

# A REAL CIRCULAR ECONOMY

THE A240 BLEND PLANT HAS ALLOWED VITALI SPA TO OPERATE ON THE LINATE BUILDING SITE WHILE PERFECTLY RESPECTING ITS GREEN VALUES IN A TRULY CIRCULAR ECONOMY

One often hears about “circular economy” but, faced with the proof of facts, few of us know exactly what it is, few put it into practice, and few realise the operating limitations and actual costs that this “production philosophy” involves in everyday business.

Vitali SpA is a company that has always had a vision, that of property, where technology, production processes and work on building sites are shaped by maximum efficiency. Efficiency, per se, is only obtained by investing in the latest technologies and optimising use of available resources. This is why, on the Linate airport building site, Vitali SpA decided to use a Blend A240 mobile plant for the production of the different mixes necessary to carry out the work.

“When Luca Vitali heard what our plant was capable of doing, reading an article on “Strade & Autostrade” in fact, recalls Paolo Leonardo Biglieri, Partner and Sales Manager of Blend, during a visit to the Milan-based airport, he called us and by the afternoon was here in the company to commission the



2. On the left, Luca Vitali, Partner and CEO of Vitali SpA, with Paolo Leonardo Biglieri, Partner and Sales Manager of Blend Plants



1. The Blend A240 is a mobile plant which is quickly operational



3. The A240 is available with two, three or four hoppers. Vitali SpA chose three hoppers to combine multi-functionality and production capacity by storing binders in traditional silos



4. The production zone of the mixes also includes the latest processes in recycled aggregates and the storage area near the plants.



5. A specific zone was dedicated to processing demolished concrete for transformation in recycled aggregates.

manufacture of an A240 with necessary configuration to meet the needs of the Linate building site”.

What can this A240 mobile plant “do”? “First and foremost, this is a real mobile and not just transportable plant; there is a big difference. When Vitali’s lorry departed from our site with the A240 it was about 14.00. At 18.00 the plant was ready for operation, taking into account the journey from Brescia to Milan and positioning on site. Vitali chose to use traditional silos that take more time to assemble. With our mobile horizontal silos, the times would have been identical to those of the A240”.

Mobility is definitely one of the fundamental factors that increases company efficiency and quickly depreciates investment. However, this is not enough to choose such a particular plant.

“The other fundamental element of the A240, in general, of all our plants, is its multi-functionality - continues Biglieri - because this plant can easily range from classic cement-bound mixes to very high RCK, to all kinds of mixes, including cold asphalt”.



6. Supply takes place without any need for additional concrete works, however Vitali Spa chose to build a ramp to facilitate loading

This fundamental concept has led to Blend's presence worldwide today with its machines from the Province of Brescia reaching all around the globe.

“The heart of our machines, whatever the size, is the continuous mixer associated with aggregate dosage. Aggregates, cement, bitumen or additives are continuously dosed by weight. Everything is controlled electronically using load sensors and allows constant mixing which is fundamental for the quality of the end product. For A240, the mixer is a counters rotating twin shaft type and allows production to reach 120 m<sup>3</sup>/hour. This machine can manage considerable production which, if you consider this is a mobile plant, further sustains its value.

### EVERY TYPE OF MATERIAL

Blend has developed its plants with those who work on the building site in mind, allowing production of every type of mix.

“The basic setting, the presence of a continuous mixer, the dosage of separate materials for each hopper and the addition of binders, emulsions, bitumen and additives during the final mixing phase has produced a plant capable of creating wide ranging mixes. Therefore, one can pass from cement-bound mixes to concrete with guaranteed resistance. The interesting thing is that the mixer allows processing with recycled aggregates. This was precisely what Vitali needed on the Linate building site.

Resurfacing of the Linate runway in fact involved demolishing the existing runway and recovering all the concrete using a separation process from the steel, primary crushing, screening and subsequent secondary crushing carried out on site with mobile plants.

“The mixes produced on this building site had an average percentage of recycled aggregates of 80% of the components - continues Biglieri - and only sand was externally sourced because its production on site was not possible. The impact on the environment and traffic around the airport was minimal and Vitali SpA calculated it avoided continuous transit of approximately 200 lorries per day. Without counting the demolished material completely reused”.

As part of a circular economy, the Blend A420 not only demonstrated its flexibility on site, but also a production capacity capable of dealing with demanding works. In fact, Vitali Spa used two plants on the Linate building site. The A240 was in fact supported by a traditional plant for production of a cement-bound mix only. “Our machine was supported by a plant capable of only producing a cement-bound mix and the multi-functionality of the plant allowed us to assist the machine in the production points requiring this type of material, then passing on to concrete production with specific RCK for the construction of foundations, drains and parking zones for the aeroplanes with high strength concrete. Changeover can take place at any time thanks to saving the recipes and ease of use”.



7. Additive mixing is possible by adding other types of external supply to the hoppers on the machine

In fact, the A240 has a management system completely identical to the other Brescia-based manufacturer's plants with simple recipes setting and designed for those working on building sites.

"We fine-tuned very simple software that follows a cascade logic which is identical to that of a smartphone, which everyone knows how to use without problem, and commands are given on the watertight display whose keypad which can even be activated while wearing work gloves. A remote control allows use even at a distance. By doing so, the operator can also carry out other temporary operations, such as feeding the hopper with the loader without losing sight of the production cycle".

## CONTINUOUS

The production capacity of the Blend A240 was greatly tested by Vitali Spa on the Linate building site.

During our visit to the building site, the plant had produced over 13,000 m<sup>3</sup> of mixes in approximately one month of operation. And the building site was only half-way through. The machine was working in continuous 24-hour shifts, 7 days a week for the entire duration of the works passing from simple cement-bound mix to R<sub>ck</sub>55 S4. "We were sure of the performance of our plant because we have experience behind us since 1983.



9. The command display, which is perfectly watertight, allows simple insertion of recipes and working functions. A remote control allows the plant to be operated from remote.



10. Loading the cement lorry is direct using the remote controlled belt that speeds up operations



8. The Blend A240 was positioned near a plant for cement mixes only which, in production peaks, was assisted by the Brescia-manufactured machine. The functionality of this A240 was particularly appreciated on the building site allowing quick changeover from cement mixes to specific RCK

We always begin from the point of view of those working on the building site because Fabrizio Tetoldini, one of Blend's partners, worked for years in the production and distribution of concrete and is very aware of the actual practical needs of those working with materials and, in particular, the problems encountered in production that could generate less quality.

This is why we chose continuous dosage of materials. In fact, we know very well that precision is fundamental, but a consistent product is even more important to obtain the guaranteed strengths and for the quality of any mix. We have diligently worked on these aspects, even gaining the trust of the London Underground and all the rail sector companies that need

performing mobile plants suitable for their operating needs. Then, we have companies that use our mobile plants on lorries not only as concrete mixing plants but also for production, transport and laying of inert material mixes intended for laying piping, fibre optic and other services. They have in fact understood that laying the elements directly with a conveyor belt

in a trench is much faster, safer, more productive and cleaner compared to the classic tipping lorry followed by a mini-loaders that moves the material". ■



11. The fully operational plant has allowed production, in just two months of operation, of over 13.000 m<sup>3</sup> of materials

*The Blend A240 is a truly mobile plant (and not only transportable) which takes two working hours to make it operational, thereby lowering the TCO.*



*Human/machine interaction is decisively simple both for basic setting and the presence of intuitive management software.*



### MAINTENANCE AND REPAIR

Blend offers an efficient and appreciated support service. Use of the global sales network with proven quality and reliability, guaranteeing the presence of spare parts, due assistance and, if necessary, training staff for intervention

### CONSUMPTION

One of Blend's strengths, from the smallest E025 to the A240, is definitely the general efficiency given by design that requires low hydraulic energy absorption, allowing considerable savings in terms of installed power.



### OPERATOR

The A240 is used via the same interface as all Blend plants. It is a practical, well-protected display which works with simple and intuitive software that is easy to remember and set.



### DIGITAL TECHNOLOGIES

The software designed by Blend to manage its plants is complete and functional, yet very simple. The technology applied allows drafting from remote of reports on the production executed, consumption and any interventions to carry out.

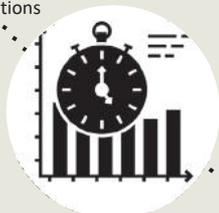


### PURCHASE COST

Blend plants have a very good quality/price ratio. If at first the purchase cost appears above average, by analysing in detail the characteristics and potential of this machinery you will realise it actually offers extremely convenient solutions.

## HOW MUCH DOES IT COST?

*The digital technology used by Blend is complete, yet simple, because it was designed for use by those working on building sites.*



### EFFICIENCY

Efficiency is the Blend mantra; the modular arrangement allows customisation even after-market. The low hydraulic absorption allows contained working costs. The multi-functionality allows a very high percentage of use, which increases with the use of recycled aggregates.



### DEPRECIATION

To date, no other company offers this kind of plant on the market with the same multi-functionality of the Blend plants. This gave rise to the second-hand market whose demand is always greater than supply, thereby guaranteeing high residual value.

*Blend plants are highly valued on the second-hand market thanks to their characteristics. Unique in their multi-functionality, production capacity and efficiency.*

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