

No :
Tanggal : 19 Agustus 2026
Dari : Engineering

SURAT PERMINTAAN BARANG

No	Kode Barang	Nama Barang, Tipe, Spesifikasi	Lokasi / User	Riwayat Pembelian				Jumlah Permintaan	Satuan	Target Date	Kategori		Keterangan
				Tanggal	Jumlah	No SPB	Supplier						
1	IMO06074	Flange DIN EN 1092-1 PN25 Raised Face DN150	Boiler 10 T	-	-	-	-	10	Pcs	22-09-26	1. Inventaris		Permintaan Tahap 2 Untuk Commisioning Aktivasi Boiler 10 Ton. No Inventaris : 1201-20-1-01271-2
2	IMO06074	Flange DIN EN 1092-1 PN25 Raised Face DN125	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26	2. Spareparts		
3	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN100	Boiler 10 T	-	-	-	-	14	Pcs	22-09-26	3. Consumable		
4	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN80	Boiler 10 T	-	-	-	-	6	Pcs	22-09-26	4. Jasa		
5	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN50	Boiler 10 T	-	-	-	-	30	Pcs	22-09-26	5. Project	✓	
6	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN40	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
7	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN25	Boiler 10 T	-	-	-	-	12	Pcs	22-09-26			
8	IMO06074	Flange DIN EN 1092-1 PN16 Raised Face DN15	Boiler 10 T	-	-	-	-	10	Pcs	22-09-26			
9	IMO02138	Blind Flange DIN EN 1092-1 PN16 Raised Face DN50	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
10	IMO02138	Blind Flange DIN EN 1092-1 PN16 Raised Face DN40	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
11	IMO02138	Blind Flange DIN EN 1092-1 PN16 Raised Face DN25	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
12	IMO16173	Pipa Siphon Carbon Steel 1/2"	Boiler 10 T	-	-	-	-	10	Pcs	22-09-26			
13	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 6"	Boiler 10 T	-	-	-	-	6	Pcs	22-09-26			
14	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 4"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
15	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 3"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
16	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 2"	Boiler 10 T	-	-	-	-	24	Pcs	22-09-26			
17	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 1,5"	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
18	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 1"	Boiler 10 T	-	-	-	-	16	Pcs	22-09-26			
19	IMO05026	Elbow 90° Black Steel SCH80 BW-Seamless 1/2"	Boiler 10 T	-	-	-	-	10	Pcs	22-09-26			
20	IMO05026	Elbow 45° Black Steel SCH80 BW-Seamless 1"	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
21	IMO05026	Elbow 45° Black Steel SCH80 BW-Seamless 1/2"	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			

22	IMO20096	Tee Black Steel SCH80 BW-Seamless 2"	Boiler 10 T	-	-	-	-	12	Pcs	22-09-26			Permintaan Tahap 2 Untuk Commisioning Aktivasi Boiler 10 Ton. No Inventaris : 1201-20-1-01271-2
23	IMO20096	Tee Black Steel SCH80 BW-Seamless 1"	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
24	IMO20096	Tee Black Steel SCH80 BW-Seamless 1/2"	Boiler 10 T	-	-	-	-	4	Pcs	22-09-26			
25	IMO20097	Tee Reducer Black Steel SCH80 BW-Seamless 2"x1"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
26	IMO18069	Reducer Concentric Black Steel SCH80 BW-Seamless 6" x 5"	Boiler 10 T	-	-	-	-	1	Pcs	22-09-26			
27	IMO18069	Reducer Concentric Black Steel SCH80 BW-Seamless 2" x 1/2"	Boiler 10 T	-	-	-	-	3	Pcs	22-09-26			
28	IMO19172	Socket Drat Dalam Black Steel SCH40 1/2"	Boiler 10 T	-	-	-	-	20	Pcs	22-09-26			
29	IMO20093	Tee Galvanis Medium Las 4"	Boiler 10 T	-	-	-	-	1	Pcs	22-09-26			
30	IMO05011	Elbow 90° Galvanis Medium Las 4"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
31	IMO05011	Elbow 90° Galvanis Medium Las 3"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
32	IMO18063	Reducer Galvanis Medium Las 4" x 3"	Boiler 10 T	-	-	-	-	2	Pcs	22-09-26			
33	IMO05011	Elbow Drat Galvanis 2"	Boiler 10 T	-	-	-	-	12	Pcs	22-09-26			
34	IMO20093	Tee Drat Galvanis 2"	Boiler 10 T	-	-	-	-	5	Pcs	22-09-26			
35	IMO23020	Watermur Galvanis 2"	Boiler 10 T	-	-	-	-	6	Pcs	22-09-26			

PERMINTAAN MATERIAL TAHAP 2 UNTUK COMMISSIONING AKTIVASI BOILER 10 TON

Situasi :

Saat ini operasional pabrik sepenuhnya bergantung pada 1 unit Boiler 6 Ton.

Konsumsi steam sudah menyentuh kapasitas puncak (100%), terutama ketika proses produksi steril di Unit 6 sedang beroperasi secara bersamaan dengan unit produksi lainnya.

Kondisi ini berisiko memicu penurunan tekanan (pressure drop) yang dapat mengganggu kestabilan proses sterilisasi dan kualitas produk.

Boiler 6 Ton beroperasi terus-menerus tanpa interval jeda yang ideal. Minimnya downtime terencana membuat kegiatan pemeliharaan preventif (preventive maintenance) sulit dilakukan secara optimal.

Pada kegiatan maintenance terakhir, ditemukan indikasi kerusakan fisik berupa dinding bata tahan panas (refractory brick) yang telah rontok/pecah.

Jika kondisi ini dibiarkan tanpa adanya opsi pengalihan beban kerja, risiko kegagalan fungsi (breakdown) total pada Boiler 6 Ton akan semakin tinggi dan berpotensi menghentikan seluruh operasional produksi.

Unit Boiler 10 Ton saat ini sudah berada di lokasi (site), namun belum pernah diaktivasi atau dioperasikan sejak awal pengadaan/kedatangan ke pabrik.

Target :

- Meningkatkan Kapasitas Pasokan Steam:

Menjamin ketersediaan pasokan steam yang stabil, andal, dan mencukupi untuk mendukung operasional produksi steril Unit 6 serta kebutuhan utilitas unit lainnya tanpa kendala penurunan tekanan.

- Menyediakan Fleksibilitas & Operasional Redundancy:

Mewujudkan skema operasional ganda (backup system) atau interchangeable running antara Boiler 6 Ton dan Boiler 10 Ton, sehingga jam kerja (running hours) dapat dibagi secara seimbang.

- Memaksimalkan Waktu Pemeliharaan (Maintenance Window):

Memberikan alokasi waktu pemeliharaan yang memadai dan longgar untuk Boiler 6 Ton, khususnya untuk perbaikan skala besar seperti perbaikan total (re-bricking) dinding bata tahan panas serta pemeliharaan berkala komponen internal lainnya secara aman.

Proposal :
Permohonan pengadaan Jasa Commissioning dan Pembelian Part Aktivasi Boiler 10 Ton dengan rincian cakupan sebagai berikut:
1. Pengadaan Part & Komponen Aktivasi Boiler 10 Ton:
Pengadaan part kelengkapan, instrumen kontrol, serta komponen pendukung yang dibutuhkan agar unit Boiler 10 Ton siap dihubungkan ke jalur distribusi utama.
2. Jasa Commissioning & Inspection:
Pelaksanaan pekerjaan commissioning menyeluruh oleh vendor/teknisi ahli berlisensi, meliputi pengetesan fungsi instrumen, interlock keamanan, pengujian pembakaran (burner setup), hingga uji operasi (trial run) untuk memastikan Boiler 10 Ton layak dan aman beroperasi penuh sesuai standar keselamatan kerja.

Tanda tangan Pemohon (nama jelas)		Tanda Tangan Mengetahui (nama jelas)	Tanda Tangan Menyetujui (nama jelas)
			
Ajeng Ayu D	M. Ardhany Rafi	Firman Ardi Busono	Hermawan Widyaprasetya

RAB Jasa Commissioning dan Part Aktivasi Boiler 10 Ton

NO	NAMA BARANG	QTY	SATUAN	HARGA	TOTAL
1	Jasa Rewiring Panel, Instalasi Burner, dan Commissioning Boiler 10 Ton (Harga include Regulator dan Water Level Gauge)	1	Lot	Rp175,000,000	Rp288,500,000
2	High Pressure Regulator Gas Fuel Pmax: 5 Bar ; Pout: 110-210 mBar ; DN100	1	Set	Rp39,500,000	
3	Water Level Gauge LG40CS Size VII DN20 PN40 (Center to Center 35cm)	2	Set	Rp37,000,000	
4	Pressure Gauge 10" 0-16 Bar Drat 1/2"	2	Pcs	Rp1,250,000	Rp2,500,000
5	Pressure Gauge 4" 0-16 Bar Drat 1/2"	2	Pcs	Rp750,000	Rp1,500,000
6	Pressure Gauge 4" 0-6 Bar Drat 1/2"	2	Pcs	Rp750,000	Rp1,500,000
7	Pressure Gauge 4" 0-500 mbar Drat 1/2"	2	Pcs	Rp1,250,000	Rp2,500,000
8	Pipa Galvanis Medium 4"	1	Batang	Rp1,250,000	Rp1,250,000
9	Pipa Galvanis Medium 2"	6	Batang	Rp975,000	Rp5,850,000
10	Pipa Black Steel Seamless SCH40 6"	4	Batang	Rp3,800,000	Rp15,200,000
11	Pipa Black Steel Seamless SCH40 4"	2	Batang	Rp2,800,000	Rp5,600,000
12	Pipa Black Steel Seamless SCH40 2"	6	Batang	Rp1,100,000	Rp6,600,000
13	Pipa Black Steel Seamless SCH40 1"	6	Batang	Rp700,000	Rp4,200,000
14	Pipa Black Steel Seamless SCH40 1/2"	6	Batang	Rp400,000	Rp2,400,000
15	Ball Valve Drat Dalam JIS10K DN50 2"	2	Pcs	Rp595,000	Rp1,190,000
16	Ball Valve Drat Dalam JIS10K DN20 3/4"	4	Pcs	Rp550,000	Rp2,200,000
17	Ball Valve Drat Dalam JIS10K DN15 1/2"	16	Pcs	Rp410,000	Rp6,560,000
18	Ball Valve Flange CI FC DN100 KITZ	1	Pcs	Rp5,500,000	Rp5,500,000
19	Globe Valve Flange CI DN150 PN16	3	Pcs	Rp9,500,000	Rp28,500,000
20	Globe Valve Flange CI DN125 PN16	1	Pcs	Rp8,000,000	Rp8,000,000
21	Globe Valve Flange CI DN100 PN16	2	Pcs	Rp5,000,000	Rp10,000,000
22	Globe Valve Flange CI DN80 PN16	2	Pcs	Rp5,985,000	Rp11,970,000
23	Globe Valve Flange CI DN50 PN16	12	Pcs	Rp3,950,000	Rp47,400,000
24	Globe Valve Flange CI DN40 PN16	1	Pcs	Rp3,420,000	Rp3,420,000
25	Globe Valve Flange CI DN25 PN16	7	Pcs	Rp2,395,000	Rp16,765,000
26	Blowdown Valve Flange CI DN50 PN40	3	Pcs	Rp25,000,000	Rp75,000,000
27	Lift Check Valve Flange CI DN150 PN16	1	Pcs	Rp15,000,000	Rp15,000,000
28	Disc Check Valve Wafer SS DN50 PN40	6	Pcs	Rp600,000	Rp3,600,000
29	Y Strainer Steam Flange Cast Iron DN50 PN16	4	Pcs	Rp1,000,000	Rp4,000,000
30	Y Strainer Steam Flange Cast Iron DN25 PN16	5	Pcs	Rp500,000	Rp2,500,000
31	Ball Float Steam Trap Flange 1" DN25 PN16 Spirax Sarco	2	Pcs	Rp12,000,000	Rp24,000,000
32	Flange DIN EN 1092-1 PN25 Raised Face DN150	10	Pcs	Rp300,000	Rp3,000,000
33	Flange DIN EN 1092-1 PN25 Raised Face DN125	2	Pcs	Rp200,000	Rp400,000
34	Flange DIN EN 1092-1 PN16 Raised Face DN100	14	Pcs	Rp165,000	Rp2,310,000
35	Flange DIN EN 1092-1 PN16 Raised Face DN80	6	Pcs	Rp150,000	Rp900,000
36	Flange DIN EN 1092-1 PN16 Raised Face DN50	30	Pcs	Rp115,000	Rp3,450,000
37	Flange DIN EN 1092-1 PN16 Raised Face DN40	4	Pcs	Rp85,000	Rp340,000
38	Flange DIN EN 1092-1 PN16 Raised Face DN25	12	Pcs	Rp55,000	Rp660,000
39	Flange DIN EN 1092-1 PN16 Raised Face DN15	10	Pcs	Rp55,000	Rp550,000
40	Blind Flange DIN EN 1092-1 PN16 Raised Face DN50	4	Pcs	Rp135,000	Rp540,000
41	Blind Flange DIN EN 1092-1 PN16 Raised Face DN40	2	Pcs	Rp135,000	Rp270,000
42	Blind Flange DIN EN 1092-1 PN16 Raised Face DN25	2	Pcs	Rp85,000	Rp170,000
43	Pipa Siphon Carbon Steel 1/2"	10	Pcs	Rp55,000	Rp550,000
44	Elbow 90° Black Steel SCH80 BW-Seamless 6"	6	Pcs	Rp650,000	Rp3,900,000
45	Elbow 90° Black Steel SCH80 BW-Seamless 4"	2	Pcs	Rp260,000	Rp520,000
46	Elbow 90° Black Steel SCH80 BW-Seamless 3"	2	Pcs	Rp150,000	Rp300,000
47	Elbow 90° Black Steel SCH80 BW-Seamless 2"	24	Pcs	Rp65,000	Rp1,560,000
48	Elbow 90° Black Steel SCH80 BW-Seamless 1,5"	4	Pcs	Rp25,000	Rp100,000
49	Elbow 90° Black Steel SCH80 BW-Seamless 1"	16	Pcs	Rp16,000	Rp256,000
50	Elbow 90° Black Steel SCH80 BW-Seamless 1/2"	10	Pcs	Rp15,000	Rp150,000
51	Elbow 45° Black Steel SCH80 BW-Seamless 1"	4	Pcs	Rp16,000	Rp64,000
52	Elbow 45° Black Steel SCH80 BW-Seamless 1/2"	4	Pcs	Rp15,000	Rp60,000
53	Tee Black Steel SCH80 BW-Seamless 2"	12	Pcs	Rp80,000	Rp960,000
54	Tee Black Steel SCH80 BW-Seamless 1"	4	Pcs	Rp55,000	Rp220,000
55	Tee Black Steel SCH80 BW-Seamless 1/2"	4	Pcs	Rp45,000	Rp180,000
56	Tee Reducer Black Steel SCH80 BW-Seamless 2"x1"	2	Pcs	Rp90,000	Rp180,000
57	Reducer Concentric Black Steel SCH80 BW-Seamless 6" x 5"	1	Pcs	Rp260,000	Rp260,000

RAB Jasa Commissioning dan Part Aktivasi Boiler 10 Ton

NO	NAMA BARANG	QTY	SATUAN	HARGA	TOTAL
58	Reducer Concentric Black Steel SCH80 BW-Seamless 2" x 1/2"	3	Pcs	Rp50,000	Rp150,000
59	Socket Drat Dalam Black Steel SCH40 1/2"	20	Pcs	Rp15,000	Rp300,000
60	Tee Galvanis Medium Las 4"	1	Pcs	Rp300,000	Rp300,000
61	Elbow 90° Galvanis Medium Las 4"	2	Pcs	Rp180,000	Rp360,000
62	Elbow 90° Galvanis Medium Las 3"	2	Pcs	Rp110,000	Rp220,000
63	Reducer Galvanis Medium Las 4" x 3"	2	Pcs	Rp130,000	Rp260,000
64	Elbow Drat Galvanis 2"	12	Pcs	Rp60,000	Rp720,000
65	Tee Drat Galvanis 2"	5	Pcs	Rp70,000	Rp350,000
66	Watermur Galvanis 2"	6	Pcs	Rp110,000	Rp660,000
67	Spiral Wound Gasket DN150 PN16 6"	10	Pcs	Rp185,000	Rp1,850,000
68	Spiral Wound Gasket DN125 PN16 5"	2	Pcs	Rp155,000	Rp310,000
69	Spiral Wound Gasket DN100 PN16 4"	6	Pcs	Rp125,000	Rp750,000
70	Spiral Wound Gasket DN80 PN16 3"	6	Pcs	Rp75,000	Rp450,000
71	Spiral Wound Gasket DN50 PN16 2"	30	Pcs	Rp65,000	Rp1,950,000
72	Spiral Wound Gasket DN40 PN16 1 1/2"	2	Pcs	Rp40,000	Rp80,000
73	Spiral Wound Gasket DN25 PN16 1"	10	Pcs	Rp30,000	Rp300,000
74	Spiral Wound Gasket DN15 PN16 1/2"	10	Pcs	Rp25,000	Rp250,000
75	Besi Siku 50x50x5 mm	5	Batang	Rp350,000	Rp1,750,000
76	Besi UNP 75x40x5 mm	5	Batang	Rp400,000	Rp2,000,000
77	Besi Behel 12 mm	8	Batang	Rp120,000	Rp960,000
78	Long Drat M12 x 1m	10	Batang	Rp20,000	Rp200,000
79	Dynabolt M12x75	150	Pcs	Rp3,500	Rp525,000
80	Ubolt+Mur 6"	20	Pcs	Rp15,000	Rp300,000
81	Calcium Silicate 6" 50mm x 610 mm	50	Batang	Rp420,000	Rp21,000,000
82	Aluminium Sheet 0.3mm x 1m x 25m	5	Roll	Rp1,950,000	Rp9,750,000
83	Packing Klingerit 1000 3mmx1.5mx2m	2	Lembar	Rp900,000	Rp1,800,000
84	Packing Klingerit 1000 5mmx1.5mx2m	1	Lembar	Rp1,200,000	Rp1,200,000
85	Packing Fiberglass Tape Non-Asbes Tebal 3mm Lebar 50mm Panjang 30m	4	Roll	Rp150,000	Rp600,000
86	Packing Fiberglass Tape Non-Asbes Tebal 3mm Lebar 100mm Panjang 30m	4	Roll	Rp175,000	Rp700,000
87	Silicone Red High Temp ThreeBond	20	Pcs	Rp30,000	Rp600,000
88	Seal Tape	100	Pcs	Rp5,000	Rp500,000
89	Baut Mur Hexa Black Steel Half Drat M14x40	50	Pcs	Rp5,500	Rp275,000
90	Baut Mur Hexa Black Steel Half Drat M14x50	100	Pcs	Rp5,500	Rp550,000
91	Baut Mur Hexa Black Steel Half Drat M14x60	100	Pcs	Rp5,500	Rp550,000
92	Baut Mur Hexa Black Steel Half Drat M16x70	100	Pcs	Rp6,000	Rp600,000
93	Baut Mur Hexa Black Steel Half Drat M16x80	200	Pcs	Rp6,000	Rp1,200,000
94	Baut Mur Hexa Black Steel Half Drat M16x90	200	Pcs	Rp6,000	Rp1,200,000
95	Baut Mur Hexa Black Steel Half Drat M16x110	100	Pcs	Rp7,000	Rp700,000
96	Baut Mur Hexa Black Steel Half Drat M20x90	100	Pcs	Rp10,000	Rp1,000,000
97	Baut Mur Hexa Black Steel Half Drat M20x110	100	Pcs	Rp10,000	Rp1,000,000
98	Ring Plat Black Steel M20	400	Pcs	Rp600	Rp240,000
99	Ring Per Black Steel M20	400	Pcs	Rp1,000	Rp400,000
100	Ring Plat Black Steel M16	1000	Pcs	Rp500	Rp500,000
101	Ring Per Black Steel M16	1000	Pcs	Rp800	Rp800,000
102	Ring Plat Black Steel M14	400	Pcs	Rp500	Rp200,000
103	Ring Per Black Steel M14	400	Pcs	Rp800	Rp320,000
104	Tapping Screw JP PH Kepala Bulat #8 x 1/2"	4000	Pcs	Rp100	Rp400,000
105	Elektroda Las RD26 2,6mm 5kg	16	Box	Rp200,000	Rp3,200,000
106	Elektroda Las LB52 3,2mm 5kg	12	Box	Rp250,000	Rp3,000,000
107	Elektroda Las NSN-308 2,6mm 4kg	1	Box	Rp700,000	Rp700,000
108	Mata Gerinda Cutting WD 4"	500	Pcs	Rp3,000	Rp1,500,000
109	Mata Gerinda Batu Poles Resibon	20	Pcs	Rp15,000	Rp300,000
110	Sikat Kawat	5	Pcs	Rp8,000	Rp40,000
111	Ezzer Multi-Purpose Anti Rust Spray	10	Kaleng	Rp85,000	Rp850,000
112	Cat Tahan Panas Warna Merah 5kg	1	Kaleng	Rp5,000,000	Rp5,000,000
113	Cat Tahan Panas Warna Hitam 5kg	2	Kaleng	Rp5,000,000	Rp10,000,000
114	Cat Zinchromate 5kg	2	Kaleng	Rp350,000	Rp700,000
115	Cat Besi Warna Biru 1kg	2	Kaleng	Rp110,000	Rp220,000
116	Thinner 20L	2	Jerigen	Rp550,000	Rp1,100,000
TOTAL					Rp414,995,000