	Rp 91,218
86	Bend Steel Ø 4 x 90 °	buah	ASTM A53, Sch 40	Rp 157,581
87	Bend Steel Ø 6 x 45 °	buah	ASTM A53, Sch 40	Rp 230,033
88	Bend Steel Ø 6 x 90 °	buah	ASTM A53, Sch 40	Rp 341,384
89	Bend Steel Ø 8 x 45 °	buah	ASTM A53, Sch 40	Rp 467,150
90	Bend Steel Ø 8 x 90 °	buah	ASTM A53, Sch 40	Rp 761,806
91	Bend Steel Ø 10 x 45 °	buah	ASTM A53, Sch 40	Rp 1,035,460
92	Bend Steel Ø 10 x 90 °	buah	ASTM A53, Sch 40	Rp 1,288,732
93	Bend Steel Ø 12 x 45 °	buah	ASTM A53, Sch 40	Rp 1,192,916
94	Bend Steel Ø 12 x 90 °	buah	ASTM A53, Sch 40	Rp 1,881,027
95	Bend Steel Ø 14 x 45 °	buah	ASTM A53, Sch 40	Rp 2,224,151
96	Bend Steel Ø 14 x 90 °	buah	ASTM A53, Sch 40	Rp 2,891,881
97	Bend Steel Ø 16 x 45 °	buah	ASTM A53, Sch 40	Rp 2,732,560
98	Bend Steel Ø 16 x 90 °	buah	ASTM A53, Sch 40	Rp 4,793,165
99	Bend Steel Ø 20 x 45 °	buah	ASTM A53, Sch 40	Rp 6,391,466
100	Bend Steel Ø 20 x 90 °	buah	ASTM A53, Sch 40	Rp 7,287,862
101	Bend Steel Ø 24 x 45 °	buah	ASTM A53, Sch 40	Rp 12,771,375
102	Bend Steel Ø 24 x 90 °	buah	ASTM A53, Sch 40	Rp 12,771,375
103	All Flanged Bend DCI Ø 6 x 45 °	buah	Cast Iron GGG 50	Rp 6,331,452
104	All Flanged Bend DCI Ø 6 x 90 °	buah	Cast Iron GGG 50	Rp 6,331,452
105	All Flanged Bend DCI Ø 8 x 45 °	buah	Cast Iron GGG 50	Rp 9,013,526
106	All Flanged Bend DCI Ø 8 x 90 °	buah	Cast Iron GGG 50	Rp 9,013,526
107	All Flanged Bend DCI Ø 10 x 45 °	buah	Cast Iron GGG 50	Rp 14,685,451
108	All Flanged Bend DCI Ø 10 x 90 °	buah	Cast Iron GGG 50	Rp 14,685,451
109	All Flanged Bend DCI Ø 12 x 45 °	buah	Cast Iron GGG 50	Rp 20,704,033
110	All Flanged Bend DCI Ø 12 x 90 °	buah	Cast Iron GGG 50	Rp 20,704,033
111	All Flanged Bend DCI Ø 14 x 45 °	buah	Cast Iron GGG 51	Rp 25,347,793
112	All Flanged Bend DCI Ø 14 x 90 °	buah	Cast Iron GGG 52	Rp 25,347,793
113	All Flanged Bend DCI Ø 16 x 45 °	buah	Cast Iron GGG 53	Rp 34,916,658
114	All Flanged Bend DCI Ø 16 x 90 °	buah	Cast Iron GGG 54	Rp 34,916,658
115	All Flanged Bend DCI Ø 20 x 45 °	buah	Cast Iron GGG 55	Rp 50,316,437
116	All Flanged Bend DCI Ø 20 x 90 °	buah	Cast Iron GGG 56	Rp 50,316,437
117	All Flanged Bend DCI Ø 24 x 45 °	buah	Cast Iron GGG 57	Rp 70,744,544
118	All Flanged Bend DCI Ø 24 x 90 °	buah	Cast Iron GGG 58	Rp 70,744,544
141	Male/Female Elbow GI Ø ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 16,019
142	Male/Female Elbow GI Ø ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 20,156
143	Male/Female Elbow GI Ø 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 29,134
144	Male/Female Elbow GI Ø 1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 65,037
145	Male/Female Elbow GI Ø 2"	buah	SNI 0139 : 2008, ISO 7-1	Rp 101,508
146	Knee GI Ø ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 8,481
147	Knee GI Ø ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 12,042
148	Knee GI Ø 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 17,602
149	Knee GI Ø 1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 34,877
150	Knee GI Ø 2"	buah	SNI 0139 : 2008, ISO 7-1	Rp 48,505
151	Elbow Push on (Knee) Ø ½"	buah	ISO 14236.2000	Rp 17,420
152	Elbow Push on (Knee) Ø ¾"	buah	ISO 14236.2001	Rp 25,398
153	Elbow Push on (Knee) Ø 1"	buah	ISO 14236.2002	Rp 34,972
154	Male elbow Push on (Knee Drat luar) Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 11,968
155	Male elbow Push on (Knee Drat luar) Ø ¾" x ½"	buah	ISO 14236.2000, Plastic Thread	Rp 15,159
156	Male elbow Push on (Knee Drat luar) Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 25,265
157	Male elbow Push on (Knee Drat dalam) Ø 1"	buah	ISO 14236.2000, Plastic Thread	Rp 29,786
158	Female elbow Push on (Knee Drat dalam) Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 14,494

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023
	159	Female elbow Push on (Knee Drat dalam)	Ø ¾" x ½"	buah	ISO 14236.2000, Plastic Thread	Rp 19,946
	160	Female elbow Push on (Knee Drat dalam)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 21,409
	161	Female elbow Push on (Knee Drat dalam)	Ø 1"	buah	ISO 14236.2000, Plastic Thread	Rp 28,722
	162	Male elbow Push on (Knee Drat luar)	Ø ½"	buah	ISO 14236.2000, Brass thread	Rp 38,961
	163	Male elbow Push on (Knee Drat luar)	Ø ¾" x ½"	buah	ISO 14236.2000, Brass thread	Rp 42,153
	164	Male elbow Push on (Knee Drat luar)	Ø ¾"	buah	ISO 14236.2000, Brass thread	Rp 52,658
	165	Male elbow Push on (Knee Drat luar)	Ø 1"	buah	ISO 14236.2000, Brass thread	Rp 70,609
	166	Female elbow Push on (Knee Drat dalam)	Ø ½"	buah	ISO 14236.2000, Brass thread	Rp 29,254
	167	Female elbow Push on (Knee Drat dalam)	Ø ¾" x ½"	buah	ISO 14236.2000, Brass thread	Rp 34,706
IX.15	REDUCER					
	1	Reducer PVC SCJ	Ø 2 x 1½ "	buah	SNI 06.0135.1987	Rp 57,494
	2	Reducer PVC SCJ	Ø 3 x 2 "	buah	SNI 06.0135.1987	Rp 98,635
	3	Reducer PVC SCJ	Ø 4 x 2 "	buah	SNI 06.0135.1987	Rp 185,259
	4	Reducer PVC SCJ	Ø 4 x 3 "	buah	SNI 06.0135.1987	Rp 229,977
	5	Reducer PVC SCJ	Ø 6 x 2 "	buah	SNI 06.0135.1987	Rp 376,907
	6	Reducer PVC SCJ	Ø 6 x 3 "	buah	SNI 06.0135.1987	Rp 383,295
	7	Reducer PVC SCJ	Ø 6 x 4 "	buah	SNI 06.0135.1987	Rp 411,914
	8	Reducer PVC SCJ	Ø 8 x 2 "	buah	SNI 06.0135.1987	Rp 638,825
	9	Reducer PVC SCJ	Ø 8 x 3 "	buah	SNI 06.0135.1987	Rp 653,390
	10	Reducer PVC SCJ	Ø 8 x 4 "	buah	SNI 06.0135.1987	Rp 664,378
	11	Reducer PVC SCJ	Ø 8 x 6 "	buah	SNI 06.0135.1987	Rp 680,221
	12	Reducer PVC SCJ	Ø 10 x 6 "	buah	SNI 06.0135.1987	Rp 1,006,277
	13	Reducer PVC RRJ	Ø 6 x 2 "	buah	SNI 06.0135.1987	Rp 389,683
	14	Reducer PVC RRJ	Ø 6 x 3 "	buah	SNI 06.0135.1987	Rp 396,072
	15	Reducer PVC RRJ	Ø 6 x 4 "	buah	SNI 06.0135.1987	Rp 408,848
	16	Reducer PVC RRJ	Ø 8 x 2 "	buah	SNI 06.0135.1987	Rp 638,825
	17	Reducer PVC RRJ	Ø 8 x 3 "	buah	SNI 06.0135.1987	Rp 651,602
	18	Reducer PVC RRJ	Ø 8 x 4 "	buah	SNI 06.0135.1987	Rp 664,378
	19	Reducer PVC RRJ	Ø 8 x 6 "	buah	SNI 06.0135.1987	Rp 677,155
	20	Reducer PVC RRJ	Ø 10 x 6 "	buah	SNI 06.0135.1987	Rp 1,213,768
	40	Reducer HDPE	Ø 3 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 202,208
	41	Reducer HDPE	Ø 4 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 264,339
	42	Reducer HDPE	Ø 4 x 3 "	buah	SNI 4829.2.2015, Segmented	Rp 264,339
	43	Reducer HDPE	Ø 6 x 2 "	buah	SNI 4829.2.2015, Segmented	Rp 655,116
	44	Reducer HDPE	Ø 6 x 3 "	buah	SNI 4829.2.2015, Segmented	Rp 655,116
	45	Reducer HDPE	Ø 6 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 655,116
	46	Reducer HDPE	Ø 8 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 942,626
	47	Reducer HDPE	Ø 8 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 942,626
	48	Reducer HDPE	Ø 10 x 4 "	buah	SNI 4829.2.2015, Segmented	Rp 1,353,480
	49	Reducer HDPE	Ø 10 x 6 "	buah	SNI 4829.2.2015, Segmented	Rp 1,353,480
	50	Reducer HDPE	Ø 10 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 1,353,480
	51	Reducer HDPE	Ø 12 x 8 "	buah	SNI 4829.2.2015, Segmented	Rp 1,850,207
	52	Reducer HDPE	Ø 12 x 10"	buah	SNI 4829.2.2015, Segmented	Rp 1,850,207
	53	Reducer HDPE	Ø 14 x 10"	buah	SNI 4829.2.2015, Segmented	Rp 2,238,517
	54	Reducer HDPE	Ø 14 x 12"	buah	SNI 4829.2.2015, Segmented	Rp 2,238,517
	55	Reducer HDPE	Ø 16 x 12"	buah	SNI 4829.2.2015, Segmented	Rp 3,346,528
	56	Reducer HDPE	Ø 16 x 14"	buah	SNI 4829.2.2015, Segmented	Rp 3,346,528
	57	Reducer HDPE	Ø 20 x 12"	buah	SNI 4829.2.2015, Segmented	Rp 5,666,787
	58	Reducer HDPE	Ø 20 x 16"	buah	SNI 4829.2.2015, Segmented	Rp 6,781,659
	59	Reducer HDPE	Ø 24 x 20"	buah	SNI 4829.2.2015, Segmented	Rp 11,212,444
	60	Verlopp Sock Galvanis	Ø ¾" x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 9,454
	61	Verlopp Sock Galvanis	Ø 1 x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 12,524
	62	Verlopp Sock Galvanis	Ø 1 x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 11,840
	63	Verlopp Sock Galvanis	Ø 1½ x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 22,603
	64	Verlopp Sock Galvanis	Ø 1½ x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 21,981
	65	Verlopp Sock Galvanis	Ø 1½ x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 18,874
	66	Verlopp Sock Galvanis	Ø 2 x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 34,200
	67	Verlopp Sock Galvanis	Ø 2 x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 33,579
	68	Verlopp Sock Galvanis	Ø 2 x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 33,579
	69	Verlopp Sock Galvanis	Ø 2 x 1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 37,332
	70	Verlopp Nipple Galvanis	Ø ¾ x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 9,454
	71	Verlopp Nipple Galvanis	Ø 1 x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 12,524
	72	Verlopp Nipple Galvanis	Ø 1 x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 11,840
	73	Verlopp Nipple Galvanis	Ø 1½ x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 22,603
	74	Verlopp Nipple Galvanis	Ø 1½ x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 21,981
	75	Verlopp Nipple Galvanis	Ø 1½ x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 18,874
	76	Verlopp Nipple Galvanis	Ø 2 x ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 34,200
	77	Verlopp Nipple Galvanis	Ø 2 x ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 33,579
	78	Verlopp Nipple Galvanis	Ø 2 x 1"	buah	SNI 0139 : 2008, ISO 7-1	Rp 33,579
	79	Verlopp Nipple Galvanis	Ø 2 x 1½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 37,332
	80	Reducer Eksentris	Ø 3 x 2 "	buah	ASTM A53, Sch 40	Rp 69,905
	81	Reducer Eksentris	Ø 4 x 2 "	buah	ASTM A53, Sch 40	Rp 116,508
	82	Reducer Eksentris	Ø 4 x 3 "	buah	ASTM A53, Sch 40	Rp 116,508
	83	Reducer Eksentris	Ø 6 x 3 "	buah	ASTM A53, Sch 40	Rp 302,920
	84	Reducer Eksentris	Ø 6 x 4 "	buah	ASTM A53, Sch 40	Rp 302,920
	85	Reducer Eksentris	Ø 8 x 4 "	buah	ASTM A53, Sch 40	Rp 442,730
	86	Reducer Eksentris	Ø 8 x 6 "	buah	ASTM A53, Sch 40	Rp 442,730
	87	Reducer Eksentris	Ø 10 x 6 "	buah	ASTM A53, Sch 40	Rp 768,952
	88	Reducer Eksentris	Ø 10 x 8 "	buah	ASTM A53, Sch 40	Rp 768,952
	89	Reducer Eksentris	Ø 12 x 6 "	buah	ASTM A53, Sch 40	Rp 1,211,682
	90	Reducer Eksentris	Ø 12 x 8 "	buah	ASTM A53, Sch 40	Rp 1,211,682
	91	Reducer Eksentris	Ø 12 x 10"	buah	ASTM A53, Sch 40	Rp 1,211,682
	92	Reducer Concentris	Ø 3 x 2 "	buah	ASTM A53, Sch 40	Rp 69,905
	93	Reducer Concentris	Ø 4 x 2 "	buah	ASTM A53, Sch 40	Rp 69,905
	94	Reducer Concentris	Ø 4 x 3 "	buah	ASTM A53, Sch 40	Rp 69,905
	95	Reducer Concentris	Ø 6 x 3 "	buah	ASTM A53, Sch 40	Rp 186,413
	96	Reducer Concentris	Ø 6 x 4 "	buah	ASTM A53, Sch 40	Rp 186,413
	97	Reducer Concentris	Ø 8 x 4 "	buah	ASTM A53, Sch 40	Rp 466,031
	98	Reducer Concentris	Ø 8 x 6 "	buah	ASTM A53, Sch 40	Rp 466,031
	99	Reducer Concentris	Ø 10 x 6 "	buah	ASTM A53, Sch 40	Rp 699,047

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023
	100	Reducer Concentris	Ø 10 x 8 "	buah	ASTM A53, Sch 40	Rp 699,047
	101	Reducer Concentris	Ø 12 x 6"	buah	ASTM A53, Sch 40	Rp 1,025,269
	102	Reducer Concentris	Ø 12 x 8"	buah	ASTM A53, Sch 40	Rp 1,025,269
	103	Reducer Concentris	Ø 12 x 10"	buah	ASTM A53, Sch 40	Rp 1,025,269
	104	Reducer Concentris	Ø 14 x 10"	buah	ASTM A53, Sch 40	Rp 1,957,332
	105	Reducer Concentris	Ø 14 x 12"	buah	ASTM A53, Sch 40	Rp 1,957,332
	106	Reducer Concentris	Ø 16 x 12"	buah	ASTM A53, Sch 40	Rp 3,075,808
	107	Reducer Concentris	Ø 16 x 14"	buah	ASTM A53, Sch 40	Rp 3,075,808
IX.16	JOINTER/COUPLER					
	1	Giboult Joint	Ø 2 "	buah	Cast Iron	Rp 157,637
	2	Giboult Joint	Ø 3 "	buah	Cast Iron	Rp 221,377
	3	Giboult Joint	Ø 4 "	buah	Cast Iron	Rp 354,432
	4	Giboult Joint	Ø 6 "	buah	Cast Iron	Rp 610,967
	5	Giboult Joint Long	Ø 2 "	buah	Cast Iron	Rp 593,103
	6	Giboult Joint Long	Ø 3 "	buah	Cast Iron	Rp 1,428,449
	7	Giboult Joint Long	Ø 4 "	buah	Cast Iron	Rp 2,286,661
	8	Giboult Joint Long	Ø 6 "	buah	Cast Iron	Rp 2,772,779
	9	Giboult Joint Long	Ø 8 "	buah	Cast Iron	Rp 3,533,426
	10	Giboult Joint Long	Ø 10 "	buah	Cast Iron	Rp 4,832,085
	11	Giboult Joint Long	Ø 12 "	buah	Cast Iron	Rp 6,057,832
	12	Universal Coupling With Grip	Ø 2 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 3,535,072
	13	Universal Coupling With Grip	Ø 3 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 4,217,969
	14	Universal Coupling With Grip	Ø 4 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 4,601,868
	15	Universal Coupling With Grip	Ø 6 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 7,216,566
	16	Universal Coupling With Grip	Ø 8 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 13,677,639
	17	Universal Coupling With Grip	Ø 10 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 20,799,461
	18	Universal Coupling With Grip	Ø 12 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 29,234,169
	19	Universal Coupling With Grip	Ø 14 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 82,922,224
	20	Universal Coupling With Grip	Ø 16 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 91,030,863
	21	Universal Coupling With Grip	Ø 20 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 122,861,274
	22	Universal Coupling With Grip	Ø 24 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 147,121,979
	23	Dismantling Joint	Ø 2 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 7,430,406
	24	Dismantling Joint	Ø 3 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 9,013,670
	25	Dismantling Joint	Ø 4 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 9,858,740
	26	Dismantling Joint	Ø 6 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 14,768,848
	27	Dismantling Joint	Ø 8 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 19,292,460
	28	Dismantling Joint	Ø 10 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 25,876,552
	29	Dismantling Joint	Ø 12 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 30,400,164
	30	Dismantling Joint	Ø 14 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 37,793,287
	31	Dismantling Joint	Ø 16 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 46,343,411
	32	Dismantling Joint	Ø 20 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 62,803,642
	33	Dismantling Joint	Ø 24 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 76,135,870
	34	Fleksible Rubber Joint	Ø 2 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 755,046
	35	Fleksible Rubber Joint	Ø 3 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 1,237,437
	36	Fleksible Rubber Joint	Ø 4 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 1,614,961
	37	Fleksible Rubber Joint	Ø 6 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 2,642,663
	38	Fleksible Rubber Joint	Ø 8 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 4,278,597
	39	Fleksible Rubber Joint	Ø 10 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 7,005,153
	40	Fleksible Rubber Joint	Ø 12 "	buah	Flange, Double Sphere, EPDM with Reinforce Steel Wire	Rp 8,452,326
IX.17	FLANGE ADAPTOR					
	1	Universal Flange Adaptor	Ø 2 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 2,818,952
	2	Universal Flange Adaptor	Ø 3 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 3,444,019
	3	Universal Flange Adaptor	Ø 4 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 3,847,605
	4	Universal Flange Adaptor	Ø 6 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 6,154,691
	5	Universal Flange Adaptor	Ø 8 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 10,398,500
	6	Universal Flange Adaptor	Ø 10 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 15,203,392
	7	Universal Flange Adaptor	Ø 12 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 21,572,181
	8	Universal Flange Adaptor	Ø 14 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 58,067,212
	9	Universal Flange Adaptor	Ø 16 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 66,973,181
	10	Universal Flange Adaptor	Ø 20 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 108,879,715
	11	Universal Flange Adaptor	Ø 24 "	buah	EN GJS 450/500, PN 16, Coating Rilsan Nylon 11, EPDM, WRAS	Rp 129,129,166
IX.18	FLANGED					
	1	Flanged Steel	Ø 2 "	buah	ISO 7005, EN 1092	Rp 132,431
	2	Flanged Steel	Ø 3 "	buah	ISO 7005, EN 1092	Rp 190,607
	3	Flanged Steel	Ø 4 "	buah	ISO 7005, EN 1092	Rp 215,074
	4	Flanged Steel	Ø 6 "	buah	ISO 7005, EN 1092	Rp 372,825
	5	Flanged Steel	Ø 8 "	buah	ISO 7005, EN 1092	Rp 535,936
	6	Flanged Steel	Ø 10 "	buah	ISO 7005, EN 1092	Rp 765,068
	7	Flanged Steel	Ø 12 "	buah	ISO 7005, EN 1092	Rp 1,021,386
	8	Flanged Steel	Ø 14 "	buah	ISO 7005, EN 1092	Rp 1,433,047
	9	Flanged Steel	Ø 16 "	buah	ISO 7005, EN 1092	Rp 2,027,237
	10	Flanged Steel	Ø 20 "	buah	ISO 7005, EN 1092	Rp 3,763,825
	11	Flanged Steel	Ø 24 "	buah	ISO 7005, EN 1092	Rp 5,437,034
	12	Flanged Blank Steel	Ø 2 "	buah	ISO 7005, EN 1092	Rp 220,234
	13	Flanged Blank Steel	Ø 3 "	buah	ISO 7005, EN 1092	Rp 257,249
	14	Flanged Blank Steel	Ø 4 "	buah	ISO 7005, EN 1092	Rp 321,562
	15	Flanged Blank Steel	Ø 6 "	buah	ISO 7005, EN 1092	Rp 421,603
	16	Flanged Blank Steel	Ø 8 "	buah	ISO 7005, EN 1092	Rp 573,952
	17	Flanged Blank Steel	Ø 10 "	buah	ISO 7005, EN 1092	Rp 1,064,727
	18	Flanged Blank Steel	Ø 12 "	buah	ISO 7005, EN 1092	Rp 1,679,267
	19	Flanged Blank Steel	Ø 16 "	buah	ISO 7005, EN 1092	Rp 2,312,672
	20	Flanged Blank Steel	Ø 20 "	buah	ISO 7005, EN 1092	Rp 4,709,807
	21	Flanged Blank Steel	Ø 24 "	buah	ISO 7005, EN 1092	Rp 6,462,303
						Rp -
IX.19	PACKING KARET					
	1	Packing Karet	Ø 5 mm	meter	EPDM	Rp 322,419
	2	Packing Karet	Ø 2 "	buah	EPDM	Rp 32,156
	3	Packing Karet	Ø 3 "	buah	EPDM	Rp 37,587

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPESIFIKASI	HARGA 2023
	4	Packing Karet	Ø 4 "	buah	EPDM	Rp 42,875
	5	Packing Karet	Ø 6 "	buah	EPDM	Rp 50,021
	6	Packing Karet	Ø 8 "	buah	EPDM	Rp 57,167
	7	Packing Karet	Ø 10 "	buah	EPDM	Rp 67,885
	8	Packing Karet	Ø 12 "	buah	EPDM	Rp 92,896
IX.20	CLAMP SADDLE					
	1	Clamp Saddle HDPE	Ø 1½ X ½ "	buah	SNI 4829.2.2015	Rp 33,766
	2	Clamp Saddle HDPE	Ø 1½ X ¾ "	buah	SNI 4829.2.2015	Rp 35,058
	3	Clamp Saddle HDPE	Ø 2 X ½ "	buah	SNI 4829.2.2015	Rp 45,075
	4	Clamp Saddle HDPE	Ø 2 X ¾ "	buah	SNI 4829.2.2015	Rp 45,721
	5	Clamp Saddle HDPE	Ø 2 X 1 "	buah	SNI 4829.2.2015	Rp 48,306
	6	Clamp Saddle HDPE	Ø 2 X 1½ "	buah	SNI 4829.2.2015	Rp 50,244
	7	Clamp Saddle HDPE	Ø 3 X ½ "	buah	SNI 4829.2.2015	Rp 85,626
	8	Clamp Saddle HDPE	Ø 3 X ¾ "	buah	SNI 4829.2.2015	Rp 87,403
	9	Clamp Saddle HDPE	Ø 3 X 1 "	buah	SNI 4829.2.2015	Rp 90,472
	10	Clamp Saddle HDPE	Ø 3 X 1½ "	buah	SNI 4829.2.2015	Rp 94,996
	11	Clamp Saddle HDPE	Ø 4 X ½ "	buah	SNI 4829.2.2015	Rp 108,728
	12	Clamp Saddle HDPE	Ø 4 X ¾ "	buah	SNI 4829.2.2015	Rp 109,859
	13	Clamp Saddle HDPE	Ø 4 X 1 "	buah	SNI 4829.2.2015	Rp 112,283
	14	Clamp Saddle HDPE	Ø 4 X 1½ "	buah	SNI 4829.2.2015	Rp 116,321
	15	Clamp Saddle HDPE	Ø 4 X 2 "	buah	SNI 4829.2.2015	Rp 124,399
	16	Clamp Saddle HDPE	Ø 6 X ½ "	buah	SNI 4829.2.2015	Rp 198,554
	17	Clamp Saddle HDPE	Ø 6 X ¾ "	buah	SNI 4829.2.2015	Rp 198,554
	18	Clamp Saddle HDPE	Ø 6 X 1 "	buah	SNI 4829.2.2015	Rp 198,554
	19	Clamp Saddle HDPE	Ø 6 X 1½ "	buah	SNI 4829.2.2015	Rp 198,554
	20	Clamp Saddle HDPE	Ø 6 X 2 "	buah	SNI 4829.2.2015	Rp 205,178
	21	Clamp Saddle HDPE	Ø 8 X ¾ "	buah	SNI 4829.2.2015	Rp 345,572
	22	Clamp Saddle HDPE	Ø 8 x 1 "	buah	SNI 4829.2.2015	Rp 348,157
	23	Clamp Saddle HDPE	Ø 8 X 1½ "	buah	SNI 4829.2.2015	Rp 351,549
	24	Clamp Saddle HDPE	Ø 8 x 2 "	buah	SNI 4829.2.2015	Rp 357,042
	25	Clamp Saddle HDPE	Ø 8 x 3 "	buah	SNI 4829.2.2015	Rp 371,098
	26	Clamp Saddle HDPE	Ø 10 X ¾ "	buah	SNI 4829.2.2015	Rp 715,215
	27	Clamp Saddle HDPE	Ø 10 x 1 "	buah	SNI 4829.2.2015	Rp 731,210
	28	Clamp Saddle HDPE	Ø 10 X 1½ "	buah	SNI 4829.2.2015	Rp 751,889
	29	Clamp Saddle HDPE	Ø 10 x 2 "	buah	SNI 4829.2.2015	Rp 757,220
	30	Clamp Saddle HDPE	Ø 10 x 3 "	buah	SNI 4829.2.2015	Rp 774,345
	31	Clamp Saddle CI	Ø 1½ X ½ "	buah	Cast Iron	Rp 40,731
	32	Clamp Saddle CI	Ø 1½ X ¾ "	buah	Cast Iron	Rp 42,589
	33	Clamp Saddle CI	Ø 2 X ½ "	buah	Cast Iron	Rp 52,879
	34	Clamp Saddle CI	Ø 2 X ¾ "	buah	Cast Iron	Rp 50,307
	35	Clamp Saddle CI	Ø 2 X 1 "	buah	Cast Iron	Rp 57,881
	36	Clamp Saddle CI	Ø 2 X 1½ "	buah	Cast Iron	Rp 68,028
	37	Clamp Saddle CI	Ø 3 X ½ "	buah	Cast Iron	Rp 63,741
	38	Clamp Saddle CI	Ø 3 X ¾ "	buah	Cast Iron	Rp 64,169
	39	Clamp Saddle CI	Ø 3 X 1 "	buah	Cast Iron	Rp 66,170
	40	Clamp Saddle CI	Ø 3 X 1½ "	buah	Cast Iron	Rp 112,046
	41	Clamp Saddle CI	Ø 4 X ½ "	buah	Cast Iron	Rp 73,602
	42	Clamp Saddle CI	Ø 4 X ¾ "	buah	Cast Iron	Rp 75,031
	43	Clamp Saddle CI	Ø 4 X 1 "	buah	Cast Iron	Rp 89,609
	44	Clamp Saddle CI	Ø 4 X 1½ "	buah	Cast Iron	Rp 144,917
	45	Clamp Saddle CI	Ø 4 X 2 "	buah	Cast Iron	Rp 202,941
	46	Clamp Saddle CI	Ø 6 X ½ "	buah	Cast Iron	Rp 108,616
	47	Clamp Saddle CI	Ø 6 X ¾ "	buah	Cast Iron	Rp 110,760
	48	Clamp Saddle CI	Ø 6 X 1 "	buah	Cast Iron	Rp 148,204
	49	Clamp Saddle CI	Ø 6 X 1½ "	buah	Cast Iron	Rp 190,650
	50	Clamp Saddle CI	Ø 6 X 2 "	buah	Cast Iron	Rp 169,213
	51	Clamp Saddle CI	Ø 8 X ¾ "	buah	Cast Iron	Rp 194,795
	52	Clamp Saddle CI	Ø 8 x 1 "	buah	Cast Iron	Rp 201,941
	53	Clamp Saddle CI	Ø 8 X 1½ "	buah	Cast Iron	Rp 267,111
	54	Clamp Saddle CI	Ø 8 x 2 "	buah	Cast Iron	Rp 357,291
	55	Clamp Saddle CI	Ø 8 x 3 "	buah	Cast Iron	Rp 291,692
	56	Universal Tapping Saddle	Ø 10 x 2 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 10,645,204
	57	Universal Tapping Saddle	Ø 12 x 2 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 11,134,883
	58	Universal Tapping Saddle	Ø 16 x 2 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 12,241,985
	59	Universal Tapping Saddle	Ø 20 x 2 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 13,412,958
	60	Universal Tapping Saddle	Ø 24 x 2 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 14,520,058
	61	Universal Tapping Saddle	Ø 10 x 3 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 12,029,080
	62	Universal Tapping Saddle	Ø 12 x 3 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 12,667,793
	63	Universal Tapping Saddle	Ø 16 x 3 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 14,158,121
	64	Universal Tapping Saddle	Ø 20 x 3 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 15,648,450
	65	Universal Tapping Saddle	Ø 24 x 3 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 16,649,099
	66	Universal Tapping Saddle	Ø 10 x 4 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 12,582,631
	67	Universal Tapping Saddle	Ø 12 x 4 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 13,412,958
	68	Universal Tapping Saddle	Ø 16 x 4 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 15,222,642
	69	Universal Tapping Saddle	Ø 20 x 4 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 15,861,354
	70	Universal Tapping Saddle	Ø 24 x 4 "	buah	Cast Iron, GGG 50, Epoxy Coating, EPDM	Rp 17,883,943
IX.21	REPAIR CLAMP					
	1	Repair Clamp 190 mm	Ø 2 "	buah	SS304, RUBBER EPDM	Rp 1,553,159
	2	Repair Clamp 250 mm	Ø 2 "	buah	SS304, RUBBER EPDM	Rp 2,572,751
	3	Repair Clamp 400 mm	Ø 2 "	buah	SS304, RUBBER EPDM	Rp 3,020,186
	4	Repair Clamp 190 mm	Ø 3 "	buah	SS304, RUBBER EPDM	Rp 1,642,086
	5	Repair Clamp 250 mm	Ø 3 "	buah	SS304, RUBBER EPDM	Rp 2,769,622
	6	Repair Clamp 400 mm	Ø 3 "	buah	SS304, RUBBER EPDM	Rp 3,285,291
	7	Repair Clamp 190 mm	Ø 4 "	buah	SS304, RUBBER EPDM	Rp 1,757,301
	8	Repair Clamp 250 mm	Ø 4 "	buah	SS304, RUBBER EPDM	Rp 2,908,327
	9	Repair Clamp 400 mm	Ø 4 "	buah	SS304, RUBBER EPDM	Rp 3,523,550
	10	Repair Clamp 250 mm	Ø 6 "	buah	SS304, RUBBER EPDM	Rp 3,355,762
	11	Repair Clamp 400 mm	Ø 6 "	buah	SS304, RUBBER EPDM	Rp 4,026,915
	12	Repair Clamp 400 mm	Ø 8 "	buah	SS304, RUBBER EPDM	Rp 5,816,654

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023
	13	Repair Clamp 600 mm	Ø 8 "	buah	SS304, RUBBER EPDM	Rp 11,745,167
	14	Repair Clamp 400 mm	Ø 10 "	buah	SS304, RUBBER EPDM	Rp 9,396,134
	15	Repair Clamp 600 mm	Ø 10 "	buah	SS304, RUBBER EPDM	Rp 19,351,561
	16	Repair Clamp 400 mm	Ø 12 "	buah	SS304, RUBBER EPDM	Rp 11,745,167
	17	Repair Clamp 600 mm	Ø 12 "	buah	SS304, RUBBER EPDM	Rp 21,588,736
	18	Repair Clamp 400 mm	Ø 14 "	buah	SS304, RUBBER EPDM	Rp 22,259,889
	19	Repair Clamp 400 mm	Ø 16 "	buah	SS304, RUBBER EPDM	Rp 31,320,446
	20	Repair Clamp 445 mm	Ø 20 "	buah	DCI Lugs, SS304, RUBBER EPDM	Rp 30,201,859
	21	Repair Clamp 445 mm	Ø 24 "	buah	DCI Lugs, SS304, RUBBER EPDM	Rp 45,862,082
IX.22	STRAINER					
	1	Y Strainer	Ø 2 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 748,335
	2	Y Strainer	Ø 3 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 1,049,235
	3	Y Strainer	Ø 4 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 1,532,465
	4	Y Strainer	Ø 6 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 2,862,465
	5	Y Strainer	Ø 8 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 5,245,056
	6	Y Strainer	Ø 10 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 7,264,106
	7	T Strainer	Ø 2 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 3,915,056
	8	T Strainer	Ø 3 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 4,362,491
	9	T Strainer	Ø 4 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 6,040,372
	10	T Strainer	Ø 6 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 9,731,710
	11	T Strainer	Ø 8 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 13,646,766
	12	T Strainer	Ø 10 "	buah	Flange PN16, Cast Iron GG25, SS304, Epoxy Coating	Rp 22,483,606
IX.23	VALVE SOCKET					
	1	Valve Socket PVC Drat Dalam	Ø ½"	buah	SNI 06.0084.2002	Rp 2,858
	2	Valve Socket PVC Drat Dalam	Ø ¾"	buah	SNI 06.0084.2002	Rp 6,431
	3	Valve Socket PVC Drat Dalam	Ø 1 "	buah	SNI 06.0084.2002	Rp 10,004
	4	Valve Socket PVC Drat Dalam	Ø 1 ½"	buah	SNI 06.0084.2002	Rp 21,437
	5	Valve Socket PVC Drat Dalam	Ø 2 "	buah	SNI 06.0084.2002	Rp 32,871
	6	Valve Socket PVC Drat Luar	Ø ½"	buah	SNI 06.0084.2002	Rp 2,858
	7	Valve Socket PVC Drat Luar	Ø ¾"	buah	SNI 06.0084.2002	Rp 6,431
	8	Valve Socket PVC Drat Luar	Ø 1 "	buah	SNI 06.0084.2002	Rp 10,004
	9	Valve Socket PVC Drat Luar	Ø 1 ½"	buah	SNI 06.0084.2002	Rp 21,437
	10	Valve Socket PVC Drat Luar	Ø 2 "	buah	SNI 06.0084.2002	Rp 32,871
IX.24	DOUBLE NIPPLE					
	1	Double Nipple GI	Ø ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 7,767
	2	Double Nipple GI	Ø ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 9,321
	3	Double Nipple GI	Ø 1 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 15,534
	4	Double Nipple GI	Ø 1 ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 23,302
	5	Double Nipple GI	Ø 2 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 31,069
IX.25	WATER MOER					
	1	Water Moer GI	Ø ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 25,702
	2	Water Moer GI	Ø ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 30,786
	3	Water Moer GI	Ø 1 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 40,652
	4	Water Moer GI	Ø 1 ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 67,916
	5	Water Moer GI	Ø 2 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 104,505
IX.26	SOCKET					
	1	Sock Galvanis	Ø ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 5,860
	2	Sock Galvanis	Ø ¾"	buah	SNI 0139 : 2008, ISO 7-1	Rp 9,432
	3	Sock Galvanis	Ø 1 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 12,005
	4	Sock Galvanis	Ø 1 ½"	buah	SNI 0139 : 2008, ISO 7-1	Rp 19,580
	5	Sock Galvanis	Ø 2 "	buah	SNI 0139 : 2008, ISO 7-1	Rp 66,742
	6	Sock Push On HDPE	Ø ½"	buah	ISO 14236.2000	Rp 18,483
	7	Sock Push On HDPE	Ø ¾"	buah	ISO 14236.2000	Rp 23,935
	8	Sock Push On HDPE	Ø 1 "	buah	ISO 14236.2000	Rp 29,653
IX.27	VERLOP					
	1	Reducer Socket Push on HDPE	Ø ¾ x ½	buah	ISO 14236.2000	Rp 21,276
	2	Reducer Socket Push on HDPE	Ø 1 x ½	buah	ISO 14236.2000	Rp 25,398
	3	Reducer Socket Push on HDPE	Ø 1 x ¾	buah	ISO 14236.2000	Rp 28,058
	4	Male coupling Push on (shock drat luar)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 10,771
	5	Male coupling Push on (shock drat luar)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 19,148
	6	Male coupling Push on (shock drat luar)	Ø 1 "	buah	ISO 14236.2000, Plastic Thread	Rp 19,547
	7	Female coupling Push on (shock drat luar)	Ø ½"	buah	ISO 14236.2000, Plastic Thread	Rp 14,494
	8	Female coupling Push on (shock drat luar)	Ø ¾"	buah	ISO 14236.2000, Plastic Thread	Rp 18,749
	9	Female coupling Push on (shock drat luar)	Ø 1 "	buah	ISO 14236.2000, Plastic Thread	Rp 30,451
	10	Male coupling Push on (shock drat luar)	Ø ½"	buah	ISO 14236.2000, Brass Thread	Rp 37,765
	11	Male coupling Push on (shock drat luar)	Ø ¾"	buah	ISO 14236.2000, Brass Thread	Rp 46,142
	12	Male coupling Push on (shock drat luar)	Ø 1 "	buah	ISO 14236.2000, Brass Thread	Rp 60,370
	13	Female coupling Push on (shock drat luar)	Ø ½"	buah	ISO 14236.2000, Brass Thread	Rp 29,254
	14	Female coupling Push on (shock drat luar)	Ø ¾"	buah	ISO 14236.2000, Brass Thread	Rp 38,430
	15	Female coupling Push on (shock drat luar)	Ø 1 "	buah	ISO 14236.2000, Brass Thread	Rp 63,961
IX.28	STUB FLANGE					
	1	Stub Flange HDPE	Ø 2 "	buah	SNI 4829.2.2015	Rp 217,115
	3	Stub Flange HDPE	Ø 3 "	buah	SNI 4829.2.2015	Rp 269,789
	4	Stub Flange HDPE	Ø 4 "	buah	SNI 4829.2.2015	Rp 434,751
	6	Stub Flange HDPE	Ø 6 "	buah	SNI 4829.2.2015	Rp 1,034,925
	7	Stub Flange HDPE	Ø 8 "	buah	SNI 4829.2.2015	Rp 1,508,165
	8	Stub Flange HDPE	Ø 10 "	buah	SNI 4829.2.2015	Rp 2,171,110
	9	Stub Flange HDPE	Ø 12 "	buah	SNI 4829.2.2015	Rp 3,191,881
	10	Stub Flange HDPE	Ø 14 "	buah	SNI 4829.2.2015	Rp 3,991,249
	11	Stub Flange HDPE	Ø 16 "	buah	SNI 4829.2.2015	Rp 5,153,935
	13	Stub Flange HDPE	Ø 20 "	buah	SNI 4829.2.2015	Rp 10,262,510
	15	Stub Flange HDPE	Ø 24 "	buah	SNI 4829.2.2015	Rp 14,290,575
IX.29	CLAMP PIPA					

DAFTAR STANDAR SATUAN HARGA PIPA & AKSESORIS 2022-2023

NO	NAMA BARANG			SATUAN	SPEKIFIKASI	HARGA 2023	
	1	Clamp Pipa Tipe U BOLT	Ø 2 "	buah		Rp	14,913
	2	Clamp Pipa Tipe U BOLT	Ø 3 "	buah		Rp	18,641
	3	Clamp Pipa Tipe U BOLT	Ø 4 "	buah		Rp	24,855
	4	Clamp Pipa Tipe U BOLT	Ø 6 "	buah		Rp	31,069
IX.30	MANOMETER						
	1	Manometer	4 Bar	buah		Rp	632,002
	2	Manometer	6 Bar	buah		Rp	632,002
	3	Manometer	10 Bar	buah		Rp	632,002
IX.31	MOER BAUT/LEM DAN LAIN-LAIN						
	1	Moer Baut	Ø M16 x 100 mm	buah		Rp	14,542
	2	Moer Baut	Ø M20 X 100 mm	buah		Rp	19,016
	3	Moer Baut	Ø M22 X 100 mm	buah		Rp	23,490
	4	Moer Baut	Ø M22 X 150 mm	buah		Rp	35,795
	5	Moer Baut	Ø M24 X 120 mm	buah		Rp	36,634
	6	Moer Baut	Ø M24 X 190 mm	buah		Rp	54,811
	7	Moer Baut	Ø M27 X 120 mm	buah		Rp	54,811
	8	Moer Baut	Ø M27 X 140 mm	buah		Rp	62,641
	9	Kotak menter	Ø ½"	buah		Rp	75,186
	10	Lem Pipa PVC		Kg		Rp	64,312
	11	Sealtip / TBA	Ø ½"	buah		Rp	3,573
	12	Timah Segel		kg		Rp	106,330
	13	Kawat Segel		kg		Rp	202,798
	14	Kawat Tembaga		ROL		Rp	9,316,572
	15	Chamfer tool Push on (Penyerut)	Ø ½ s/d 1"	buah	ISO 14236.2000	Rp	72,604
	16	Release key Push on (kunci pembuka)	Ø ½"	buah	ISO 14236.2000	Rp	6,117
	17	Release key Push on (kunci pembuka)	Ø ¾"	buah	ISO 14236.2000	Rp	7,845
	18	Release key Push on (kunci pembuka)	Ø 1 "	buah	ISO 14236.2000	Rp	9,707

REKAPITULASI AKSESORIS PERPIPAAN

NO	URAIAN PEKERJAAN	VOLUME	SAT
1	2	4	5
I	REKAP PIPA HDPE		
1	Pipa HDPE S-10 PN-8 Dia. 400 mm	9000	m'
II	REKAP AKSESORIS PIPA, STREET BOX & CHAMBER VALVE		
1	Stub Flange HDPE 400 mm	23	bh
2	Moer Baut M.20 x 100 mm	384	bh
3	Packing Karet 400 mm	34	bh
4	All Flange Bend DCI 400 x 90°	7	bh
5	Tee All Flange DCI 400 mm	2	bh
6	Flange Steel 400 mm	9	bh
7	Water Meter (Elektromagnetic) 400 mm	1	bh
8	Dismantling Joint 400 mm	1	bh
9	Gate Valve 400 mm	4	bh
10	Pipa GI Medium 400 mm	10	bh
11	All Flange Bend DCI 400 x 45°	2	bh
12	Street Box	1	bh
III	REKAP AKSESORIS JEMBATAN PIPA		
1	Pipa GI Medium dia. 16" (400 mm)	32	m'
2	Pipa GI Medium dia. 2" (63 mm)	1	m'
3	Flange Steel 16" (400 mm)	6	m'
4	Flange Steel 2" (63 mm)	2	bh
5	All Flange Bend DCI 16"x45° (400 mm x 45°)	8	bh
6	Gate Valve 2" (63 mm)	2	bh
7	Combination Air Valve 2" (63 mm)	2	bh
8	Stub Flange HDPE 400 mm	4	bh
9	Moer Baut M.20 x 100 mm	320	bh
10	Moer Baut M.16 x 100 mm	16	bh
11	Pengaman pipa dari besi beton dia. 12 mm	4	bh
12	Klem penjepit pipa dari besi plat	18	bh
13	Rubber Packing 400 mm	16	bh
14	Rubber Packing 63 mm	4	bh
IV	REKAP AKSESORIS POMPA		
1	Pipa GI Medium dia. 16" (400 mm)	20	m'
2	Pipa GI Medium dia. 10" (250 mm)	6	m'

NO	URAIAN PEKERJAAN	VOLUME	SAT
1	2	4	5
3	Pipa GI Medium dia. 2" (63 mm)	0.3	m'
4	Pipa GI Medium dia. 1/2" (15 mm)	1	m'
5	Flange Steel 16" (400 mm)	2	bh
6	Flange Steel 10" (250 mm)	8	bh
7	Flange Steel 2" (63 mm)	2	bh
8	Long Bend All Flange Steel 10"x45° (250 mm x 45°)	2	bh
9	Gate Valve 2" (63 mm)	1	bh
10	Gate Valve 10" (250 mm)	2	bh
11	Gate Valve 16" (400 mm)	2	bh
12	Combination Air Valve 2" (63 mm)	1	bh
13	Wafer Check Valve 250 mm	2	bh
14	Flexible Rubber Joint 400 mm	2	bh
15	Flexible Rubber joint 250 mm	2	bh
16	Concentric Reducer DCI All Flange 250 x 160 mm	2	bh
17	Excentric Reducer DCI All Flange 400 x 200 mm	2	bh
18	Flange Blank 400 mm	1	bh
19	Rubber Packing 400 mm	8	bh
20	Rubber Packing 250 mm	10	bh
21	Rubber Packing 200 mm	2	bh
22	Rubber Packing 160 mm	2	bh
23	Rubber Packing 63 mm	2	bh
24	Moer Baut M.20 x 100 mm	240	bh
25	Moer Baut M.16 x 100 mm	48	bh
26	Shock GI 15 mm	1	bh
27	Double Nipple 15 mm	2	bh
28	Knee GI 15 mm	1	bh
29	Brass Gate Valve 15 mm	1	bh
30	Manometer 10 bar	1	m'

REKAP NODE DAN JEMBATAN PIPA

RINCIAN NODE

NO	URAIAN PEKERJAAN	VOLUME	SAT
1	2	4	5
1	Perpipaan		
1.1	Pipa HDPE S-10 PN-8 Dia. 400 mm	9000	m'
2	AKSESORIS NODE		
2.1	ND.1		
2.1.1	Stub Flange HDPE 400 mm	1	bh
2.1.2	Moer Baut M.20 x 100 mm	12	bh
2.1.3	Packing Karet 400 mm	1	bh
2.2	ND.2		
2.2.1	All Flange Bend DCI 400 x 90°	1	bh
2.2.2	Stub Flange HDPE 400 mm	2	bh
2.2.3	Moer Baut M.20 x 100 mm	24	bh
2.2.4	Packing Karet 400 mm	2	bh
2.3	ND.3		
2.3.1	All Flange Bend DCI 400 x 90°	3	bh
2.3.2	Tee All Flange DCI 400 mm	2	bh
2.3.3	Flange Steel 400 mm	9	bh
2.3.4	Water Meter (Elektromagnetic) 400 mm	1	bh
2.3.5	Dismantling Joint 400 mm	1	bh
2.3.6	Gate Valve 400 mm	3	bh
2.3.7	Stub Flange HDPE 400 mm	2	bh
2.3.8	Moer Baut M.20 x 100 mm	168	bh
2.3.9	Packing Karet 400 mm	16	bh
2.3.10	Pipa GI Medium 400 mm	10	m
2.4	ND.4		
2.4.1	All Flange Bend DCI 400 x 90°	1	bh
2.4.2	Stub Flange HDPE 400 mm	2	bh
2.4.3	Moer Baut M.20 x 100 mm	24	bh
2.4.4	Packing Karet 400 mm	2	bh
2.5	ND.5		
2.5.1	All Flange Bend DCI 400 x 45°	1	bh
2.5.2	Stub Flange HDPE 400 mm	2	bh
2.5.3	Moer Baut M.20 x 100 mm	24	bh
2.5.4	Packing Karet 400 mm	2	bh
2.6	ND.6		
2.6.1	All Flange Bend DCI 400 x 45°	1	bh
2.6.2	Stub Flange HDPE 400 mm	2	bh
2.6.3	Moer Baut M.20 x 100 mm	24	bh
2.6.4	Packing Karet 400 mm	2	bh
2.7	ND.7		
2.7.1	Stub Flange HDPE 400 mm	2	bh
2.7.2	Moer Baut M.20 x 100 mm	12	bh
2.7.3	Packing Karet 400 mm	1	bh
2.8	ND.8		
2.8.1	Stub Flange HDPE 400 mm	2	bh
2.8.2	Moer Baut M.20 x 100 mm	12	bh
2.8.4	Packing Karet 400 mm	1	bh
2.9	ND.9		
2.9.1	All Flange Bend DCI 400 x 90°	1	bh
2.9.2	Stub Flange HDPE 400 mm	2	bh

NO	URAIAN PEKERJAAN	VOLUME	SAT
1	2	4	5
2.9.3	Moer Baut M.20 x 100 mm	24	bh
2.9.4	Packing Karet 400 mm	2	bh
2.10	ND.10		
2.10.1	Stub Flange HDPE 400 mm	2	bh
2.10.2	Moer Baut M.20 x 100 mm	12	bh
2.10.3	Packing Karet 400 mm	1	bh
2.11	ND.11		
2.11.1	All Flange Bend DCI 400 x 90°	1	bh
2.11.2	Stub Flange HDPE 400 mm	2	bh
2.11.3	Moer Baut M.20 x 100 mm	24	bh
2.11.4	Packing Karet 400 mm	2	bh
2.12	ND.12		
2.12.1	Gate Valve 400 mm	1	bh
2.12.2	Stub Flange HDPE 400 mm	2	bh
2.12.3	Moer Baut M.20 x 100 mm	24	bh
2.12.4	Packing Karet 400 mm	2	bh
2.12.5	Street Box	1	bh
3	AKSESORIS JEMBATAN PIPA		
3.1	JB1		
3.1.1	Pipa GI Medium dia. 16" (400 mm)	16	m'
3.1.2	Pipa GI Medium dia. 2" (63 mm)	0.5	m'
3.1.3	Flange Steel 16" (400 mm)	6	bh
3.1.4	Flange Steel 2" (63 mm)	1	bh
3.1.5	All Flange Bend DCI 16"x45° (400 mm x 45°)	4	bh
3.1.6	Gate Valve 2" (63 mm)	1	bh
3.1.7	Combination Air Valve 2" (63 mm)	1	bh
3.1.8	Stub Flange HDPE 400 mm	2	bh
3.1.9	Moer Baut M.20 x 100 mm	160	bh
3.1.10	Moer Baut M.16 x 100 mm	8	bh
3.1.11	Pengaman pipa dari besi beton dia. 12 mm	2	bh
3.1.12	Klem penjepit pipa dari besi plat	9	bh
3.1.13	Rubber Packing 400 mm	8	bh
3.1.14	Rubber Packing 63 mm	2	bh
3.2	JB2		
3.2.1	Pipa GI Medium dia. 16" (400 mm)	16	m'
3.2.2	Pipa GI Medium dia. 2" (63 mm)	0.5	m'
3.2.3	Flange Steel 12" (400 mm)	6	bh
3.2.4	Flange Steel 2" (63 mm)	1	bh
3.2.5	All Flange Bend DCI 16"x45° (400 mm x 45°)	4	bh
3.2.6	Gate Valve 2" (63 mm)	1	bh
3.2.7	Combination Air Valve 2" (63 mm)	1	bh
3.2.8	Stub Flange HDPE 400 mm	2	bh
3.2.9	Moer Baut M.20 x 100 mm	160	bh
3.2.10	Moer Baut M.16 x 100 mm	8	bh
3.2.11	Pengaman pipa dari besi beton dia. 12 mm	2	bh
3.2.12	Klem penjepit pipa dari besi plat	9	bh
3.2.13	Rubber Packing 400 mm	8	bh
3.2.14	Rubber Packing 63 mm	2	bh

NO	URAIAN PEKERJAAN	VOLUME	SAT
1	2	4	5
4	AKSESORIS POMPA		
4.1	POMPA		
4.1.1	Pipa GI Medium dia. 16" (400 mm)	20	m'
4.1.2	Pipa GI Medium dia. 10" (250 mm)	6	m'
4.1.3	Pipa GI Medium dia. 2" (63 mm)	0.3	m'
4.1.4	Pipa GI Medium dia. 1/2" (15 mm)	1	m'
4.1.5	Flange Steel 16" (400 mm)	2	bh
4.1.6	Flange Steel 10" (250 mm)	8	bh
4.1.7	Flange Steel 2" (63 mm)	2	bh
4.1.8	Long Bend All Flange Steel 10"x45° (250 mm x 45°)	2	bh
4.1.9	Gate Valve 2" (63 mm)	1	bh
4.1.10	Gate Valve 10" (250 mm)	2	bh
4.1.11	Gate Valve 16" (400 mm)	2	bh
4.1.12	Combination Air Valve 2" (63 mm)	1	bh
4.1.13	Wafer Check Valve 250 mm	2	bh
4.1.14	Flexible Rubber Joint 400 mm	2	bh
4.1.15	Flexible Rubber joint 250 mm	2	bh
4.1.16	Concentric Reducer DCI All Flange 250 x 160 mm	2	bh
4.1.17	Excentric Reducer DCI All Flange 400 x 200 mm	2	bh
4.1.18	Flange Blank 400 mm	1	bh
4.1.19	Rubber Packing 400 mm	8	bh
4.1.20	Rubber Packing 250 mm	10	bh
4.1.21	Rubber Packing 200 mm	2	bh
4.1.22	Rubber Packing 160 mm	2	bh
4.1.23	Rubber Packing 63 mm	2	bh
4.1.24	Moer Baut M.20 x 100 mm	240	bh
4.1.25	Moer Baut M.16 x 100 mm	48	bh
4.1.26	Shock GI 15 mm	1	bh
4.1.27	Double Nipple 15 mm	2	bh
4.1.28	Knee GI 15 mm	1	bh
4.1.29	Brass Gate Valve 15 mm	1	bh
4.1.30	Manometer 10 bar	1	bh