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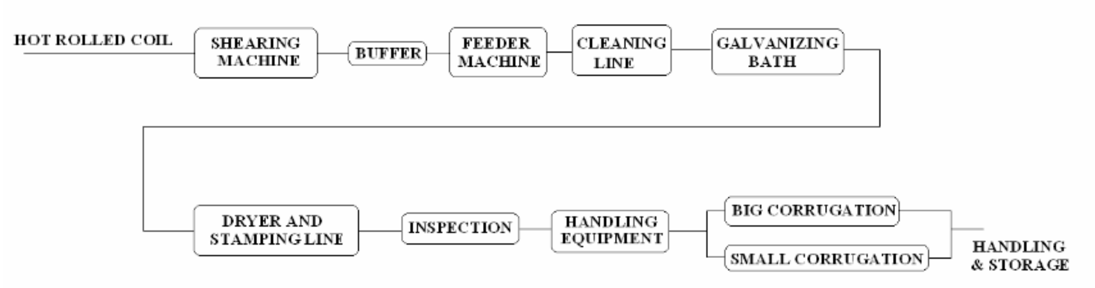


[illegible]

1. Penyediaan Material; Material berupa gulungan baja (hot rolled coil) dengan ketebalan yang bervariasi.
2. Pemotongan Material; Material dipotong menjadi baja lembaran dengan panjang yang bervariasi.
3. Mesin Pengumpan; Untuk mengumpankan baja lembaran satu persatu ke cleaning line (motorized roller conveyor).
4. Bak *Cleaning*; Untuk membersihkan permukaan baja lembaran dari oli, karat dan lapisan oksida dan kotoran-kotoran lain. Larutan pembersih menggunakan asam sulfur 10% 150-185 ^{o}F.
5. Bak *Galvanizing* ; Setelah dibersihkan, lembaran seng dicelup panas di dalam larutan klorida seng (*zinc chloride*) dan asam hidroklorida (*hydrochloride acid*).
6. *Drying* dan *Stamping*; Setelah pelapisan, lembaran seng dikeringkan dengan panas yang bersumber dari bola lampu pengering, dan selanjutnya dilewatkan pada stamping conveyor. Pada stamping ini terdapat simbol pabrik pembuat, ukuran produk, berat lapisan seng dan kode produksi.
7. Inspeksi; Inspeksi dilakukan secara visual untuk melihat cacat permukaan logam, robekan, lipatan dan titik-titik tanpa lapisan seng serta ketidak rataan lapisan seng.
8. *Corrugation*; Lapisan seng yang telah melalui pemeriksaan, kemudian dibuat bergelombang melalui mesin penggelombang
9. Gudang; Produk seng yang telah siap dipasarkan, di simpan didalam gudang penyimpanan.

[illegible]

[illegible]

[illegible]

Test of mu = 3358208 vs mu not = 3358208

Variable	N	Mean	StDev	SE Mean
SO	6	3352750	13306	5432

Variable	95.0% CI	**T**	P
SO	(3338785, 3366715)	**-1.00**	0.361

[illegible]

[illegible]

Two-sample T for S1 vs SO

	N	Mean	StDev	SE Mean
S1	6	3351967	9498	3877
SO	6	3352750	13306	5432

Difference = mu S1 - mu SO
Estimate for difference : -783
95% CI for difference : (-15654, 14087)
T-Test of difference = 0 (vs not =): **T-Value = -0.12** P-Value = 0.909 DF = 10
Both use Pooled StDev = 11560

[illegible]

Level l S1
Leve12 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
5568.78	9497.6	27172.1	6	S1
7801.90	13306.2	38068.4	6	SO

F-Test (normal distribution)

Test Statistic : 0.509
P-Value : 0.477

Levene's Test (any continuous distribution)

Test Statistic : 1.758
P-Value : 0.214

[illegible]

[illegible]

Two-sample T for S2 vs SO

	N	Mean	StDev	SE Mean
S2	6	3363267	12721	5193
SO	6	3352750	13306	5432

Difference = mu S2 - mu SO
Estimate for difference : 10517
95% CI for difference : (-6228, 27262)
T-Test of difference = 0 (vs not =): **T-Value = 1.40** P-Value = 0.192 DF = 10
Both use Pooled StDev = 13017

[illegible]

Level l S2
Leve12 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
7458.62	12720.8	36393.4	6	S2
7801.90	13306.2	38068.4	6	SO

F-Test (normal distribution)

Test Statistic : 0.914
P-Value : 0.924

Levene's Test (any continuous distribution)

Test Statistic : 0.265
P-Value : 0.618

[illegible]

[illegible]

Two-sample 'T for S3 vs SO

	N	Mean	StDev	SE Mean
S3	6	3368333	10374	4235
SO	6	3352750	13306	5432

Difference = mu S3 - mu SO
Estimate for difference: 15583
95% CI for difference: (235, 30931)
T-Test of difference 0 (vs not =): **T-Value = 2.26** P-Value = 0.047 DF = 10
Both use Pooled StDev 11931

[illegible]

Level l S3
Leve1 2 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
6082.85	10374.4	29680.5	6	S3
7801.90	13306.2	38068.4	6	SO

F-Test (normal distribution)

Test Statistic : 0.608
P-Value : 0.598

Levene's Test (any continuous distribution)
Test Statistic : 0.779
P-Value : 0.398

[illegible]

[illegible]

Two-sample T for S4 vs SO

	N	Mean	StDev	SE Mean
S4	6	3783325	211271	86251
SO	6	3352750	13306	5432

Difference = mu. S4 - mu SO
Estimate for difference: 430575
95% CI for difference: (238015, 623135)
T-Test of difference = 0 (vs not =): **T-Value = 4.98** P-Value = 0.001 DF = 10
Both use Pooled StDev = 149687

[illegible]

Level 1 S4
Leve1 2 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
123876	211271	604435	6	S4
7802	13306	38068	6	SO

F-Test (normal distribution)

Test Statistic : 252.098
P-Value : 0.000

Levene's Test (any continuous distribution)

Test Statistic : 1.826
P-Value : 0.206

[illegible]

[illegible]

Two-sample T for S5 vs SO

	N	Mean	StDev	SE Mean
S5	6	3367158	8743	3569
SO	6	3352750	13306	5432

Difference = mu S5 - mu SO
Estimate for difference: 14408
95% CI for difference: (-75, 28891)
T-Test of difference 0 (vs not =): **T-Value = 2.22** P-Value = 0.051 DF = 10
Both use Pooled StDev 11258

[illegible]
Leven S5
Leve12 SO
ConfLvl 95.0000
Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
5126.50	8743.3	25014.1	6	S5
7801.90	13306.2	38068.4	6	SO

F-Test (normal distribution)

Test Statistic : 0.432
P-Value : 0.378

Levene's Test (any continuous distribution)

Test Statistic : 2.149
P-Value : 0.173

[illegible]

[illegible]

Two-sample T for S6 vs SO

	N	Mean	StDev	SE Mean
S6	6	4825125	30328	12381
SO	6	3352750	13306	5432

Difference = mu S6 - mu SO
Estimate for difference: 1472375
95% CI for difference: (1442249, 1502501)
T-Test of difference 0 (vs not =): **T-Value = 108.90** P-Value = 0.000 DF = 10
Both use Pooled StDev 23418

[illegible]

Level l S6
Leve1 2 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
17782.3	30328.0	86766.7	6	S6
7801.9	13306.2	38068.4	6	SO

F-Test (normal distribution)
Test Statistic : 5.195
P-Value : 0.095

Levene's Test (any continuous distribution)

Test Statistic : 4.659
P-Value : 0.056

[illegible]

[illegible]

Two-sample T for S7 vs SO

	N	Mean	StDev	SE Mean
S7	6	3914825	19415	7926
SO	6	3352750	13306	5432

Difference = mu S7 - mu SO
Estimate for difference: 562075
95% CI for difference: (540664, 583486)
T-Test of difference 0 (vs not =): **T-Value = 58.49** P-Value = 0.000 DF = 10
Both use Pooled StDev 16644

[illegible]

Level 1 S7
Leve1 2 SO
ConfLvl 95.0000

Bonferroni confidence intervals for standard deviations

Lower	Sigma	Upper	N	Factor Levels
11383.9	19415.4	55546.5	6	S7
7801.9	13306.2	38068.4	6	SO

F-Test (normal distribution)

Test Statistic : 2.129
P-Value : 0.427

Levene's Test (any continuous distribution)

Test Statistic : 2.566
P-Value : 0.140

[illegible]

Jarak jangkauan Crane 1

Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	20	1	10 s	10
25	25	1	25 s	4
55	25	1	55 s	1.818
80	20	1	80 s	1.25
280	10	1	280 s	0.357

Jarak jangkauan Crane 2

Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	20	1	10 s	10
25	10	1	25 s	4
30	10	1	30 s	3.333
80	10	1	80 s	1.25
150	10	1	150 s	0.667
175	10	1	175 s	0.571
200	10	1	200 s	0.5
205	10	1	205 s	0.488
280	10	1	280 s	0.357

Jarak jangkauan Crane 3

Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	30	1	10 s	10
25	50	1	25 s	4
50	20	1	50 s	2

Jarak jangkauan Crane 4

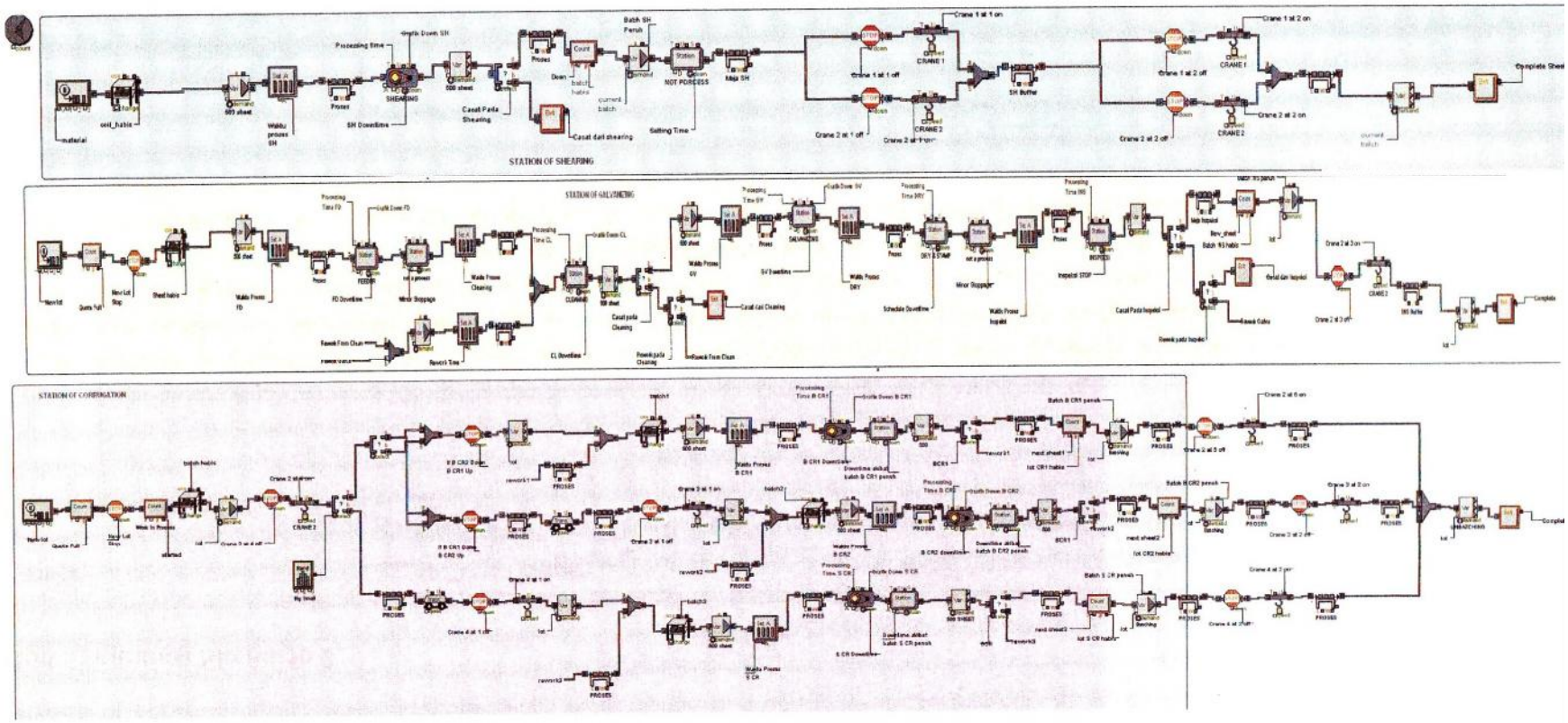
Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	30	1	10 s	10
25	50	1	25 s	4
50	20	1	50 s	2

Jarak jangkauan Crane 5

Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	20	1	10 s	10
25	10	1	25 s	4
30	10	1	30 s	3.333
45	10	1	45 s	2.22
150	10	1	150 s	0.667
175	20	1	175 s	0.571
230	10	1	230 s	0.434
250	10	1	250 s	0.4

Jarak jangkauan Crane +

Jarak (ft)	Proporsi (%)	Kecepatan (ft/s) pada jarak 100 ft	Waktu tempuh pada v = 1 ft/s	Kecepatan (ft/s) pada jarak x
10	40	1	10 s	10
25	40	1	25 s	4
45	20	1	30 s	2.22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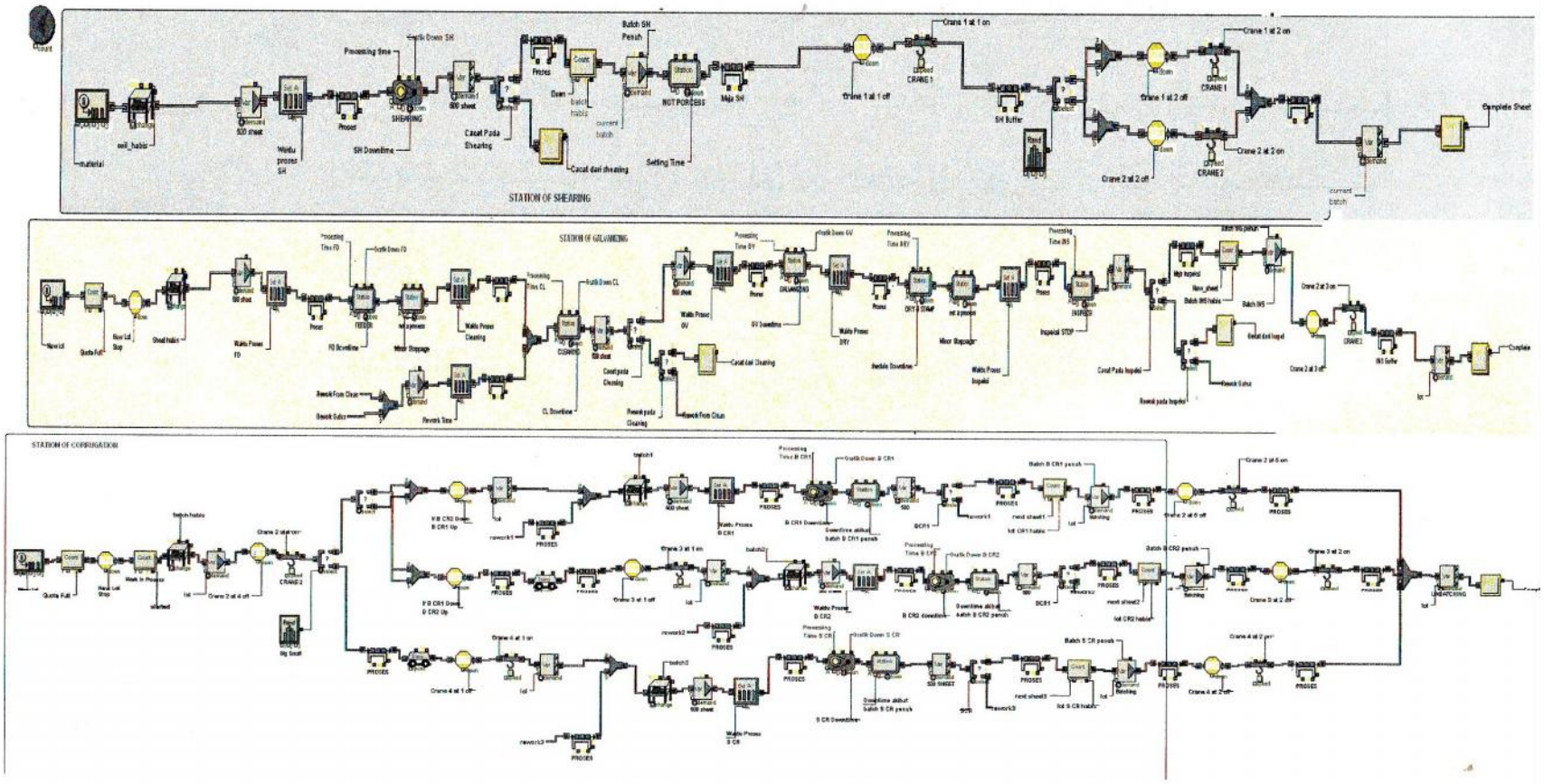
STATION OF GALVANIZING
STATION OF CORRUGATION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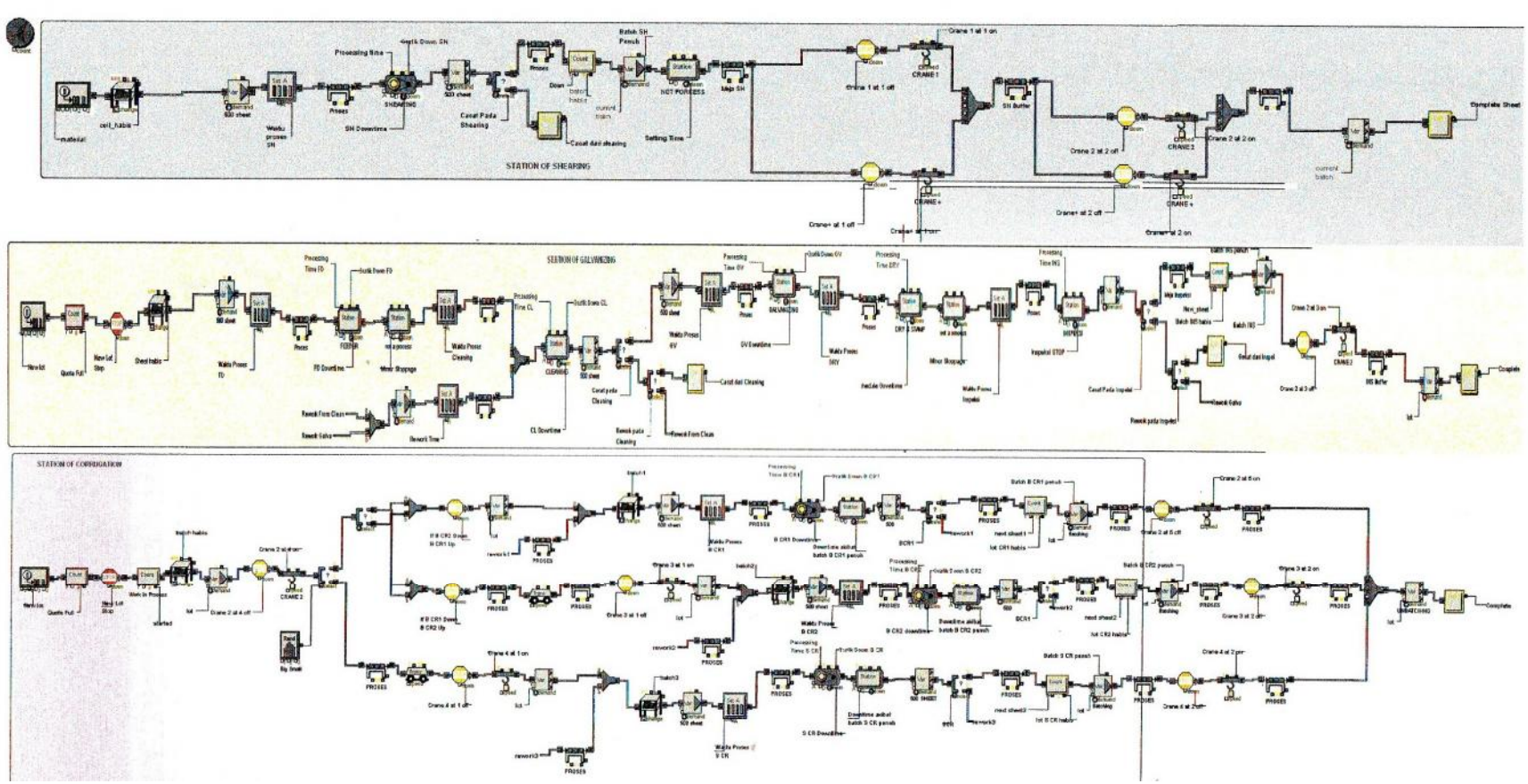
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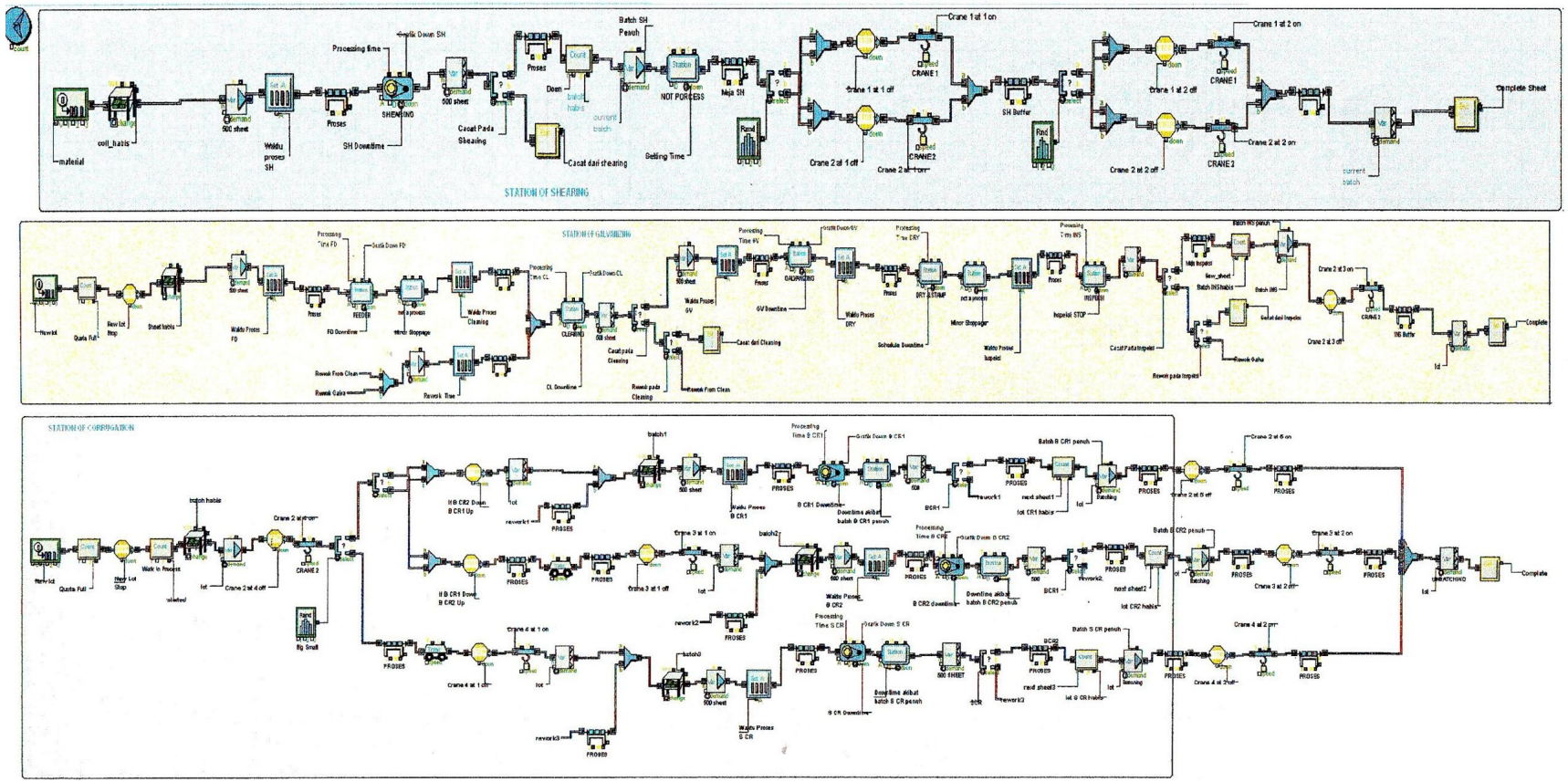
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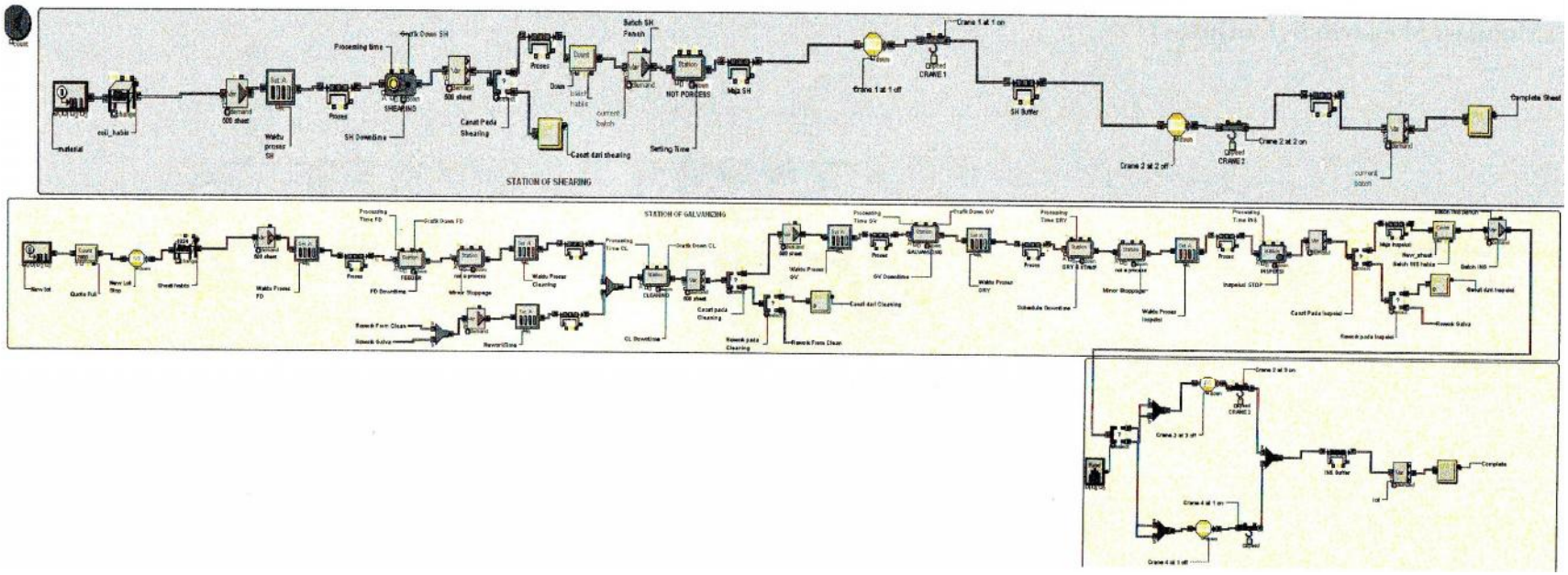
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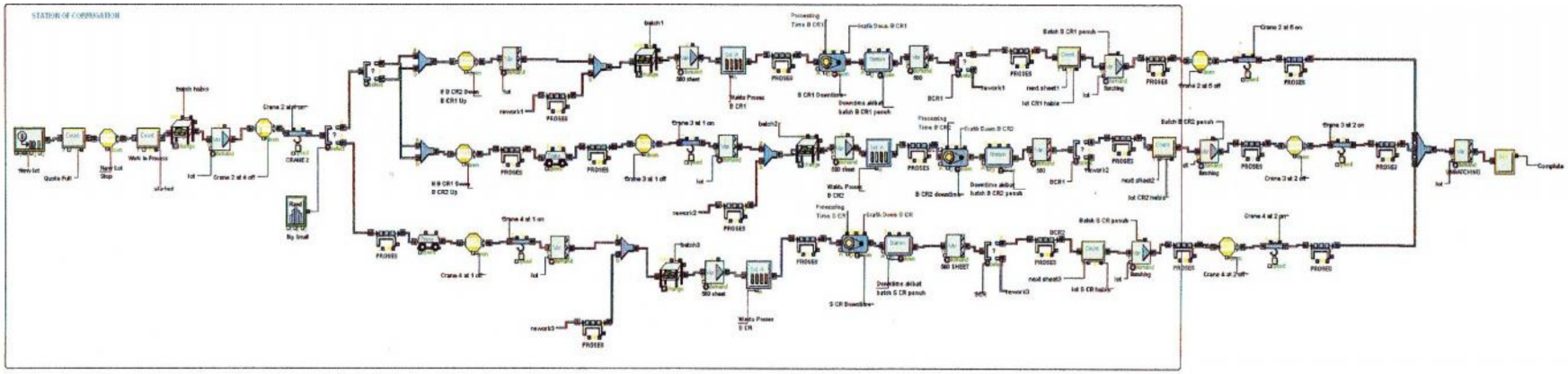
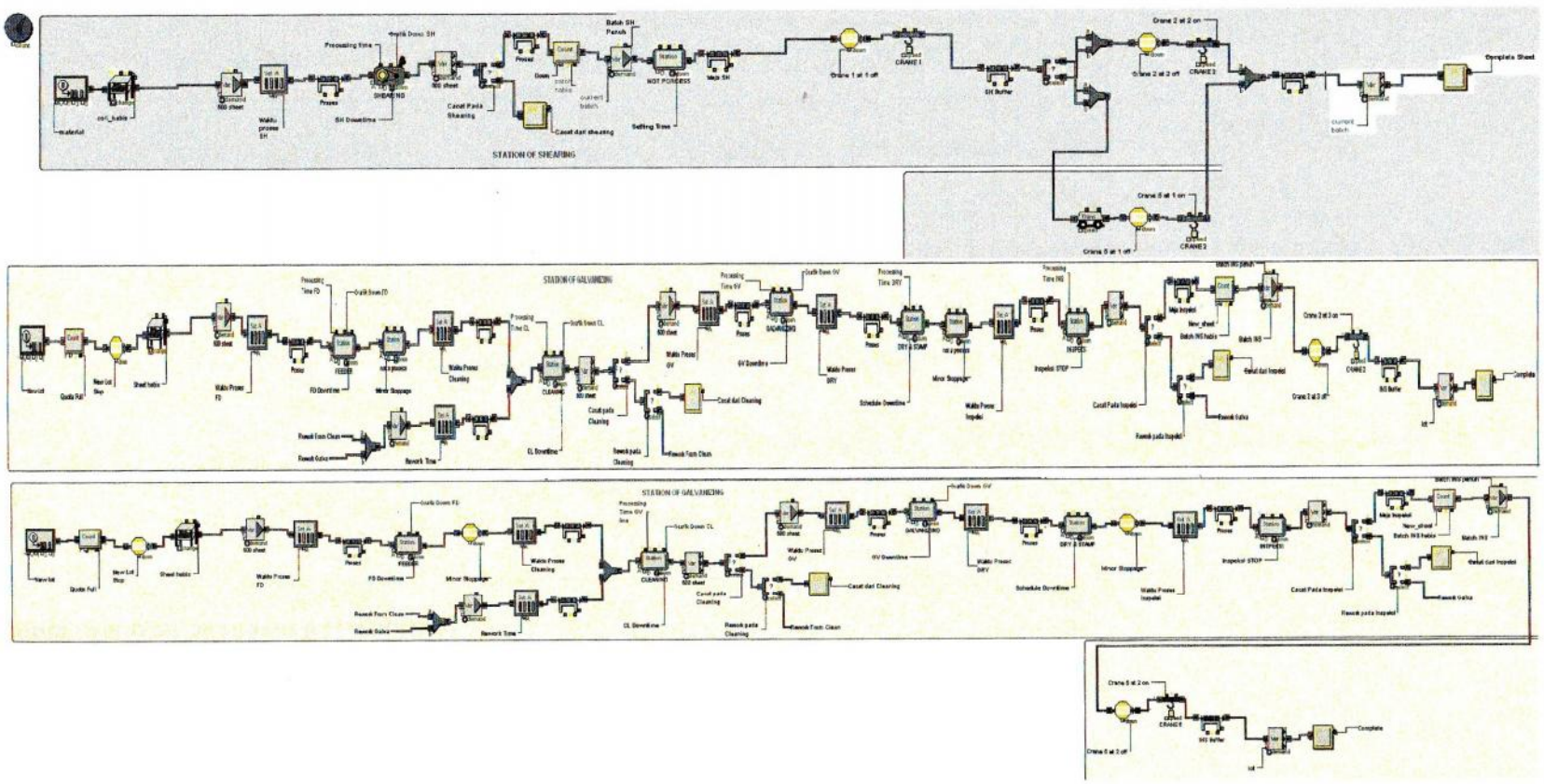
Model Simulasi Skenario 5 (Lanjutan)

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