

CHASSIS PLANS

ENGINEERED SOLUTIONS

Application

Well logging is the practice of making a detailed record of the geologic formations penetrated by a well borehole, typically oil or gas. This is typically accomplished using an instrumented Wireline truck which travels to a well site on an occasional basis. The roads are typically rough unimproved dirt tracks or, in arctic areas, very rough ice roads. Ambient temperatures range from very high (Middle East) to very low (Arctic).

Specification

The systems are installed in a control shed mounted on a large truck and must withstand continuous high levels of shock and vibration in transit. Exceptional reliability was absolutely required.

Vibration 5-500Hz	
Operational	1G
Non-Operational	2G
Shock	
Operational	10G
Non-Operational	30G
Temperature	
Operating	-6 to 49°C
Storage	-20 to 70°C
Humidity	0 to 90%
MTBF	50,000 hours



Solution

Chassis Plans created what had to be one of the most rugged chassis ever built at the time. This was a clean paper design specifically to meet Schlumberger's rigorous environmental requirements.

The entire system is constructed of aircraft grade 5052-H32 high strength aluminum to minimize weight. Each of the drive trays is held by four thumb screws, two in front and two in back. Five 3-1/2" drives are arrayed vertically behind the air filter for good cooling and easy accessibility. A card hold-down is tailored to the installed cards. Special zero backlash slides are used. All stainless steel hardware was installed for harsh high salinity environments. Color matching was provided as well as a standard silk screen with the company's logo. Strict depth and non-standard front panel requirements were met to comply with the customer's specification. Chassis Plans was able to create an enclosure that will accommodate their needs, worldwide, for years to come.

Fully integrated configured systems were provided using assured long availability components.