

Natural stone in the heart of Europe

Silesia and Saxony are ample with resources of natural stone. Sandstone, granite, porphyry, clay slates, gneiss, marble and basalt form a unique landscape. The tradition of the use of the local natural stone is long in Saxony and Silesia. Due to the abundant resources of the stone, numerous centers of excavation and machining of stone appeared and the significance of the products is supraregional and supranational. The local stone is irreplaceable also as a historical building material. Historical monuments made of this stone link the landscape and settlements in a traditional way and, thus, they are a characteristic feature of the natural landscape marked with human hand.

Saxon and Silesian stone industry acquires and processes such natural stone / rock as granite, gneiss but also sandstones and metamorphic rocks. The resources which are suitable for excavation of dressed stone are, despite of frequently prevailing in Saxony compact rock, usually rare and they are particularly valuable. Stone machining in Silesia focuses primarily upon such centers as Strzegom, Bolesławiec and Radków.

Dressed stone means – especially for the surface visible later – machined, usually square, manually hewed or machined natural stone.

The resources of natural stone in Saxony and Silesia offer a wide choice of rocks and colors. The customers of the Saxon and Silesian stone industry are mostly construction industry (for public orders) and also private vendors. While the construction industry depends strongly on state tendering procedures, the demand of the private sector is relatively stable.

Natural stone excavation and production of dressed stone always accompanied the history and development of Saxony and Silesia. Scattered all over the region, the natural resources have been offering yield and plants and jobs related thereto. The economic significance of this industry used to change together with the general economic situation of the region. There are now less than 30 various natural dressed stone excavation plants in Saxony.

Quantitatively, the general economic significance of the natural dressed stone industry should be regarded as small. However, the natural dressed stone industry shall be perceived not only as an income payer but as a consignee of preliminary services and investments. It should be assumed that further jobs are related with each job in the natural dressed stone industry.

The local natural dressed stone industry creates an added value in the country. The added value results in further positive effects for the society and national economy.

natural stone excavation sites in Saxony:

Official name of the plant	Type of rock / stone
Dörfel gneiss mine	Schlettau gneiss
Leubsdorf gneiss mine	Leubsdorfer gneiss
Blauenthal granite mine	Ebenstocker granite
Arnsdorf-Heideberg granite strip mine	Arnsdorfer granite
Melaune quarry	Arnsdorfer granite
Pließkowitz quarry	Lusatian granite
Meißen-Cölln granite mine	Meißner granite
Mittweida granite mine	Mittweidaer granite
Wildenau granite mine	Kirchberger granite
Zschorlau granite mine	Eibenstocker granite
Soraer Berg (Soraer Höhe) strip granodiorite mine	Sora-lamprophyre
Lohmen "Alte Poste" quarry	Saxon sandstone
Lohmgrund I & II quarry	Saxon sandstone
Mühlleite quarry	Saxon sandstone
Neundorf quarry	Saxon sandstone
Reinhardtsdorf strip stone mine	Saxon sandstone
Wehlen sandstone mine	Saxon sandstone
Theuma clay slate mine	clay slate

Natural dressed stone is mainly used in construction industry whose planning, creation and realization is principally marked with esthetic, technical and economic aspects. In the last years, economic aspects of construction projects have been considered primary in the plan of social and political interest. Thus, it is necessary to take ecological aspects into consideration from the very beginning of planning of a construction project. Natural dressed stone may play a significant role to this end. The application of the material at a construction site includes three preliminary steps, i.e. excavation, machining and transportation to the final destination, e.g. to a stonemason's.

The significance of transportation between the excavation site and the application site acquires a new aspect. The load of air with CO₂ related to transportation of selected natural stone from Far East is from forty to seventy times higher than in case of local natural stone.

A quotation from an ecological balance of a concrete compound /2/:

"Local building materials with no significant transportation cost have the largest number of advantages in any aspect..."

Assuming such a point of view, we should state that the local natural stone not only grants us with regional identification in its application as a building material but it also contributes to an ecological and economic balance.