

INDERR →

**Complete control and
propulsion system**

DIESEL ELECTRIC TOWER CAR

INDER ENG. INDUSTRIES

**12-F govindpura Industrial
area, bhopal, MP, 462023, INDIA**



Control Cubical

INDERR engineering provides complete controlling systems for DETC ohe tower car, this panel has a very complex relay based logic system which control all the systems in the wagon it consist of our in house build GEFR (ground fault earth relay) for over current and over voltage protection we have designed all the wiring schematic diagram according to rdso specs .

SALIENT FEATURES

- very clean wiring schematics and design to make operation easy
- Earth fault and over voltage protection device for fault clearance
- welded according to EN-15085-02
- Tested Up to 1.5kv of surge
- Dielectric test up to 1.2 kv



Drivers Desk

INDERR Engineering manufacture complete Drivers Desk from fabrication to equipment we have developed this drivers desk for DETC wagon which has an FRP top and fabricated bottom that houses our Master controller, DCS (driver control switch) and LED panel all designed and manufactured and wired by us.

SALIENT FEATURES

- In house manufactured master controller tested up to 1 million cycle
- Fabricated according to EN 15085-02 standard
- vibration test according to EN 61373 class F location B



Power and protection Cubical(MSGC)

MSGC(Motor Switch Gear Cubical) is the heart of the train which consist of a reverser that changes the polarity of the motors , 4 pneumatic contactors each of 1200 V at 1000 A DC , MOLR (Motor Overload Relay) and electronic WSR (Wheel Slip relay) all designed and manufactured by us this cubical protects and control the propulsion system of DETC.

SALIENT FEATURES

- very clean wiring schematics and design to make operation easy
- Earth fault and over voltage protection device for fault clearance
- welded according to EN-15085-02
- Tested Up to 1.5kv of surge
- in house manufactured pneumatic contactor of 1200V at 1000 A
- 4 pole reverser with motor overload protection relay
- microcontroller based Wheel slip relay

