Gilang Shatya

2021

PORTOFOLIO

2024

Design Engineering

GILANG SHATYA KENCANA PRATAMA PUTRA

Bandung, 2 Oktober 1999

Design engineer with knowledge of manufacturing processes especially injection mold, jig & fixtures, and sheet metal. Experienced at work in a manufacturing company. Self-motivated to always learn something new, have good adaptability, able to work in a team or individually, and ready to work under pressure.

PHONE
+6288-23422-9999

EMAIL
gilangshatya@gmail.com

INSTAGRAM
glgshty

LINKEDIN
linkedin.com/in/gilangshatya

EXPERIENCE

PT Graha Sumber Prima Elektronik – Tangerang Selatan, Indonesia 02/2021 – 07/2021
Mechanical Engineer (Internship)
- Designed and developed tools for support production process.
- Operated various machines for sheet metal work (Press brake, Punch & Shearing).
- Learned about manufacture process especially sheet metal product for electrical panel.

PT Daijo Industrial – Jakarta, Indonesia 11/2021 – 03/2022
Design Engineer
- Designed and developed 3D models of injection mold in NX.
- Drafted injection mold design in AutoCAD.
- Collaborated with the production operator's functional teams about manufacturing process for injection mold.
- Operate CNC machine.

PT Schneider Electric Indonesia – Cikarang, Indonesia 04/2022 – 12/2022
Design Engineer (Project Base)
- Designed sheet metal and busbar parts for LV/MV panels.
- Responsible for designing standards for LV switchboards.
- Created bill of material for design panels.
- Supported new products for development and sustaining current products.
- Applies technical expertise to define, analyze, and validate manufacturing processes.
- Responsible for managing revision design, and collaborated with internal stakeholders about the product design.

PT LAPI ITB – Bandung, Indonesia 03/2023 – 06/2023
Drafter (Project Base)
- Make piping and storage tank design in Dialux.
- Calculating convensional lightning protection.
- Make a pondation plane of convensional lightning protection.
- Make design basis installation of conventional lightning protection.
- Make a electrical grounding layout for lighting improvement.
- Make a electrical cable routing.
- Drawing electrical outdoor lighting and JB layout for lighting improvement.

PT Modular Global Teknindo – Bandung, Indonesia 07/2023 – 07/2024
Engineering Department
- Create the design of Modular Operation Theatre for the manufacturing process.
- Create the design of MOT equipment for the manufacturing process.
- Research and develop the design of medical devices.
- Estimate material design.
- Researching whether the design will work and be cost-effective.
- Follow up the production process.
- Write detailed reports.

PT Mirka Diraya Abirupa – Cikarang, Indonesia 08/2024 – Current
Supervisor
- Manage projects and site superintendents
- Ensured compliance with project objectives, standards, procedures, and requirements
- Lead the execution of project
- Providing technical and project management oversight
- Reporting work in the field to superiors

EDUCATION

Bandung Polytechnic of Manufacturing - Bandung, Indonesia 2018 - 2021
Design Engineering
- Able to design injection mold
- Able to design press tool
- Able to design jig & fixture
- Able to do product development
- Able to use and read measuring instruments (Micrometer, Caliper etc.).

Final Project : Design Three Plate Injection Mold with Slider and Unscrewing System for Cap of Zebra Ballpoint A4C

Bandung Vocational High School 2 - Bandung, Indonesia 2014 - 2017
Drawing Machine Technique

ORGANIZATION EXPERIENCES

Himpunan Mahasiswa Teknik Perancangan
- Member of Medkominfo
  Media Komunikasi dan Informasi

Badan Eksekutif Mahasiswa Polman
- Member of Kementrian Kominfo

SOFTWARE SKILLS

CAD
- Solidworks
- Autocad
- PTC Creo
- NX
- Dialux
- Ms.Office Basic

CAM
- Solid CAM
- Master CAM
- NX CAM

LANGUAGE

- Indonesian (Native Proficiency)
- English (Secondary Language)

SEMINAR

- Seminar Manufacture “Melahirkan Wirausaha Milenium, How to Start Your B2B Business”, Himpunan Mahasiswa Teknik Manufaktur
  Politeknik Manufaktur Bandung, 2019
- Seminar “Plastic Mold & Strategic Winning Bussines”, Himpunan Mahasiswa Teknik Perancangan
  Politeknik Manufaktur Bandung, 2019

ACHIEVEMENTS

- Achievement as participant at “Latihan Keterampilan Manajemen Mahasiswa – Tingkat Dasar”,
  Politeknik Manufaktur Bandung, 2018

College Works

Final Project

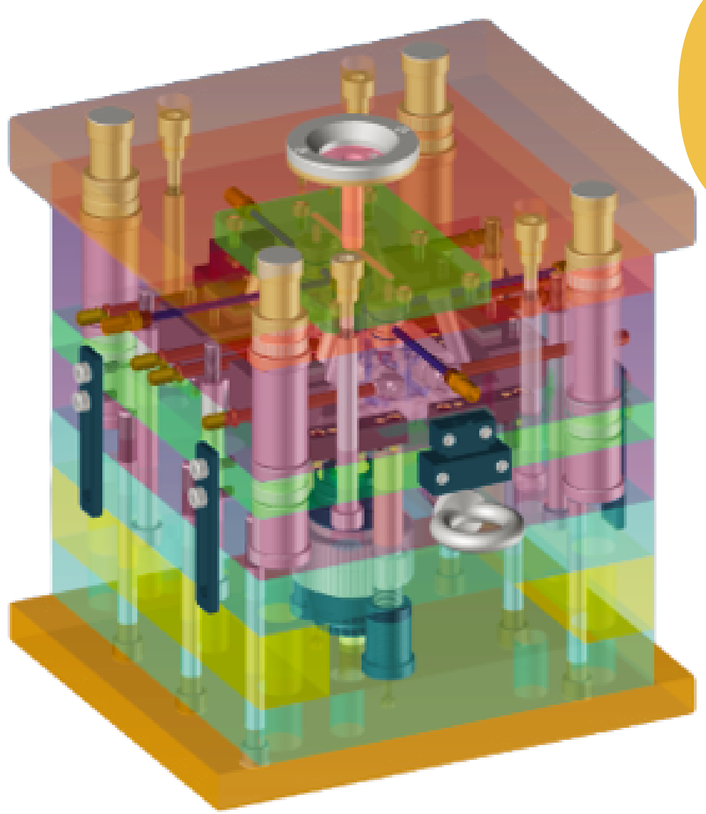
01.

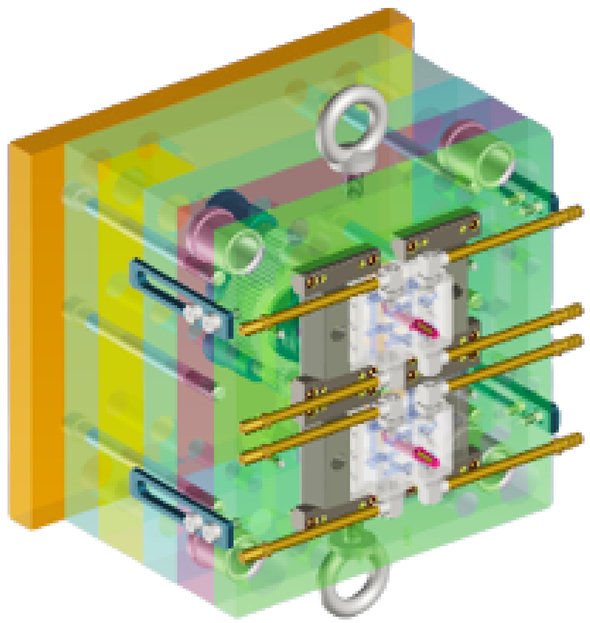
Design of Three Plate Injection Mold with Slider and Unscrewing System for Cap of Zebra Ballpoint A4C

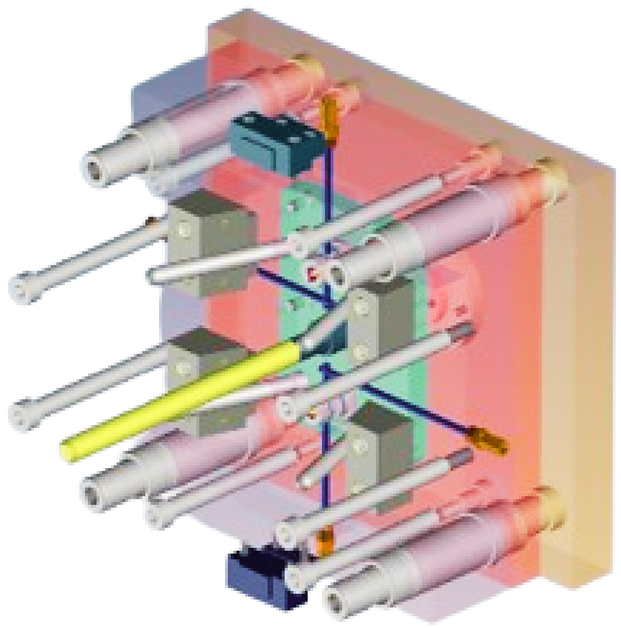
Proyek akhir Perancangan Cetakan Injeksi Plastik Three Plate dengan Unscrewing dan Slider untuk Produk Cap of Zebra Ballpoint A4C, memiliki tujuan untuk menghasilkan rancangan peralatan pencetak plastik mesin injeksi berdasarkan produk Cap of Zebra Ballpoint A4C.

Produk ini memiliki bentukan ulir dalam sehingga membutuhkan sistem unscrewing dalam pembuatanya. Selain itu, sistemslider juga diperlukan untuk membentuk bagian samping produk.

Kemudian hasil rancangan yang dibuat memenuhi semua daftar tuntutan, rancangan dapat berfungsi dengan baik, dan dihasilkan dokumentasi teknik berupa gambar susunan dan gambar bagian.

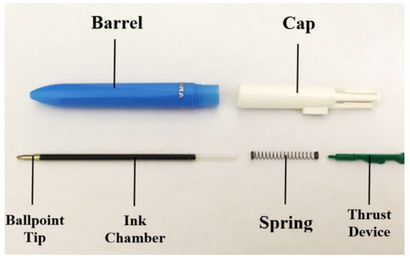


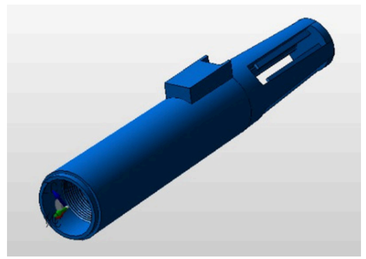




Design of Three Plate Injection Mold with Slider and Unscrewing System for Cap of Zebra Ballpoint A4C

Produk ini merupakan salah satu komponen penyusun ballpoint merk Zebra tipe A4C yang berfungsi sebagai alat menulis. Ballpoint ini memiliki beberapa komponen penyusunnya diantaranya cap, barrel, spring, ballpoint tip, ink chamber, dan thrust device.

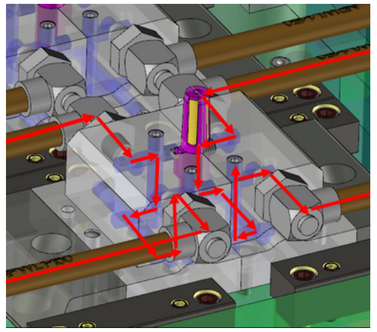


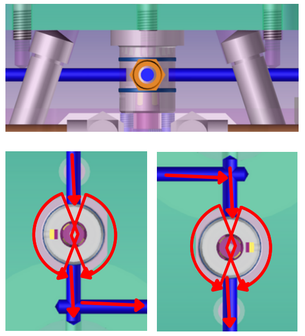


DATA PRODUK	
Nama	*Cap of Zebra Ballpoint*
Material	PP *Copolymer* (*Polypropylene*)
Penyusutan	2% (Berdasarkan Rata – rata)
Massa jenis	0,9 gr/cm^3
Berat	2,44 gr (Perhitungan Manual)
Sudut *draft*	1°
Tebal dinding dominan	0,8 mm

DAFTAR TUNTUTAN		
Tuntutan	Spesifikasi	Keterangan
Warna produk	Natural (putih)	-
Tampilan	Tanpa cacat	Tidak *flashing*
Jumlah *cavity*	2 buah	-
Standar *moldbase*	FUTABA	-
Material *core & cavity*	DIN 1.2316	-
Mesin Injeksi	*Demag Erogotech 200-840*	-

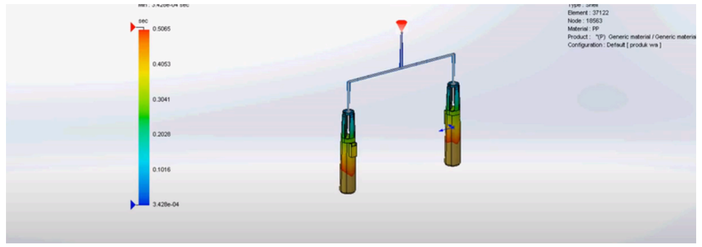
Cooling pada Slider dan Cavity





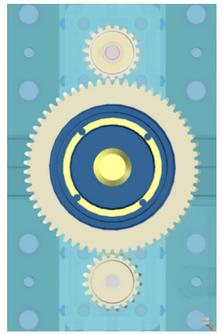
Cooling diberikan pada Slider dan Cavity berdasarkan kebutuhan pada produk dan mengacu pada konstruksi.

Flow Simulation



simulasi flow, pada saat pengisian plastik pada rongga cetakan.

Unscrewing



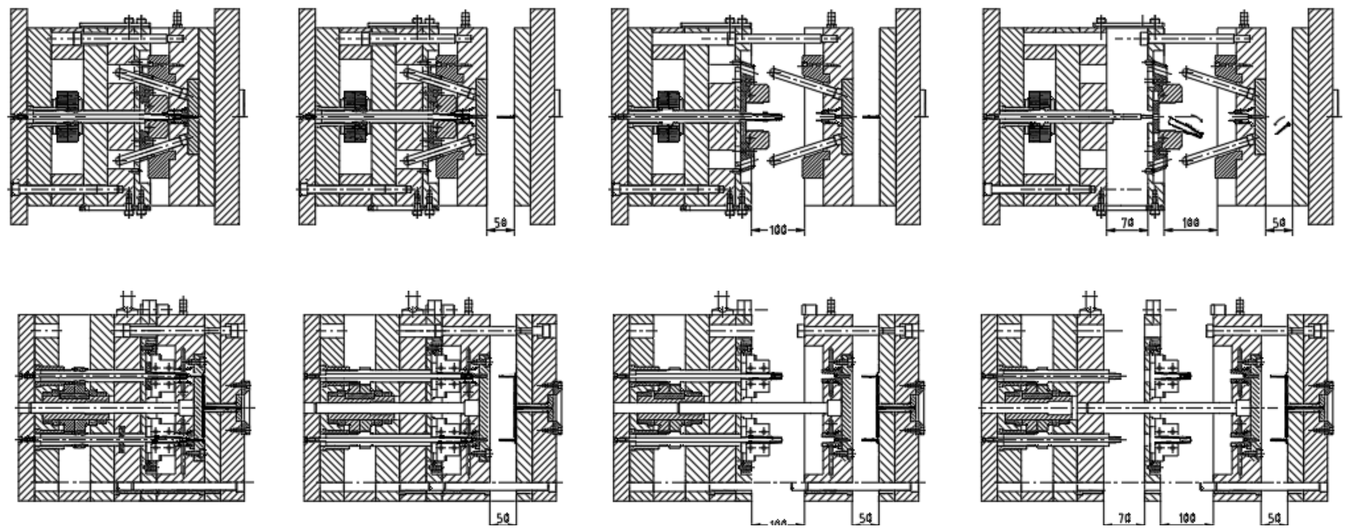
nProduk = 5,33 Putaran
N1 = 6,45 Putaran
P Lead Screw = 50
Z1 = 19
Z2 = 60
Ntotal = 10,97

Perhitungan unscrewing ini di dapat berdasarkan jarak pada bukaan saat kondisi mold terbuka hingga produk terjatuh.

Estimasi Gaya Cekam		
DEMAG	Berdasarkan *wall thickness dan flowpath*	8,4 Ton
	Berdasarkan Faktor Tebal Dinding	4,4Ton

Estimasi di dapat berdasarkan kebutuhan mesin yang di gunakan.

Tahapan Bukaan

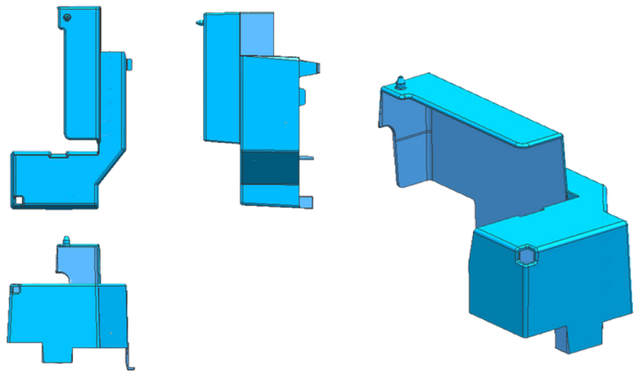


Full -Time Works

Design Engineering Division

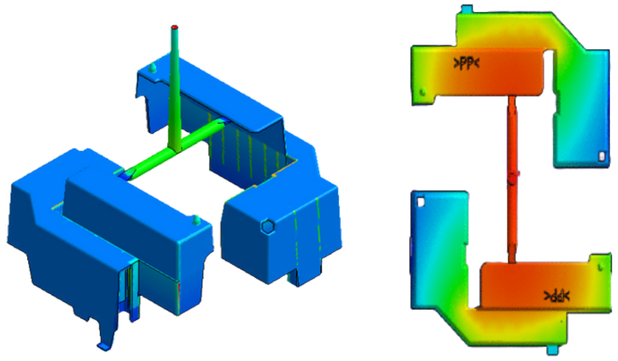
02.

Design of Two Plate Injection Mold for Holder Fuse Cover



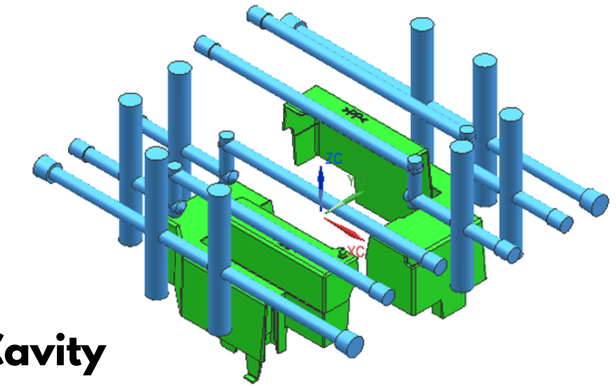
Pada proyek ini, penulis berkesempatan merancang sebuah cetakan untuk pembuatan cover Holder Fuse dengan menggunakan sistem Two Plate, Cold Runner & Side Gate.
Seluruh proyek ini penulis selesaikan menggunakan software UG NX.

Flow Simulation



Flow Simulation penulis lakukan untuk menganalisa, serta penentuan kebutuhan Cooling Line.

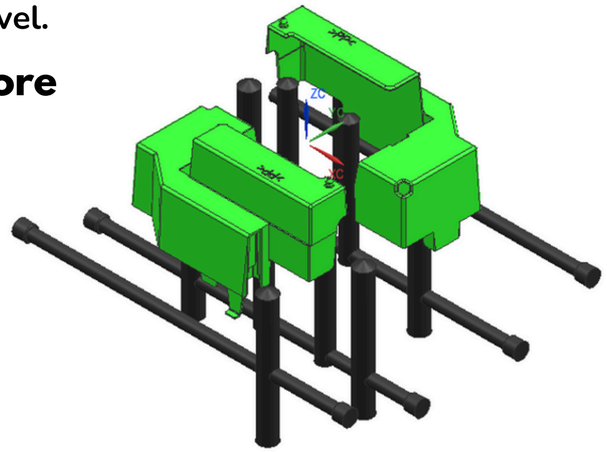
Cooling Line



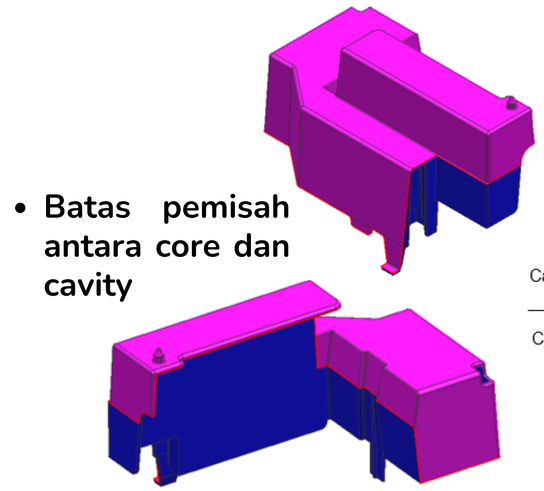
Cavity

- Sistem cooling yang di gunakan adalan bevel.

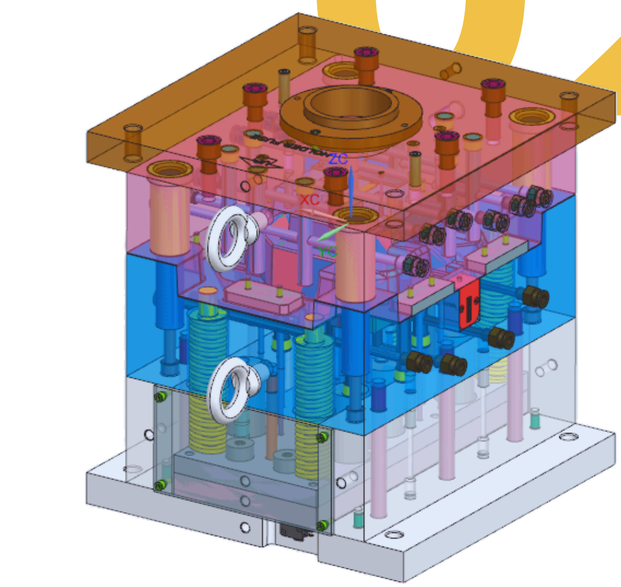
Core

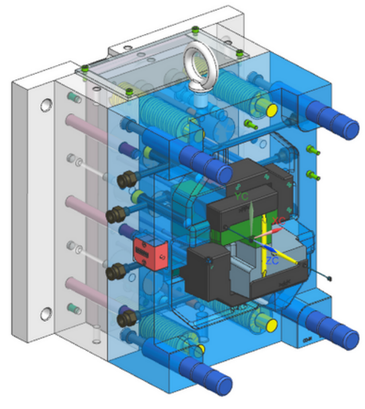


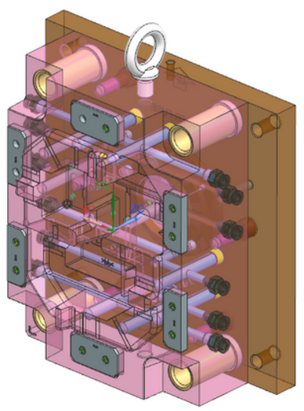
Parting Line

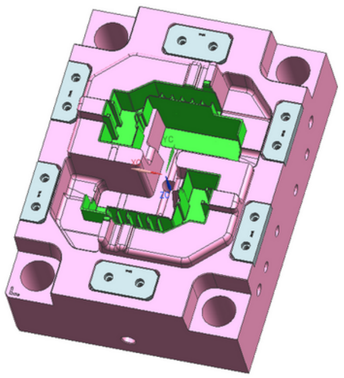


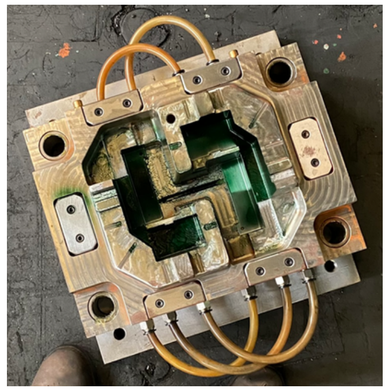
- Batas pemisah antara core dan cavity









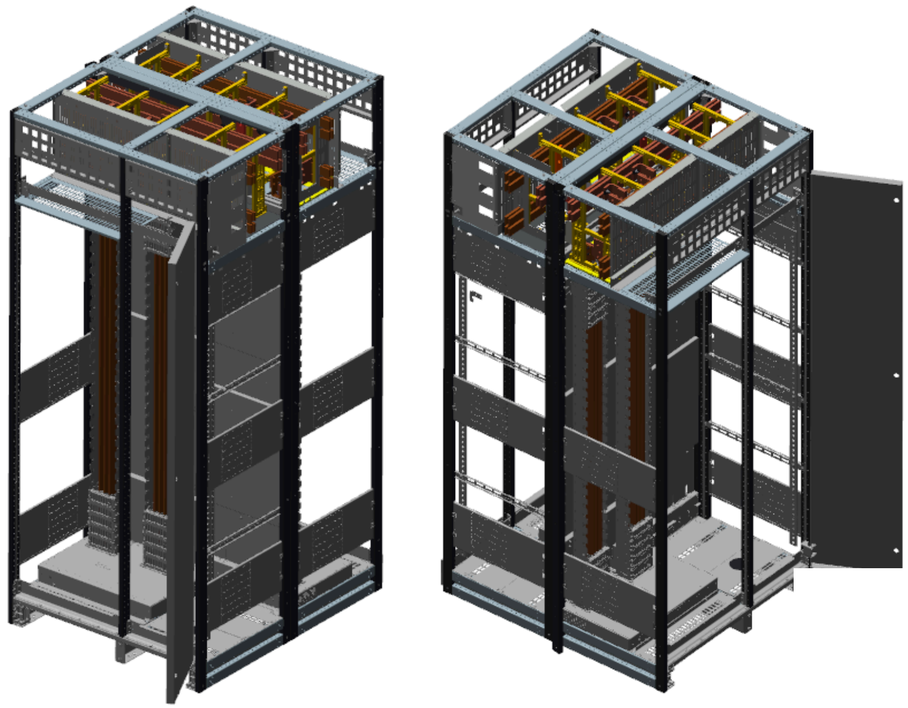


Project-Base Works

Technical Design Division

03.

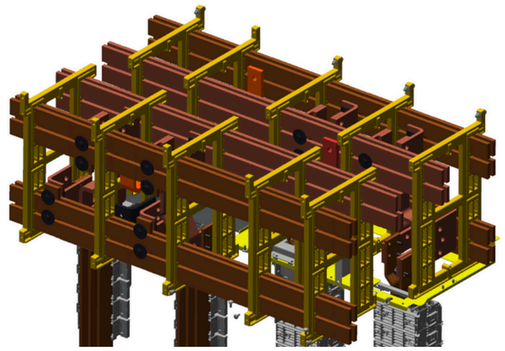
Design of BlokSeT DC Back to Back Schneider Panel



Pada proyek ini, penulis berkesempatan untuk memodifikasi desain standar dari Panel BlokSeT LV. modifikaisi dilakukan berdasarkan permintaan dan kebutuhan klien.

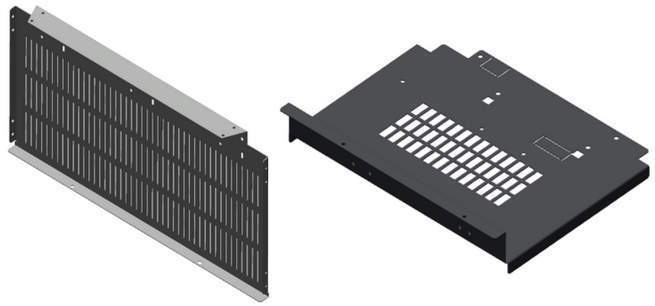
Seluruh proyek ini penulis selesaikan menggunakan PTC Creo & Autocad.

Busbar Circuit



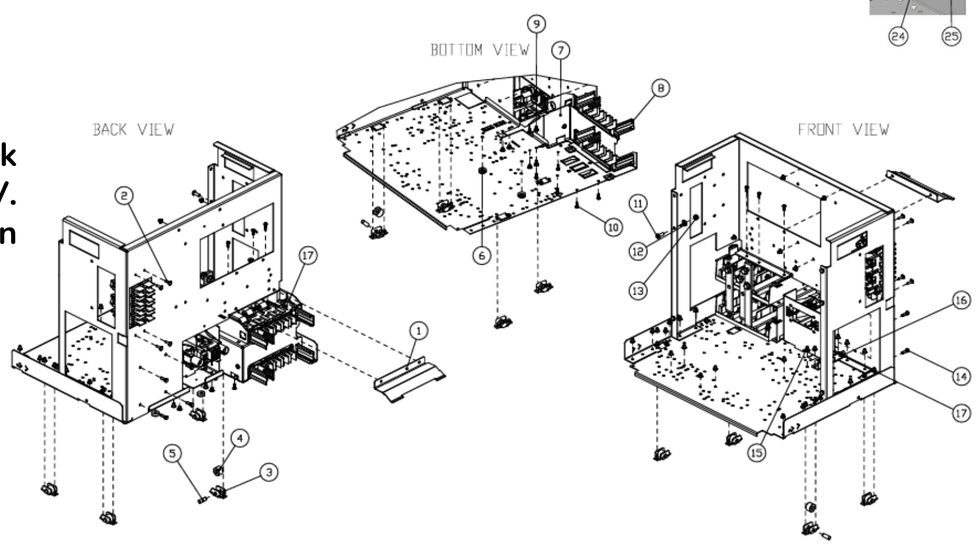
Penulis mekakuan modifikasi mayor terhadap circuit busbar, berdasarkan Line Diagram yang klien berikan.

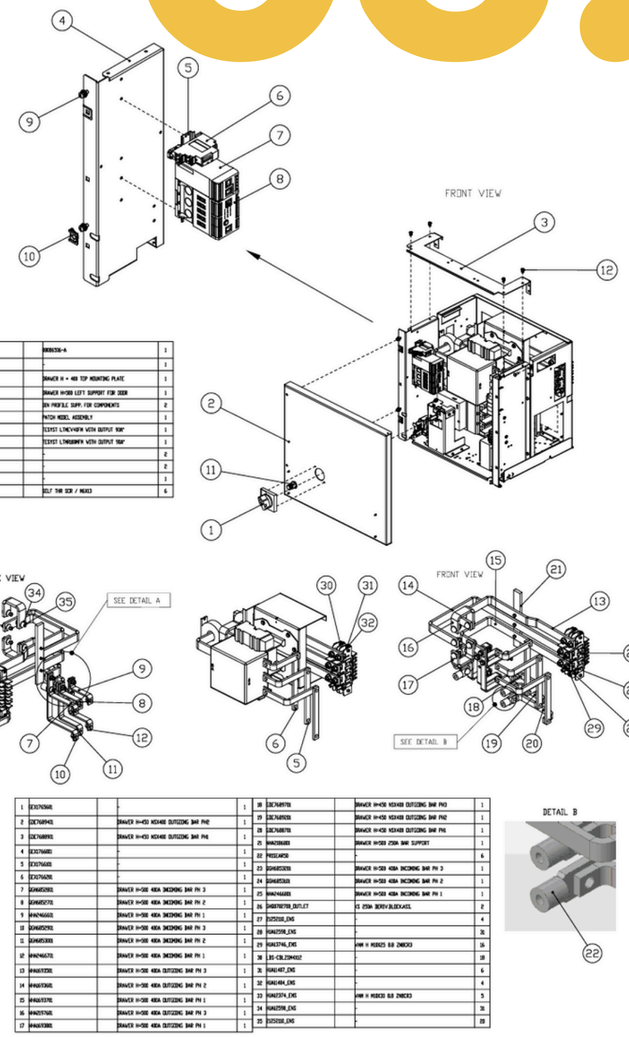
Sheet Metal Part

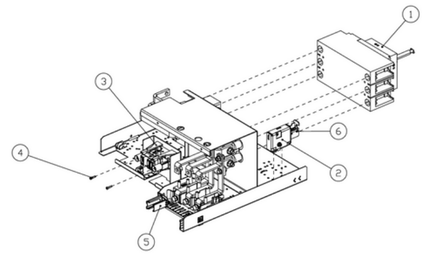


Penulis mekakuan modifikasi terhadap desain part sheet metal.

Assembly Guide







Penulis bertanggung jawab pada pembuatan assembly guide untuk proses instalasi dan pemasangan di lapangan.

Project-Base Works

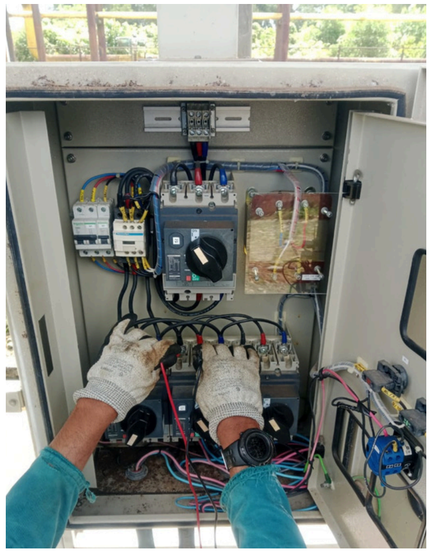
Drafter Engineering Divison

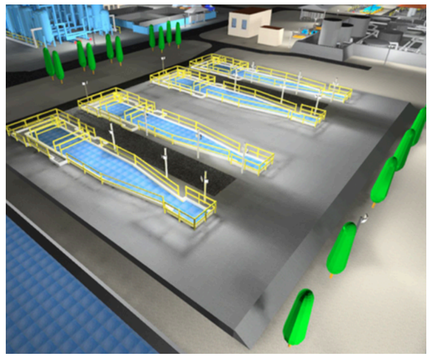
04.

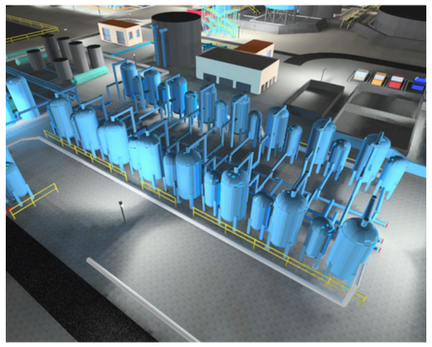
Pertamina Hulu Rokan Lightning Improvement POD Area - CGS3

Pada proyek ini, penulis melakukan Ligthning Improvement terhadap area - area kerja PHR yang peneranganya belum memenuhi standar area kerja migas.

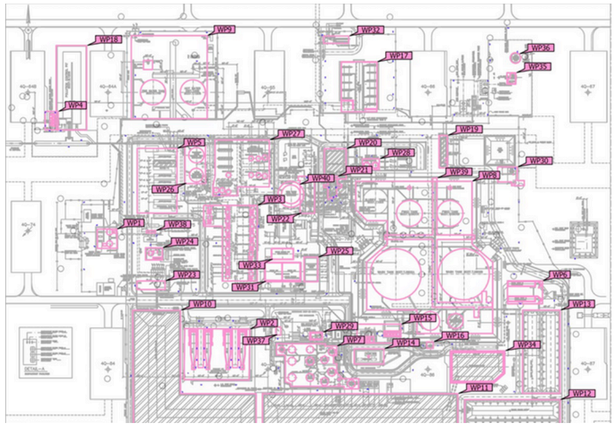
Penulis membuat 3D Model pada seluruh Area CGS3 untuk keperluan simulasi. Software yang digunakan pada proyek ini adalah Dialux & Autocad. penulis berkerja sama dengan rekan tim survey dalam penyempurnaan-nya.





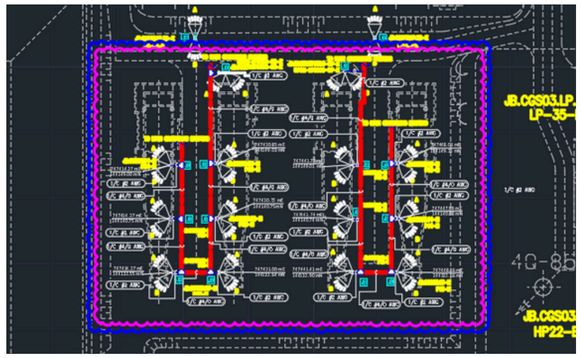


Area Lightning Improvement

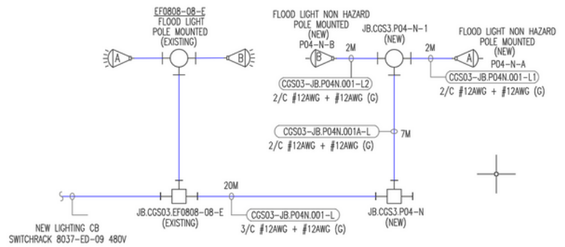


Penulis menentukan jalur routing kabel berdasarkan titik kordinat menggunakan bantuan software AutoCAD. Penulis menentukan spesifikasi lampu yang akan digunakan berdasarkan ketinggian pole, serta posisi & jarak terhadap objek melalui simulasi.

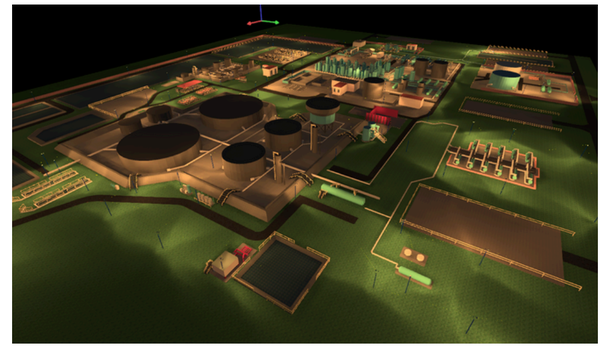
Electrical Cable Grounding Layout



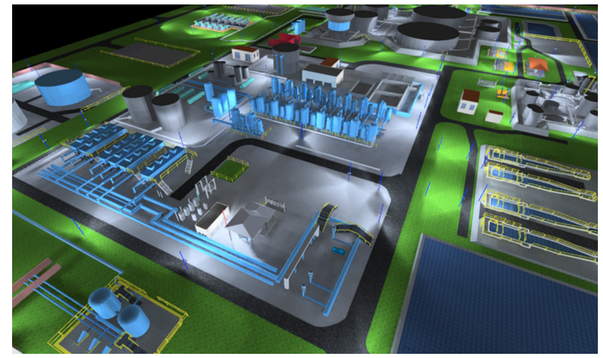
Lightning Loop Diagram

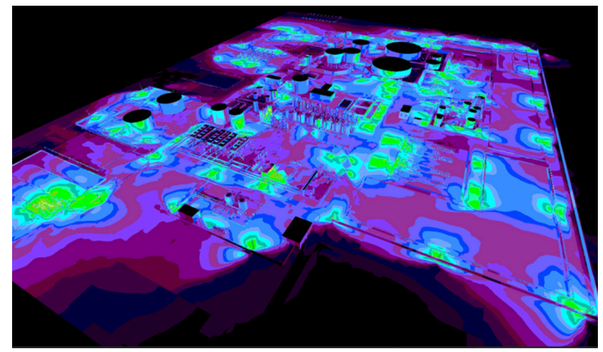


Before Improvement (Existing)



After Improvement





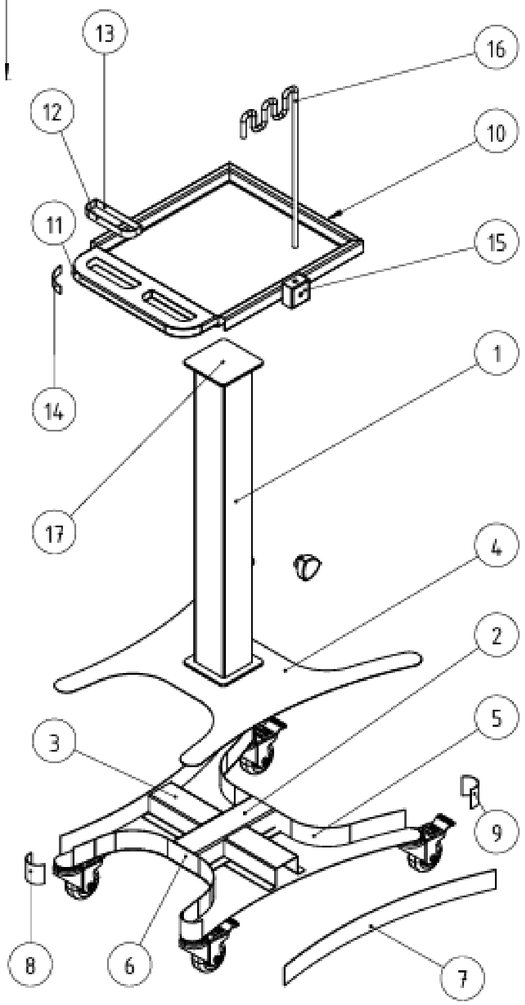
Full -Time Works

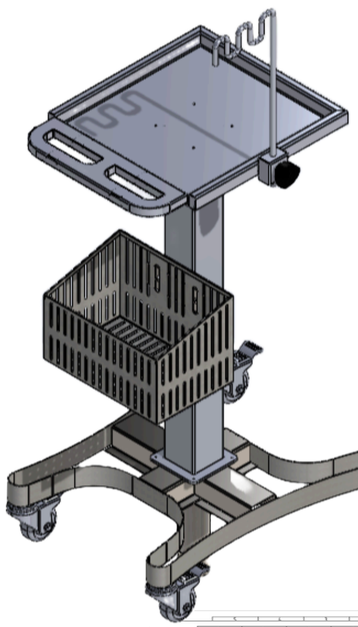
Engineering Department

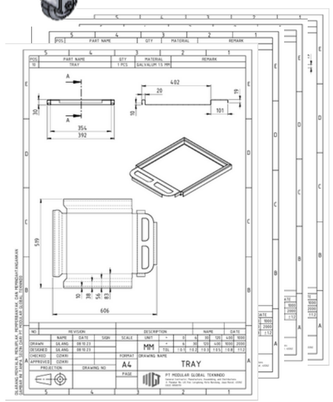
Modular Operation Theatre & Medical Device

05.

Trolley Fetal



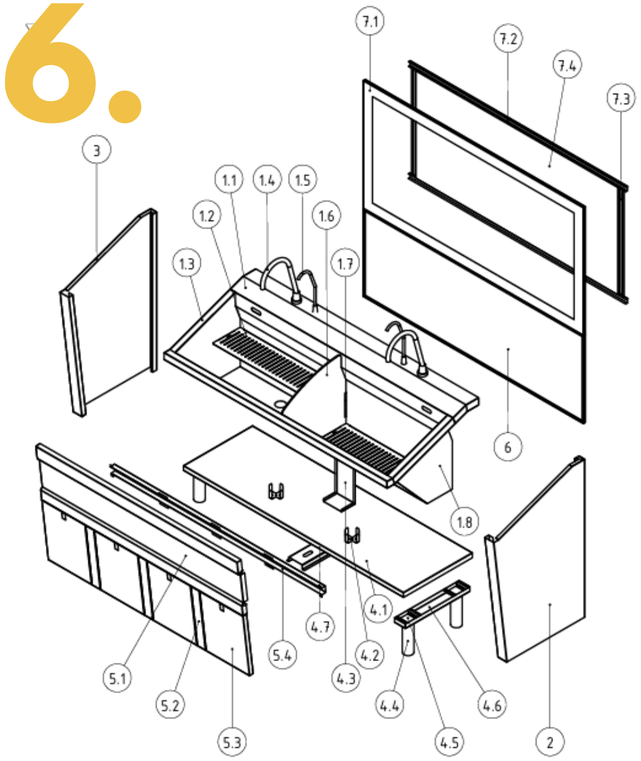


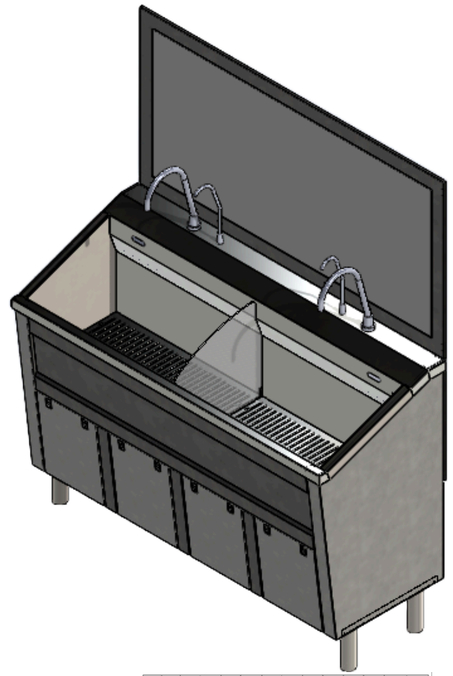


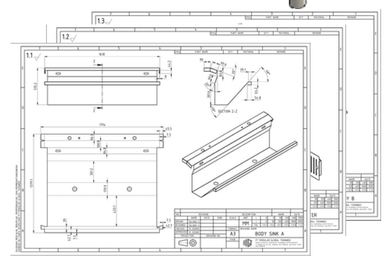
Trolley Fetal, merupakan keranjang untuk memindahkan janin sehingga mempermudah saat akan di pindah tempat kan pasca operasi.

06.

Scrub Double Sink



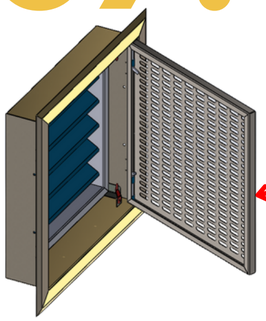


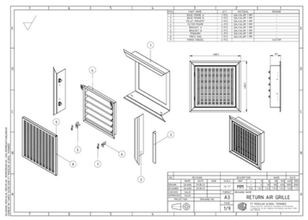


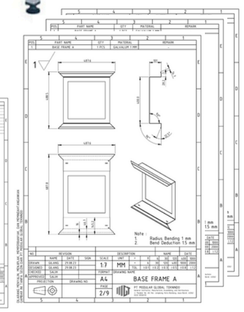
Scrub Double Sink, digunakan untuk mencuci tangan sebelum memasuki ruangan operasi. Penulis merancang dengan menggunakan material full Stainless Steel (SUS HL) agar terhindar dari bakteri.

07.

Return Air Grille







Return Air Grille adalah penutup pada bukaan saluran ducting pada suatu ruangan. RAG berfungsi mengembalikan udara dari ruangan untuk di kirim ke sistem HVAC agar terjadi kestabilan tekanan dan suhu/temperature.