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**SARDAR VALLABHBHAI NATIONAL
INSTITUTE OF TECHNOLOGY, SURAT-395 007.**

Date: 06/10/2023

No. SVNIT/SC/SAE/ 001/2023-24 / 2699

To,

6 OCT 2023

Institute website

SUB: - Enquiry for mechanical assembly for development of formula student electric vehicle.

Dear Sir,

You are requested to quote your prices for the supply of stores listed overleaf. The quotations may be sent to the undersigned in a sealed envelope by appropriate way and subscribed as: "Quotation with reference to Enquiry No. SVNIT/SC/SAE/001/2023-24 dtd: 6/10/2023. Your quotation should reach the undersigned on or before **13/10/2023 at 5:00 pm.**

- The quotations should be furnished with the following information.
- 1) The brand or make of each item should be specifically stated and wherever necessary, Complete set of specifications and dimensions should be given.
 - 2) If asked, samples are accompany the quotations
 - 3) Sales tax, General tax, Central Sales tax, Custom duty, Insurance charges, Packing and Forwarding charges, if not included in the prices quoted, should be clearly specified.
 - 4) The period of validity of the quotation should be at least 45 Days. Offers subject to prior sale may please be avoided.
 - 5) The delivery period is to be clearly mentioned in the quotation.
 - 6) The mode of delivery of the stores may be mentioned. The delivery should be F.O.R. Surat or at the Institute.
 - 7) All concessions available to an educational institution should be specified and also taken into account while quoting.
 - 8) This Institute is located within the limits of S.M.C. & exempted from the paying of octroi duty on incoming goods from outside limits of S.M.C.
 - 9) This Institute is registered with the dept. of scientific & industrial Research (DSIR) for the purpose of availing custom duty exemption & central excise duty exemption, and hence the certificate to this effect will be issued wherever it is necessary on demand.
 - 10) Payment is normally made by cheque drawn on the S.V.N.I.T. Branch Office of State Bank of India, Surat-395007 within a period of thirty days from the date of receipt of stores.
 - 11) Your specifications & terms- conditions should be as per the format attached, must be on your company letterhead & signed by an authorized person.
 - 12) Offered quotation may be rejected if any ambiguity is found in offered specifications, terms & conditions supplied by party in specified tabular format.
 - 13) The Director reserves the right to accept stores, which are not strictly in confirming with the specifications but otherwise, found suitable.

Yours faithfully,

Dr. Bade Mukund, Faculty Chairman, SAE,
Department of Mechanical Engineering, Sardar
Vallabhbhai National Institute of Technology,
Surat 395007

Specification

Sr. No.	Item Name
1.	<p>Steering Wheel Quick Release Mechanism</p> <p>Description: A steering wheel quick release mechanism is a device used to easily and quickly detach and attach a steering wheel to the steering column of a vehicle. This mechanism is particularly common in motorsports, where it allows drivers to quickly switch steering wheels during pit stops or for other reasons.</p>
2.	<p>Al Alloy steering Wheel Welded</p> <p>Description A steering wheel is a critical component of a vehicle, serving as the primary interface between the driver and the vehicle's directional control system. It allows the driver to maneuver the vehicle by turning the wheels and controlling the direction of travel.</p> <p>Technical data Diameter = 10 inch</p>
3.	<p>Rack & Pinion</p> <p>Description In automotive steering systems, the rotational motion from the steering wheel is converted into linear motion using a rack and pinion mechanism to turn the vehicle's wheels.</p> <p>Technical data C factor:100.53 Eye to eye: 410 mm Pinion dia:32mm Lock to lock: 215 deg Rack travel: 60mm</p>
4.	<p>DNM suspension</p> <p>Description The suspension systems they produce are designed to enhance the performance, comfort, and control of mountain bikes and other off-road bicycles.</p> <p>Technical data DNM RCP2S 240mm</p>
5.	<p>Front Knuckle</p> <p>Description The front knuckle, also known as the steering knuckle or upright, is a crucial component in a vehicle's front suspension system. It plays a vital role in connecting the wheel and the suspension system, allowing the wheel to pivot for steering and supporting the weight of the vehicle.</p> <p>Technical data As per CAD file.</p>
6.	<p>Rear knuckle</p> <p>Description The rear knuckle, also known as the rear upright or rear hub carrier, is an essential component of a vehicle's rear suspension system. Similar to the front knuckle, the rear knuckle plays a vital role in connecting the wheel to the suspension system, providing stability, control, and support to the rear end of the vehicle.</p> <p>Technical data As per CAD file.</p>
7.	<p>wheel Hub</p> <p>Description A wheel hub is a crucial component of a vehicle's wheel assembly that connects the wheel to the vehicle's axle and allows for smooth rotation. It is an essential part of the vehicle's suspension system and plays a significant role in supporting the weight of the vehicle and providing a mounting point for the wheel and tire.</p> <p>Technical data As per CAD file.</p>
8.	<p>Brake Disc</p> <p>Description</p>

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	<p>A brake disc, also commonly referred to as a brake rotor, is a critical component of a vehicle's braking system. It's a disc-shaped part that rotates along with the vehicle's wheel and is clamped by the brake caliper during braking to slow down or stop the vehicle.</p> <p>Technical data Material EN 19 & Manufacturing as per CAD file & Polishing & Hardening</p>
9.	<p>Steering Arm</p> <p>Description The steering arm, also known as the steering knuckle arm or steering lever, is a key component of a vehicle's steering system. It's an essential part that connects the steering linkage to the steering knuckle, allowing the driver to control the direction of the vehicle.</p> <p>Technical data Machining & Material 7050-T6 as per CAD Files</p>
10.	<p>Part Machining</p> <p>2 rear clamps 2 front clamps</p>
11.	<p>LOCK NUT</p> <p>Description Lock nuts are a type of fastener used to secure bolts, screws, or other threaded components in place. They are designed to resist loosening due to vibration or other forces.</p>
12.	<p>BEARING</p> <p>Description The Double Tapered Roller Bearing 32009X is a precision-engineered mechanical component designed for applications where radial and axial load support is required. This bearing exhibits a unique design with two tapered raceways (cones) and rolling elements (rollers) set at an angle to the bearing's axis. The designation "32009X" typically denotes its specific size and design within the bearing family. In this case, it might indicate an inner bore diameter of 45 mm, an outer diameter of 75 mm, and a width of 20 mm, but specific dimensions can vary by manufacturer.</p> <p>Model No. 32009x</p>
13.	<p>Wilwood Balance Bar</p> <p>Description A Wilwood balance bar is a component commonly used in dual master cylinder brake systems, particularly in performance and racing applications. Its primary function is to allow the fine adjustment of brake bias between the front and rear brakes. Brake bias refers to the distribution of braking force between the front and rear wheels of a vehicle. Achieving the right brake bias is critical for optimizing braking performance and preventing wheel lockup.</p> <p>Technical data Wilwood Balance bar (340-4745)</p>
14.	<p>Master cylinder</p> <p>Description A Wilwood master cylinder is a type of hydraulic component used in braking systems, particularly in performance and racing applications. It plays a crucial role in transferring force from the brake pedal to the brake calipers, thereby enabling the vehicle to slow down or stop.</p> <p>Technical data Wilwood Compact Remote Flange Mount Master Cylinders 260-10371</p>
15.	<p>KBX - Brake Calipers</p> <p>Description Brake calipers are essential components in a vehicle's braking system, responsible for applying force to the brake pads, which then press against the brake rotors to create friction and slow down or stop the vehicle. KBX Caliper are selected for the rear assembly.</p> <p>Technical data Piston OD is 30mm Weight - 500 Grams OEM Calipers comes with mirror part</p>
16.	<p>Brake Pads</p> <p>Description Brake pads are vital components of a vehicle's braking system, responsible for creating friction with the brake rotors to slow down or stop the vehicle.</p>
17.	<p>Brake Line</p> <p>Description A brake line is a crucial component of a vehicle's braking system, responsible for carrying brake fluid from the master cylinder to the brake components (such as calipers or wheel cylinders) at each wheel. Brake</p>

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	<p>lines play a vital role in transmitting hydraulic pressure generated when you press the brake pedal, enabling the brakes to function and slow down or stop the vehicle effectively.</p> <p>Technical data M10 5 mtr</p>
18.	<p>T Splitter 3 Port</p> <p>Description A T-splitter, also known as a 3-port T-connector or simply a T-connector, is a simple yet essential plumbing or fluidic component used to split a fluid flow into two separate pathways or to combine two flows into a single stream. It has a T-shaped configuration with three openings or ports: one inlet and two outlets.</p>
19.	<p>4-way connector</p> <p>Description A 4-way connector is a versatile component used in various applications to join and control the flow of fluids, gases, or electrical signals among four separate pathways or components. These connectors come in different forms, each designed for specific purposes.</p>
20.	<p>Benjo bolt</p> <p>Description A banjo bolt is a type of fastener used to connect a tube and a fitting. It is also called a tube nut, and it can be used in many different applications. The banjo bolt is a type of fastener that is used in a variety of applications. A banjo bolt has three main components: a head, a body, and a washer.</p>
21.	<p>ATV axle</p> <p>Description An ATV (All-Terrain Vehicle) axle is a critical component of the vehicle's drivetrain that transfers power from the engine to the wheels, allowing the ATV to move forward or backward. ATV axles are essential for transferring power from the engine to the wheels, enabling the ATV to move over a variety of terrains. The axles play a critical role in maintaining traction, stability, and control while ensuring smooth power delivery to the wheels.</p> <p>Model: Alto custom</p>
22.	<p>Open Differential. Chain Drive System For Formula</p> <p>Description An open differential, commonly used in cars, is a fundamental component of the vehicle's drivetrain that serves the primary purpose of allowing the two drive wheels (typically the front wheels or rear wheels, depending on the vehicle's configuration) to rotate at different speeds while the car is in motion.</p> <p>Technical data As per CAD file.</p>
23.	<p>Pressure Hydraulic brake switch</p> <p>Description A pressure hydraulic brake switch, also known as a hydraulic brake pressure switch, is an electrical component used in hydraulic brake systems to detect the pressure within the brake lines. It plays a crucial role in various safety and control systems in vehicles, particularly in modern automotive braking systems.</p>

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