

STARI MOST

Rehabilitation of the old Bridge of Mostar A Pilot Cultural Heritage Project



The Old Bridge "Stari Most"

The Company

The LGA Civil Engineering Department supports partners in the civil engineering branch of trade and industry, as well as clients from the public and private sector, in their efforts to maintain standards relating to safety, quality and the protection of the environment, and to improve their capacity to compete in both national and international markets.

Extensive knowledge and many years of experience with various clients have led to the ability of Civilserve to guarantee a high standard of quality in the areas of customer advice, expertise and customer care.

The bridge, named "Stari Most" was the symbol of the town Mostar that takes the name from it (mostari=bridge guardians). It was built in the XVI century.

In November 1993, during the civil war, the bridge was destroyed by shelling, and a masterpiece of the ottoman times, a unique example of the ancient construction technique and an element of regional identity was lost.

The Old Bridge was a stone bridge with a span of about 29 meters and a curvature close to a lowered centre half-circle. The bridge was mainly conceived as a functional structure, aimed mostly at connecting the two banks of the river. The bridge had few esthetical devices and no ornamental elements; its architectural beauty, found in the simplicity and in the essentiality of the structure has made it to an symbol of Mostar.



The "Old Bridge" demolished "

LGA and the rehabilitation of the bridge:

The reconstruction project is led by the city of Mostar under the auspices of UNESCO and has the ambitious goal to rebuild the symbolic-bridge in a way, which would still justify the nomination of the old town complex as the cultural world heritage.

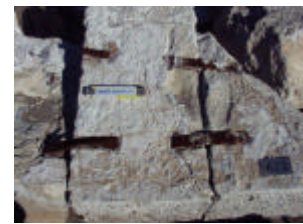
In this complex and difficult task the city of Mostar has selected LGA to execute studies of ancient building materials from the bridge: stones, mortar, iron and lead.

Executed works by LGA-team:

- Damage analysis and sampling; endoscopy
- Typology / variety of old materials
- Stone analysis for original stones
- New stone analysis
- Mortar analysis and reconstruction
- Biological analysis
- Metallography of gramps and dowels
- Masonry model testing
- Lead pouring technology experiments
- Impact-echo test on old stones for damage detection
- Digital mapping of new stone blocks
- Measuring all ancient metal parts
- Designing a monitoring system for reconstruction
- Restoration trials on void limestone



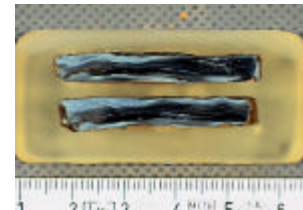
Historical dowel



Blocks with cramps in-situ



"Anatomy" of an ancient dowel



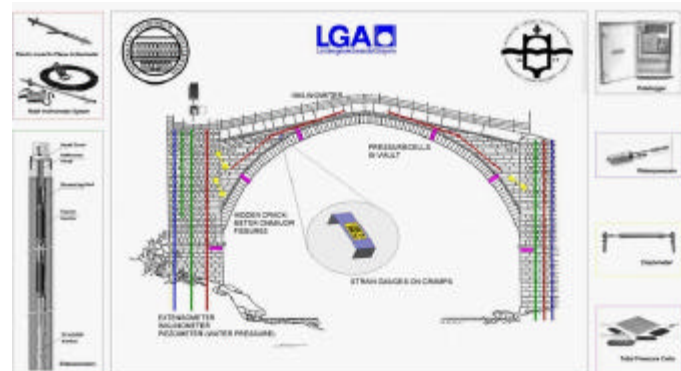
Preparation of the microsection metallographic specimen



Drilling and taking samples at abutment west



LGA measurement system



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