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SECURITY SYSTEMS
Gate Barriers

HYDRAULIC DROP ARM BARRIERS

Hydraulic Drop Arm Barriers

CE TÜV CERT
ISO 9001: 2008
EN ISO 14001: 2004

General Description

Drop Arm Barriers are designed especially for entrances where there is a threat of suicide vehicle attack, or for the entrances that have high security requirements. If there is a threat of vehicle attack in addition to the control of vehicle access in high security applications, hydraulic drop arm barriers are one of the best and most secure solutions. Even though the attack is from high tonnage vehicles with high speeds, it is not possible for the vehicle to keep on moving forward anymore beyond the arm of the barrier. Optima Hydraulic Drop Arm Barriers are designed for K12 standards, i.e. to stop vehicles with 80km/hr speed and 7500kg weight or more.

CONSTRUCTION

The arm of the barrier which is called the "crash beam" is supported by two "support columns" in both ends when closed. Drive of the barrier is both "adjustable counterweight and hydraulic". The crash beam is manufactured by welding two NPU 260x90x10 beams, constructing a 250x180x10 mm tubular steel structure. Similarly, support columns are manufactured by 200x90x8.5 mm NPI beams. Required foundation depth is around 1000 mm. Similarly the length of the foundation is 2500x2000 mm. Height of the centre line of the crash beam is 850 mm from ground level. All the elements are hot-dip galvanized or epoxy coated for long service lives.

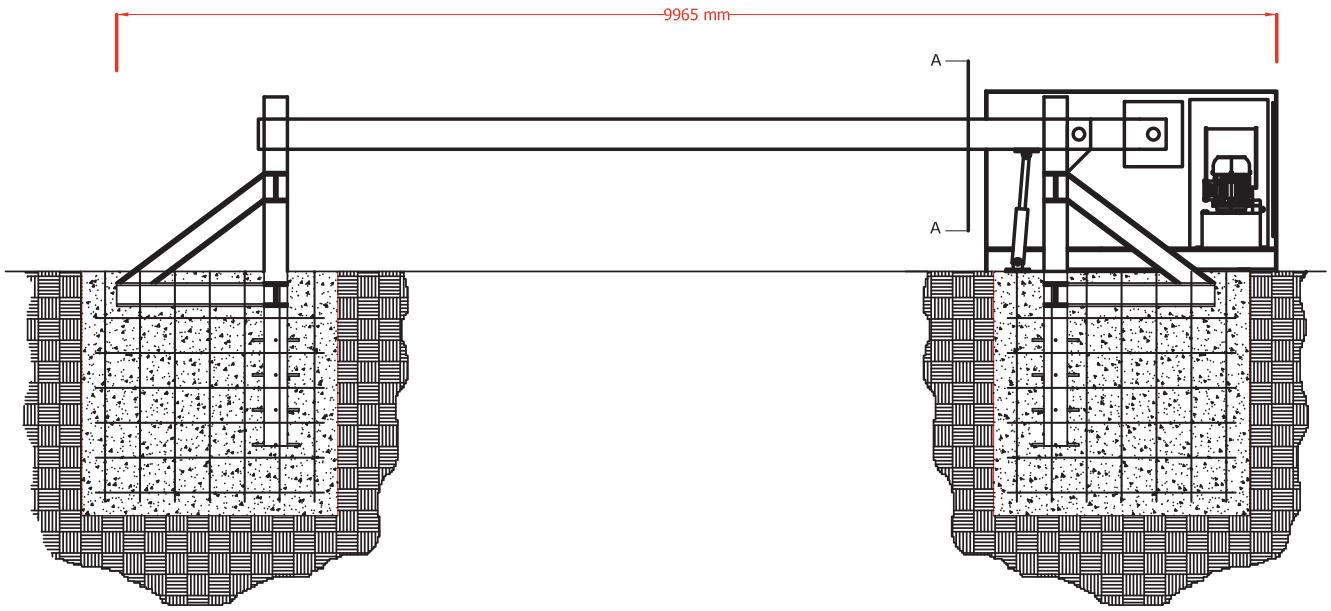
HYDRAULIC POWER UNIT AND CONTROL ELECTRONICS

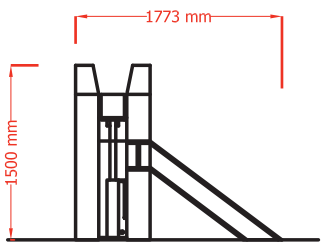
All the hydraulic components are tested at 250 bars although normal operating pressure is around 75-100 bars. Manuel hand pump is standard in HDAB series, therefore in case of power failure it is possible to raise and lower the barrier by manual hand pump. Coolers or heaters are can be integrated to the hydraulic power unit. Control electronics utilized in hydraulic drop arm barrier is PLC controlled. Two keyboards with emergency stop are standard; one desktop, other being integrated in the hydraulic power unit. Motor is driven by a contactor and protected by a thermic breaker. The low current voltage required by the system is supplied by a switch mode power supply. There is a fuse for every component in the system. All the cables running in the system are colour coded and numbered to ease tracking.

ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT
Between 20°C and +75°C, %95 non condensing humidity, 380 V 50-60 Hz (or 220 V, 50-60 Hz, optional)

OPTIONAL ACCESSORIES
1. Flashing or red/green lights
2. Radio control receiver, transmitter and antenna
3. Safety photocell, stand and casing
4. Inductive loop detector
5. Drainage Pump
6. Card Reader System
7. Hydraulic accumulator
8. Uninterrupted Power Supply (UPS)
9. DC motor and pump
10. Different colors

ARM LENGTH: From 2mt to 10mt





SECTION A-A