

Desain rangka kendaraan fsae UI = Chassis design for fsae UI car

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Abstrak

[Sama seperti mobil balap lainnya, desain mobil Formula Student juga melibatkan banyak aspek didalamnya. Selain harus kuat dan ringan, kendaraan yang dimaksud juga harus mudah dan murah diproduksi serta mudah dirawat. Dalam tulisan ini sebuah pendekatan dijelaskan untuk menyelesaikan sebuah desain rangka kendaraan Formula Student yang berjenis space frame untuk memenuhi syarat kekuatan, serta mudah dan murah untuk diproduksi. Desain rangka kendaraan ini akan digunakan oleh tim Bayu Motorsport Universitas Indonesia dalam presentasi desain pada kompetisi Formula Student yang bertempat di sirkuit balap Ricardo Paletti, Varano de' Melegari, Parma, Italia. Hasilnya desain rangka yang telah dirancang dapat memenuhi regulasi FSAE yang disyaratkan, dengan massa rangka 41 kg, spesifikasi material baja bertipe SAE-AISI 4130 yang menggunakan teknik penyambungan las gas metal arc welding.

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