

#### Andrea Mazzetti Seismic Geotechnical Civil Engineer

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### Seismic Geotechnical Civil Engineer

Over 15 years broad based seismic geotechnical and structural engineering experience, embracing a variety of disciplines, including heavy civil engineering, geotechnical design of shallow and deep foundations, building and design consultancy. Most recent experience within design, construction/installation and commissioning of onshore wind farm, biogas industrial plant for energy production, civil facilities for electrical power plant (TERNA), seismic design of stainless tanks and pipelines. Possessing well developed supervisory and staff training skills (multi-skilled personnel). Also responsible for the management of site security, subcontractors and QA / QC personnel.

Personal	Born: 26 Agosto 1970 in Sarteano (SI) – ITALY			
information:	Married – No child – Non smoker – Full driving license			
Adavanced skills and compentences	<ul> <li>Earthquake engineering for structural design;</li> <li>Seismic design of reinforced concrete and prestressed concrete structures;</li> <li>Seismic design of ductile-steel civil and industrial structures;</li> <li>Seismic and geotechnical design of shallow and deep foundations;</li> <li>Seismic design of steel structures as silos, tanks and pipelines;</li> <li>Seismic design of anchorage of industrial facilities;</li> <li>Project design of Microtunneling and Horizontal drilling works;</li> <li>High level experience with FEA software as SAP2000, actually using PROSAP (2SI);</li> <li>High level experience with AUTOCAD2D and OFFICE;</li> <li>High level experience with design tools as AUTOCAD STRUCTURAL DETAILING;</li> <li>High level experience with BIM software as REVIT STRUCTURES;</li> <li>High level experience with geotechnical software as API++, CARL, SLOPE, LOADCAP;</li> </ul>			

### Professional experience

#### Senior Engineer at Enki s.r.l.

#### Gen 00 - Present

#### Infrastrutture s.p.a. / Hergo Wind s.r.l. (MI) 2014 – Monte Gazzaro Wind Farm (Firenzuola – FI)

- 5.1 MW total power, 6 WTG (Wind Tower Generator) with rated power 0.85 MW;
- Responsible for overall management of projects;
- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and programming;
- Controlling and direction of a multi-disciplinary professional team;
- FEA structural analysis of steel Wind Tower, height to 80 mt;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of wind tower anchorage respect wind and seismic loads according to Eurocode;
- Supervision and co-ordination of multiple contractors.

#### TECHNE s.r.l. (NA) / SELEX ES FINMECCANICA (RM) 2014 – Airport International Blaise Diagne Dakar - Civil Works and Technological systems

- FEA structural analysis of steel mast and lattice tower for Communication, Meteo, Navaids and Radio system;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of steel structures anchorage respect wind and seismic loads according to Eurocode;

### TERNA s.p.a (MI) / Ing. Zanieri (FI) 2014 – Electrical power plant 380/132 kV of Santa Lucia in Calenzano (FI)

- FEA structural analysis of steel structures, civil structures and building;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of steel structures anchorage respect wind and seismic loads according to Eurocode;

### Repower AG (MI) 2013 – Cisa Cirone wind farm (Pontremoli – MS)

- 52.8 MW total power, 16 WTG (Wind Tower Generator) with rated power 3.3 MW;
- Responsible for overall management of projects;
- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and programming;
- Controlling and direction of a multi-disciplinary professional team;
- FEA structural analysis of steel Wind Tower, height to 80 mt;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of wind tower anchorage respect wind and seismic loads according to Eurocode;
- Supervision and co-ordination of multiple contractors.

### TERNA s.p.a (MI) / Ing. Zanieri (FI) 2013 – Electrical power plant 380/132 kV of Pietramala (FI)

- FEA structural analysis of steel structures, civil structures and building;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of steel structures anchorage respect wind and seismic loads according to Eurocode;

### Rewind s.r.l. (FI) 2012 – Piancaldoli wind farm (Piancaldoli – FI)

- 19.2 MW total power, 24 WTG (Wind Tower Generator) with rated power 0.8 MW;
- Responsible for overall management of projects;
- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and programming;
- Controlling and direction of a multi-disciplinary professional team;
- FEA structural analysis of steel Wind Tower, height to 80 mt;
- Seismic and geotechnical design of concrete shallow and deep

foundations;

- Design of wind tower anchorage respect wind and seismic loads according to Eurocode;
- Supervision and co-ordination of multiple contractors.

### Infrastrutture s.p.a. / Hergo Wind s.r.l. (MI) 2011 – Monte Faggiola wind farm (Firenzuola – FI)

- 42.9 MW total power, 13 WTG (Wind Tower Generator) with rated power 3.3 MW;
- Responsible for overall management of projects;
- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and programming;
- Controlling and direction of a multi-disciplinary professional team;
- FEA structural analysis of steel Wind Tower, height to 80 mt;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of wind tower anchorage respect wind and seismic loads according to Eurocode;
- Supervision and co-ordination of multiple contractors.

## Cavalzani Inox s.r.l. (Calenzano - FI) / Ing. Galardi 2009/2014

- FEA structural analysis of several stainless steel tanks according to Eurocode and API650, volume range from 50 mc to 700 mc;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Seismic design of stainless pipelines according to ASCE and Eurocode
- Seismic design of tanks and pipelines anchorage according to Eurocode and ACI 318-05 and ACI 349-01

# ASM PRATO (PO) / PIN s.c.r.l. (PO) 2012 – Calice biogas industrial plant for energy production, 60.000 ton/year MSW and 2 gas engines 1.2 MW

- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and

programming;

- FEA structural analysis of steel electrical and civil structures and building;
- Seismic and geotechnical design of concrete shallow and deep foundations;

Infrastrutture s.p.a. / Hergo Wind s.r.l. (MI) 2011 – Monte Peschiena Wind Farm (San Godenzo – FI)

- 46.2 MW total power, 14 WTG (Wind Tower Generator) with rated power 3.3 MW;
- Responsible for overall management of projects;
- Ensuring all operations are undertaken in safety and in accordance with Italian law and project / company H&S policy;
- Management of project team functions;
- Full development and review of project planning and programming;
- Controlling and direction of a multi-disciplinary professional team;
- FEA structural analysis of steel Wind Tower, height to 80 mt;
- Seismic and geotechnical design of concrete shallow and deep foundations;
- Design of wind tower anchorage respect wind and seismic loads according to Eurocode;
- Supervision and co-ordination of multiple contractors.

### L'Aquila Earthquake, Italy 2009 – Over 200 site survey for seismic and geotechnical characterization of soils

- Seismic and geotechnical survey of site;
- Dynamic characterization of buildings according to HVSR measure;
- Seismic analysis and assessment in support of retrofitting of exiting Heritages structures and civil buildings.

#### Education:

1999

Faculty of Engineering, University of Florence, Master Degree of Engineering in Civil & Environmental Engineering, final classification 108/110.

#### **Research activity:** 2000/2001 - Faculty of Engineering, University of Florence, Geophysical laboratory: one year of research activity on earthquake and seismic engineering.

Profes	Professional							
short	courses							

- 2014 Society of Professional Engineers of Siena Short Course "Structural design of glass structures according to NTC2008 and Eurocode"
- 2014 Society of Professional Engineers of Siena Short Course "Innovative system technology for retrofitting of reinforced concrete structures"
- 2013 Society of Professional Engineers of Firenze Short Course "Health & Safety according to Italian law D.Lgs. 81/08"
- 2012 EUCENTRE PAVIA European Center for Training and Research in Earthquake Engineering – Short Course
   "Seismic Analysis, assessment and retrofitting of reinforced concrete structure and infrastructure"
- 2011 Society of Professional Engineers of Pistoia Short Course "Seismic geotechnical design according to NTC 2008"
- 2010 EUCENTRE PAVIA European Center for Training and Research in Earthquake Engineering – Short Course
   "Seismic design of concrete buildings"
- 2010 EUCENTRE PAVIA European Center for Training and Research in Earthquake Engineering – Short Course "Seismic design of tanks and assessment and retrofitting of existence tanks."
- 2010 Society of Professional Engineers of Pistoia Short Course "Structural design of steel constructions"
- 2010 Society of Professional Engineers of Pistoia Short Course "Seismic design of wood structures according to NTC 2008"
- 2008 EUCENTRE PAVIA European Center for Training and Research in Earthquake Engineering – Short Course "Seismic design assessment and retrofitting of masonry buildings"

**Professional** Society of Professional Engineers of Siena, number 680 **membership**:

Mother tongue

other language

Italian

Understanding		Speaking		Writing		
	Listening			Spoken production		
	Good	Excellent	Good	Good		Good

Additional information

**English** Self-assessment

Personal interest : Antique books, dogs, cooking, oil and wine tasting