

DAFTAR PUSTAKA

- Alontseva, D. L., Ghassemieh, E., Krasavin, A. L., Shadrin, G. K., Kussaiyn-Murat, A. T., & Kadyroldina, A. T. (2020). Development of control system for robotic surface tracking. *International Journal of Mechanical Engineering and Robotics Research*, 9(2), 280–286. <https://doi.org/10.18178/ijmerr.9.2.280-286>
- Benziro. (2019). *Bahan-Bahan Yang Dapat Dipotong Oleh Mesin Plasma Cutting*. Benziro.Com.
- Budi Utomo, R. S., & Alva, S. (2017). Studi Dan Karakterisasi Laju Korosi Logam Aluminium Dengan Pelapisan Membran Sol-Gel. *Jurnal Teknik Mesin*, 6(3), 191. <https://doi.org/10.22441/jtm.v6i3.1969>
- Cahyono, E. (2017). Rancang Bangun Meja Mesin Plasma Cutting Dengan Gerak 3 Axis X , Y , Z Menggunakan Motor Stepper. *Repository.Its.Ac.Id*, 1–111.
- ESAB. (2024). *How Thick Can You Cut with Plasma Underwater*. Esab.Com.
- Ferry Budhi Susetyo, Ilhamullah, Frima, C. A. M., Kusuma, A., & Lubi, A. (2022). Rancang Bangun Perangkat Pendukung Untuk Proses Pemotongan Dengan Plasma Cutting. *Jurnal Konversi Energi Dan Manufaktur*, 7(2), 105–115. <https://doi.org/10.21009/jkem.7.2.5>
- Fractory. (2021). *How Plasma Cutting Works? Advantages & Disadvantages*. Fractory.Com.
- Grill, J. (2024). *Guide to Plasma Arc Equipment*. Weldguru.
- Hypertherm. (2024). *Types of Plasma*. Hypertherm.Com.

- Kawanlama. (2023). *Kenali Cara Kerja Plasma Cutting*. Kawanlama.Com.
- Klopmart. (2019). *Kompresor: Pengertian, Fungsi, Jenis, dan Cara Kerja!* Klopmart.Com.
- Kusminah, I. L., Wardani, D., Pramesty, L., & Indarto, R. O. (2023). Analisis Kegagalan Material Aluminium 5052 sebagai Aplikasi Bahan Lambung Kapal Terhadap Pengaruh Salinitas Air Laut. *G-Tech: Jurnal Teknologi Terapan*, 7(1), 45–51. <https://doi.org/10.33379/gtech.v7i1.1853>
- Loftis Steel. (2024). *Stainless Steel*. Loftissteel.Com.
- Manalu, A. P. J., Muhyi, A., Puandra, F., Siahaan, Y. K., & Yusman, F. G. S. (2023). Analisis Pengaruh Kecepatan Pemotongan dan Kuat Arus Terhadap Kekasaran Permukaan dan Lebar Kerf Pada Pemotongan Aluminium 5052 Menggunakan CNC Plasma Arc Cutting. *JUSTIMES (Jurnal Rekayasa Teknik Mesin Saburai)*, 1(02), 54–63. <https://doi.org/10.24967/justimes.v1i02.2604>
- Megaperkakas. (2023). *PLASMA CUTTING RHINO CUT 40 RED*. Megaperkakas.Com.
- Millerwelds. (2023). *Introduction to Plasma Pattern Cutting*. Millerwelds.Com.
- Modernmachinery. (2024). *Precision CNC Plasma Cutting Machines*. Modernmachinerycompany.Com.
- Mun, D. Y., & Cho, Y. T. (2020). A Short Review on the Mechanical and Thermal Processes for Underwater Cutting of Metal Structures. *Journal of the Korean Society of Manufacturing Process Engineers*, 19(1), 121–133. <https://doi.org/10.14775/ksmpe.2020.19.01.121>

- Pujono, P., & Pamuji, A. (2020). Rancang Bangun Mesin Pemotong Pipa Dengan Pergerakan Torch Otomatis Untuk Optimasi Proses Plasma Cutting. *Accurate: Journal of Mechanical Engineering and Science*, 1(1), 11–20. <https://doi.org/10.35970/accurate.v1i1.159>
- Rizkiawan, D., & Sumbodo, W. (2020). Pengaruh Variasi Tekanan Udara Pada Pemotongan Plat Baja St 37 Menggunakan Cnc Plasma Cutting Terhadap Struktur Mikro, Kerf Dan Kekerasan. *Jurnal Kompetensi Teknik*, 12(2), 6–12. <https://doi.org/10.15294/jkomtek.v12i2.21152>
- Robotmaster. (2024). *Robotic Plasma Cutting in a 3D World*. Robotmaster.Com.
- Santoso, E., Nafi, M., Studi, P., Mesin, T., & Teknik, F. (2015). ANALISA PENGARUH VARIASI PENAMBAHAN Cu DAN WAKTU STRUKTUR MIKRO. 5(2).
- Setiawan, M. A., & Riyanto, I. (2019). *Kompresor Dengan Pengaturan Kecepatan Motor 3 Fasa*. 2(1), 204–211.
- Setyarto, B. D., Sulistiani, H., Darwis, D., & Dellia, P. (2023). Implementasi Metode Certainty Factor untuk Deteksi Kerusakan Mesin CNC Plasma Cutting Hypertherm. *Jurnal Informatika Dan Rekayasa Perangkat Lunak*, 4(2), 176–182. <https://doi.org/10.33365/jatika.v4i2.2595>
- Sofia. (2023). *Besi Stainless: Sejarah, Sifat, dan Penggunaannya yang Luas*. Smsperkasa.
- Studiosteel. (2020). *The Power of Plasma Cutting*. Studiosteel.Com.
- Tarmizi, T., & Hutapea, O. B. (2016). Desain dan Pembuatan Perkakas untuk Proses Friction Stir Welding pada Material Aluminium 5052. *Jurnal Riset*

Teknologi Industri, 9(2), 107–119. <https://doi.org/10.26578/jrti.v9i2.1709>

Tiyan, A. T. (2022). Pengaruh variasi diameter nozzle dan kuat arus terhadap kekerasan dan kekasaran plat baja SS400 dengan Plasma Cutting. *Jurnal Teknik Mesin Universits PGRI Semarang NISSIN*, 1(1), 26–43.

Wibawa, I. W. S., Kantun, I. K., Suherman, I. K., Baiti, R. N., & Suirya, I. W. (2022). Perancangan mekanisme rel torch Plasma Cutting 1 (satu) axis. *Journal of Applied Mechanical Engineering and Green Technology*, 3(1), 8–12. <https://doi.org/10.31940/jametech.v3i1.8-12>

WIBOWO, A. H., Hadi, S. P., & Purnaweni, H. (2018). Bab I Pendahuluan *Galang Tanjung*, 2504, 1–9.

Wisnujati, A., & Sepriansyah, C. (2018). Analisis Sifat Fisik Dan Mekanik Paduan Aluminium Dengan Variabel Suhu Cetakan Logam (Dies) 450 Dan 500 Derajat Celcius Untuk Manufaktur Poros Berulir (Screw). *Turbo : Jurnal Program Studi Teknik Mesin*, 7(2), 159–165. <https://doi.org/10.24127/trb.v7i2.792>

MILL CERTIFICATE	No: 24077	CERTIFIED SRAC-IQNet ISO 9001/2008 No.10/valid 2017	vimetco alro SLATINA
	Date: 10/23/2017		

CUSTOMER : ATA Resources Pte Ltd

CONTRACT/ORDER : 6471

BILL OF DELIVERY : 80338005

TRUCK/CONTAINER : CCLU 4683988

MATERIAL : ALUMINIUM PLATES

ALLOY : EN AW-5052

TEMPER: H112

LOT/DIMENSIONS (mm) : 70180557 - 10X1220X2440

ACCORDING TO : EN 485 - 515 - 573

MECHANICAL PROPERTIES				1 MPa = 1 N/mm2 = 0.145 ksi = 0.102 kgf/mm2								
1 lbs = 0.4536 kg			Rm		Rp0.2		Elong.%					
			Mpa		Mpa		50mm					
			min.	max.	min.	max.	min.					
Specified values:			190		80		7					
LOT / BATCH	CASE	NET WEIGHT kg	Measured values:									
70180557 S17065631	551345	83	204		151		30.5					
CHEMICAL COMPOSITION %												
BATCH	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Al
S17065631	0.098	0.21	0.016	0.026	2.4	0.18	0.008	0.015	0.012	0.009	0.014	REM. REM REM
Acc. Standard	Min.				2.2	0.15						REM.
	Max.	0.25	0.4	0.1	0.1	2.8	0.35	0.05	0.1	0.05	0.05	0.05
Remarks:					Other- Each- Max.: 0.05			OthersTotal- Max.: 0.15				

REMARKS:

ACCORDING TO: EN 485-2:2016; EN 515:1994; EN 573-3:2013

We hereby certify that the material detailed hereon has been produced and tested according to the requirements of the relevant standards, specification and/or order. Keep in dry conditions, without large temperatures variations. The differences between metal and air must not exceed 11 °C. Please follow the recommendations of the Aluminium Association Guide for minimizing water staining, latest edition, for the unloading and storage of the material in your premises before usage. Also we certify that ALRO products complies with REACH legislation no. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals and CLP legislation no. 1272/2008 on classification, labeling and packaging of substances and mixtures.

According to EN 10204:2004 3.1







