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BELUGA, a mini hyper-mobile hot mix plant, produces asphalt with VEGECOL® BINDER

Jacques BONVALLET, FAYAT Group, Sales & Marketing Director
Jacky CAHOUR, Technical & Development Director, COLAS Centre Ouest
Paul TROUDET, Equipment Director, COLAS Centre Ouest

Topic: Sustainable roads / Environment
Bio Hot mixes production

- Low quantity
- Difficult introduction into the daily production of a stationary plant
- Cleaning asphalt plants is not easy

Top Tower 4000

Traditional solution

BELUGA solution

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Execution / Examples
A new production concept

- As close as possible to demand and application
- Output: 7 t / h
- 2 aggregate grades, weighted (bridge)
- $T = 130^\circ C$ / Temperature controlled
- No pollution, no dust, no noise
Selective extraction of aggregates and control of presence with weight-based metering
A mini hyper mobile hot mix plant

- Batch = 1 tonne
- Only gas burner for heating
- Innovating bag filter
Filtering device integrated into the stack

- Gases and water vapour
- Aggregates
- Filtered particles
Sustainable development

- On-site production / No transportation
- No heat losses
- $\Delta T = -40^\circ C$ / $t^\circ$ of traditional asphalts
- No handling requirements
- CO$_2$ reduction: -30%
- No dust
Végécol a Bio Binder

- From renewable plant resources
- COLAS patent; ISO 9001 certification
- Non contaminating (water), no toxic gas issues
- Translucent, can be coloured
- Production at 130°C
Field of use for the mix

- Any surface, any traffic
- Rather urban, sensitive environmental context
- Especially downtown cities, pedestrian pavements, cycle tracks
- Thickness = 5 cm, or 3 - 4, on binder course
- Production: generally < 60 t
Environmental balance
Conclusion

- A binder already used for traditional plants
- A new machine, the BELUGA, mini urban plant
- Could be used with traditional binder as well