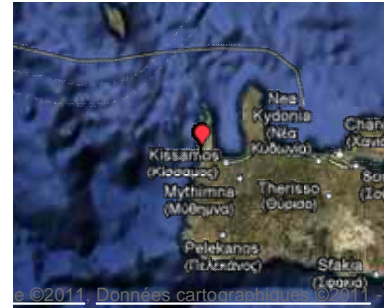


## Crete - Phalasarna

The ancient city of Phalasarna is located in the middle of the west coast of Crete, at the tip of the Gramvousa cape. Pottery from the surrounding area proves that the city was already inhabited in the Middle Minoan period, while its development is depicted by the Archaic and Classical tombs discovered in the nearby area. The city was at its peak between the middle of the 4th century B.C. and the middle of the 1st century B.C. During this period a "limen kleistos" (walled harbour) was constructed, coins were issued and naval trade and warfare was developed, exploiting the city's strategic position in-between the Aegean - Egypt and Western - Eastern Mediterranean sea crossroads. The Romans destroyed the city in 67 B.C., most probably because of its turning to piracy. Relics of houses, temples and quarries have been located around the harbour area. Today the port is found inland due to tectonic action in the Crete region. Excavation is taking place by the Ephorate of Underwater Antiquities.



Figures 

### Main features

Region	Crete
Use	Commercial - Military
Prosperity period (centuries)	4th B.C. - 1st B.C.
Existence of contemporary port	No, the harbour is inland today
Findings on site	Yes, the two basins, remains of defending walls and towers, a quay furnished with mooring stones and the two canals

### General description

The harbour of Phalasarna was established in an existing basin, which was dredged and reshaped. Access to the open sea was achieved by building a canal from the port to the sea that was also functioning as a drainage work. This canal was most probably walled and sealed by a chain, in order to create the "limen kleistos", as mentioned in Skylax (47). A second canal, which intersected the first one, discharged further north and was built probably for preventing siltation in the port.

The main basin, 75x100m wide, was enclosed by walls and protected with at least four fortification towers. In the inner side of the walls quays equipped with mooring stones were built. A stone stepladder was also discovered.

In the middle of 2nd century B.C. a second port basin was created northern than the first one. Its entrance was built from the remainders of a fortification tower. A small canal (50x50cm.) allowed water circulation. The existing walls-quays were used for mooring.

### Technical features

Construction period (centuries)	4th B.C., The harbour was constructed around 335 B.C. By the middle of 2nd c. B.C. the second basin was formed
Port configuration	Artificial Harbour, Inner Harbour
Port basin size	7500 m <sup>2</sup>
Main wind direction	S

Port land area	km <sup>2</sup>
Port entrance	The entrance to the harbour was made via an artificial canal, 100m long, which was formed through the marsh and the rocky beach, at the south of the basin.
Change of sea surface elevation	-6.6 m
Sedimentation	Yes
Outer port structures	
Inner port structures	Basins, Canals, Wharves
Land facilities	Temples, Defence Structures
Construction method	Carved stones
Neotectonic history	Lift
Shore line displacement	Silting

### Function and operations

Phalasarna bay seems to be active since Middle Minoan period as a naval station, in the form of a natural protected basin communicating with the sea. Around the middle of 4th century B.C. works took place in the basin and the entrance, so the city of Phalasarna acquired a modern internal closed harbour that determined its peak, being an important naval trading and warfare center.

Sea level rose about 20cm until the 2nd century B.C. and the port's functionality was affected, forcing builders to intervene and elevate the surrounding construction levels. After the 2nd century B.C. the port was used as a pirate hideout, which drew the Romans attention and led to its destruction. Boulders found in the canal prove that the entrance was deliberately blocked, while stone bullets located in the basin are evidence of hostilities. Total annihilation occurred during the 4th century A.D., probably in 365 A.D., when the whole area rose by about 6.6m due to a severe earthquake. The city and the port were buried irreversibly by tectonic action.

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