



This 70% low-floor LRV was supplied to replace the aging original fleet and to support new line extensions connecting to BART and CalTrans.

This new design simplified ADA access with low-floor level boarding and provided passenger convenience with interior bicycle racks.

**Formation:**  
6 - Axle Articulating

**Track Gauge:**  
4ft – 8.5in / 1435mm

**Electric System:**  
750 Vdc  
Overhead Catenary  
System



| Santa Clara - Santa Clara Valley Transportation Authority |  |
|---|--|
| General   |  |
| Manufacturer  | KINKISHARYO International                          |
| Quantity  | 100  |
| Yr. Delivered (Last)                                      | 2001   |
| Body Type   | 6-axle double articulating                         |
| Empty Weight  | 99980 lbs (45350 kg)                               |
| Seats   | 65 passengers                                      |
| Minimum Radius  | 82 ft (25 m)                                       |
| Voltage (VDC)   | 750  |
| Maximum Speed (Balance)                                   | 62 mph (99 kph)                                    |
| Full Acceleration   | 3.0 mphps (1.34 m/s <sup>2</sup> )                 |
| Deceleration, Service                                     | 3.5 mphps (1.56 m/s <sup>2</sup> )                 |
| High/Low Platform   | Low  |
| ADA Accessibility   | Level Boarding                                     |
| Maximum Cars to Train Line                                | 3  |
| Noise Level at 40 mph & 50 Ft                             | 75 dBA   |
| Carbody   |  |
| Manufacturer  | Kinki Sharyo Co. Ltd.                              |
| Material  | LAHT   |
| Buff Load (Lbs)   | 2g   |
| Length (Over Coupler Faces)                               | 90 ft (27432 mm)                                   |
| Width   | 8.67 ft (2642 mm)                                  |
| Height  | 11.08 ft (3377 mm)                                 |
| Ceiling Height  | 8.17 ft (2490 mm)                                  |
| Floor Height (TOR)  | Low floor 14 in (355 mm) High floor 35 in (889 mm) |
| Floor Construction/Covering                               | Plymetal/Neoprene Rubber                           |
| Passed ASTM E119  | Yes  |
| Articulation-Manufacturer                                 | KINKISHARYO International                          |
| Seat Manufacturer   | American Seating                                   |
| Seat Type   | Cantilever SS Frame                                |
| Window Type   | Laminated Safety Glass                             |
| Couplers  |  |
| Manufacturer  | Dellner  |
| Location of Electric Heads                                | Side   |
| Isolation Method  | Drum Switch  |
| Coupler Height (TOR to CL)                                | 17 in (432 mm)                                     |
| Electrical Equipment                                      |  |
| LVPS Manufacturer   | Alstom   |
| LVPS Output (kW)  | 10   |
| APS Manufacturer  | Alstom 208Vac, 3-Φ inverter                        |
| APS Output (KVA)  | 60   |
| Battery Manufacturer                                      | SAFT   |
| Battery Capacity (A.h.)                                   | 180  |
| Lighting  |  |
| Manufacturer  | Translite  |
| Ballast Type  | DC   |
| Fixtures Contain Air Diffusers                            | Yes  |
| Railroad Headlight  | Yes  |

| Destination Signs  |   |
|--|---|
| Manufacturer   | Meister   |
| Type   | LCD   |
| Number per Car   | 2/4/3   |
| Location   | Front/Side/Interior                             |
| Propulsion   |   |
| Manufacturer   | Alstom  |
| Motors/Powered Truck   | 2   |
| Method of Cooling for Motors   | Self-ventilated vortex type                     |
| Control Type   | AC IGBT Inverter                                |
| Control Package/Car  | 2   |
| Control State-of-the-Art   | Microprocessor                                  |
| Method of Cooling for Control  | Forced Air                                      |
| Pantograph Manufacturer  | Schunk Graphite Technology                      |
| Motor Rating (kW)  | 140   |
| Type Gearing   | Voith Dbl Red                                   |
| Gear Ratio   | 6.64  |
| Friction Brakes  |   |
| Manufacturer   | Knorr   |
| Type   | Spring-applied Hydraulic Release                |
| Separate Control   | Yes   |
| Track Brake Manufacturer   | Knorr   |
| Number of Axles With Brakes  | 6   |
| Doors  |   |
| Type   | Sliding Plug                                    |
| Number per Side  | 4   |
| Manufacturer (Controls)  | IFE   |
| Controls (Location/Type)   | Overhead/Electric                               |
| Sensitive Edge   | Yes   |
| Photo Cells  | No  |
| Passenger Activated  | Pushbutton (Outside/Inside)                     |
| Trucks and Suspension  |   |
| Manufacturer   | Kinki Sharyo Co. Ltd.                           |
| Primary Suspension   | Chevron   |
| Secondary Suspension   | Air Spring                                      |
| Load Leveling  | Yes   |
| Wheel Base   | Motor: 75 in (1905 mm) Trailer: 71 in (1803 mm) |
| Wheel Manufacturer   | Penn Machine                                    |
| Wheel Type   | Bochum 84                                       |
| Wheel Size   | 26 in (660 mm)                                  |
| Truck Centers  | 33.5 ft (10217 mm)                              |
| Frame Location   | Inside  |
| Wheel Profile  | 1:32  |
| HVAC   |   |
| Manufacturer   | Toshiba-Carrier                                 |
| Heating Configuration  | OH & Floor                                      |
| Heating Capacity (kW)  | 13.2 OH/12.2 Floor                              |
| Cooling Configuration  | Roof  |
| Cooling Capacity (Tons)  | 15.2  |
| Communications   |   |
| Manufacturer: Meister • Systems include PA System—Inside/Outside, Intercom, Prerecorded Announcements, Monitoring Diagnostic System, GPS Positioning—Antenna mounted |   |

