

The El Ali Meteorite of Somalia

This is a meteorite found lying on the impact area, near the town of El Ali in Hiiraan Region of Somalia. According to the chemical analysis made on samples from the meteorite several times, the meteorite consists mainly of iron and nickel. Iron meteorite, usually combined with small amounts of nickel. When such meteorites, often called irons, fall through the atmosphere, they may develop a thin, black crust of iron oxide that quickly weathers to rust.

The size of the meteorite: Size of this meteorite is determined by its length, width and height. It has a tubular shape with a hump on the top. That shows it was gliding through the atmosphere at a great speed. This piece of meteorite has melted on all sides and it has developed pits on its surface to indicate that some material has ablated away.

Today (12/07/2020), I visited the site where the meteorite is kept to measure its lengths, widths and heights. The table below gives the size measurements:

Lengths (cm)		Heights (cm)		Widths (cm)		Volume (cm ³)	Density (kg/cm ³)	Mass (kg or tones)
250	Average 205cm	177	Average 128 cm	100	Average 99cm	LxHxW= V 2,597,760 Cm ³	7.5 g/cm ³	Mass= d x v 19,483,200 g Or 19.5 tonnes
247		150		70				
210		140		150				
180		110		130				
120		130		110				
260		90		70				
170		100		65				

Now correction is required since the meteorite has holes (voids or pits) that go deep. So the estimated mass of the meteorite is reduced to **16.5 tonnes**. That is the minimum it can go.

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