

SDT 40 - SCAD Tower with central rider cabin

This is a permanent tower truss structure, designed to accommodate a SCAD Dive free fall system combined with a centrally lifted rider cabin. It is particularly designed as an affordable tower ride attraction for small entertainment and amusement businesses.

It consists of four major truss columns, horizontally supported only in the upper and lower segments to leave free visibility in the centre, which offers a spectacular view for spectators. Inside the tower there is an 8 person cabin, which is combined with the SCAD net. An electric winch lifts the rider cabin, as well as the SCAD net into position at the same time.

Inside the cabin riders are connected to the easy to dress free fall seat harness CFF. Here the first rider hooks onto the release system, before being lowered 3 feet underneath the cabin floor. Upon a countdown, the rider experiences free fall at it is best unattached and pure, but controlled by the CFF harness.

After a 73 ft free fall the rider lands in a 300 square foot airbag supported SCAD double net, which is suspended from the tower top. The feeling is like landing in a cloud without any impact. After landing the SCAD is lowered to ground in 20 seconds, the rider can step out and the SCAD is hoisted up again to catch the next rider. The free fall feeling is more intense, than any other simulation or free fall drop ride, due to the avoidance of disturbing attachments. As the rider is seated comfortably the ride is even smoother than known rides.

The dual cable winch is powered by a high capacity motor winch system, certified for personal transportation. The tower is also equipped with floodlights for night operation. A music sound system is optionally recommended. All parts of the tower are manufactured with high quality according to DIN 41 12, the stringent official German standard for amusement rides. The SCAD system is type approved by the German technical control board TÜV and complies with the USA ASTM standards. The decoration and features can be customized to meet customer-specific requirements.

Technical data:

Ride capacity:	40 riders / h
Footprint:	16 x 16 m / 50' x 50' ft
Rec. ride price:	\$ 20 p. person
Total tower height:	165 ft / 55 m
Power Europe:	460 V / 9,2 Kw/ 40 Amp
Power US:	208 V / 9,2 kW / 80 Amp
Capacity of cabin:	4 riders / 1 operator
Staff:	2
Free fall distance:	73 ft / 22 m
Time for cabin lifting:	50 sec. (every 4 riders)
Weight / Ground load:	40 tons / 200 kN/m ²
Suspension type:	rubber cords
Total time per ride:	90 sec.
Foundations:	10 x 10 x 4 ft / 3 x 3 x 1 m
Reg. replacements:	rubber cords every 400 rides (550US\$), top net every 3 - 4000 rides (950 US\$)

Additional features: Mega Splash Pool, Mechanical spring system, Structure illumination, Theming, Video and Sound system

