

BOTTICINO: from “MARBLE” to COMMODITY

*Impact, Perspectives and Innovations
with the rapid change of the Global Market*



GHIRARDI
stone contractors

Giuliano Ghirardi – Geologist

Provincia di Brescia

Hard Limestone (Marbles)

***Estraction Basin of Botticino (Botticino Classico,
Semiclassico e Fiorito)***

*Botticino – Nuvolera – Nuvolento –
Serle – Rezzato*

***Variegated Breccias (Breccia Aurora, Marina,
Oniciata, Damascata)***

Serle – Paitone – Gavardo – Sabbio Chiese

Botticino



Physical and Mechanical Properties at the top of Category
Uniformity
High production: any size job

Main Use as Natural Stone

- Residential

- Public Construction



- Hotels

- Urban Landscape



Multiple Use as “Waste” or “Secondary Rough Material”



Extraction District

Authorized Quarries - n° 65

Total units that can be authorized - n° 131

Total M3 as planned in the current regulation (till 2024) based on the Lombardy Regional Law L.R. 14/98

- About 60.000.000 m3 (lumpsum)

M3 authorized at dec 2015 - About 30.000.000 m3

Employed - 250 ***Employed in the District*** - 1500

Royalties to Local Administrations - About 50.000.000 Euro
(in 10 years)

Production during last 10 years

<i>Year 2015 (Stima)</i>	<i>330.000 t</i>	<i>Lapideo</i>	<i>2.050.000 t</i>	<i>Pietrischi</i>
<i>Year 2014</i>	<i>354.000 t</i>	<i>Lapideo</i>	<i>2.050.000 t</i>	<i>Pietrischi</i>
<i>Year 2010</i>	<i>354.000 t</i>	<i>Lapideo</i>	<i>1.988.000 t</i>	<i>Pietrischi</i>
<i>Year 2008</i>	<i>430.000 t</i>	<i>Lapideo</i>	<i>2.794.000 t</i>	<i>Pietrischi</i>
<i>Year 2007</i>	<i>508.000 t</i>	<i>Lapideo</i>	<i>2.566.000 t</i>	<i>Pietrischi</i>
<i>Year 2005</i>	<i>452.000 t</i>	<i>Lapideo</i>	<i>2.310.000 t</i>	<i>Pietrischi</i>

Sales and Export

90% of Natural Stone with final destination Extra Ue

- Mainly as Blocks or semifinished product*
- Manpower Cost in New Markest 5 to 10% less then in Europe*
- Country with very high duties on Finished Product*
- Export of the European tecnology in developing countries*

100% of the “Secondary Raw Material” for National Use

- White Cement*
- Glues and Adesives*
- Artificila Levees*
- Inert material for many other uses*

New Market Dynamics and its Critical Issue

Crisis year 2007

- Affected the market from the end of Year 2008*
- Less demand form the traditional markets*
- Cement production in strong contraction*

Year 2009 – 2015

Construction Boom in India

- Developing of big cities*
- Botticino as best resource in term of quantity and uniformity (compare to main competitor)*
- Reduction of 70% of cement production*

From “Marble” to “Commmmodity”

Result of the factor already exposed

- Botticino purchased as Beige Hard Limestone (Beige and White the most requested of the market): availability, delivery and meeting construction request are the main factors*
- The prices made by the word demand: just a little the control on the producers' hand*



Necessary to modulate the production to the new dynamics

Extraction system and studies need an evolution:

- *Working operations made on 50 years old models*
 - *Remove all the material available in the lot*
 - *Finish the “good” material*
 - *What not sellable, to be destinated to other uses*
- *Cement Crisis*
 - *Change from open air quarry*
 - *Concentrate on the best Natural Stone*
- *Cost control (developing + extraction) to be determinated as any other commodity*

New technology

New Professional

Bigger Companies

Flexible Regulations:

*moving from open air to tunnels cannot
wait 10 years public procedures*

GHIRARDI

stone contractors

Giuliano Ghirardi

Geologist

Via Santa Croce, 49 - Carpenedolo - Italy

www.ghirardi.it giuliano@ghirardi.it