

## NUEVAS TECNOLOGIAS EN PAVIMENTOS DE CONCRETO

New Technologies in Concrete Paving  
- Sebastian Nussbaum / WIRTGEN Germany



- Introduction
- Concrete Paving – Applications and machine technology
- INSET: Roads / Airports / Container Ports / Industrial Areas
- OFFSET: Monolithic Profiles
- Machine Control
- New technology highlight
- Q&A

# INTRODUCTION

- WIRTGEN GmbH
- Product and Sales Manager
- Concrete Products
- 10 years Slipform Paving experience
- North America, Latin America, Africa, Middle East, India
- Holder of „German Concrete Paving Licence“ (B-StB-Licence)
- Speaker for B-StB-Licence



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# THE WIRTGEN GROUP

Building the future together.

CLOSE TO OUR CUSTOMERS





# The WIRTGEN GROUP Concept

Company Use



6  
product  
brands

1  
corporate  
group





# WIRTGEN | Slipform Pavers – Offset

Company Use

With offset slipform pavers, the concrete is transported into the offset mold via a loading conveyor or a conveyor auger.

Models	10
Paving width	2,200 – 4,000 mm
Paving height	1,300 – 3,000 mm
Engine outputs	92 kW/125 hp – 180 kW/245 hp
Machine weights	10,000 – 27,500 kg





# Offset Application Examples

Company Use



# WIRTGEN | Slipform Pavers – Inset

Company Use

With inset slipform pavers, the concrete is placed directly in front of the machine and distributed by a spreading auger or spreading plough.

Models	11
Paving width	2,000 – 16,000 mm
Layer thickness	450 mm
Engine outputs	155 kW/211 hp – 321 kW/436 hp
Machine weights	17,000 – 155,000 kg





# Inset Application Examples

Company Use



Concrete roadway



Airport runway



Highway



Paving two-layer application



# WIRTGEN | Slipform Pavers – Auxillary Equipment: TCM & WPS

Company Use

Texture curing machines give the concrete pavement the desired surface texture, applying a dispersion which prevents the surface and edges from drying too quickly.

Models	8
Working widths	4,000 – 18,000 mm
Working height TCM	Max. 500 mm
Engine outputs	41 kW/56 hp – 231 kW/314 hp
Machine weights	7,500 – 51,000 kg



# WIRTGEN slipform pavers conquer the world

Company Use



# Global Sales and Service Network

Company Use



- WIRTGEN GROUP Factories
- WIRTGEN GROUP Sales & Service
- Authorized Dealers





# CONCRETE PAVING TECHNOLOGY

Slipform Paving: Inset / Offset / Machine Control / Innovations

# WIRTGEN slipform pavers conquer the world

Company Use



# Concrete Paving in India

Company Use





# WIRTGEN slipform pavers conquer the world

Company Use





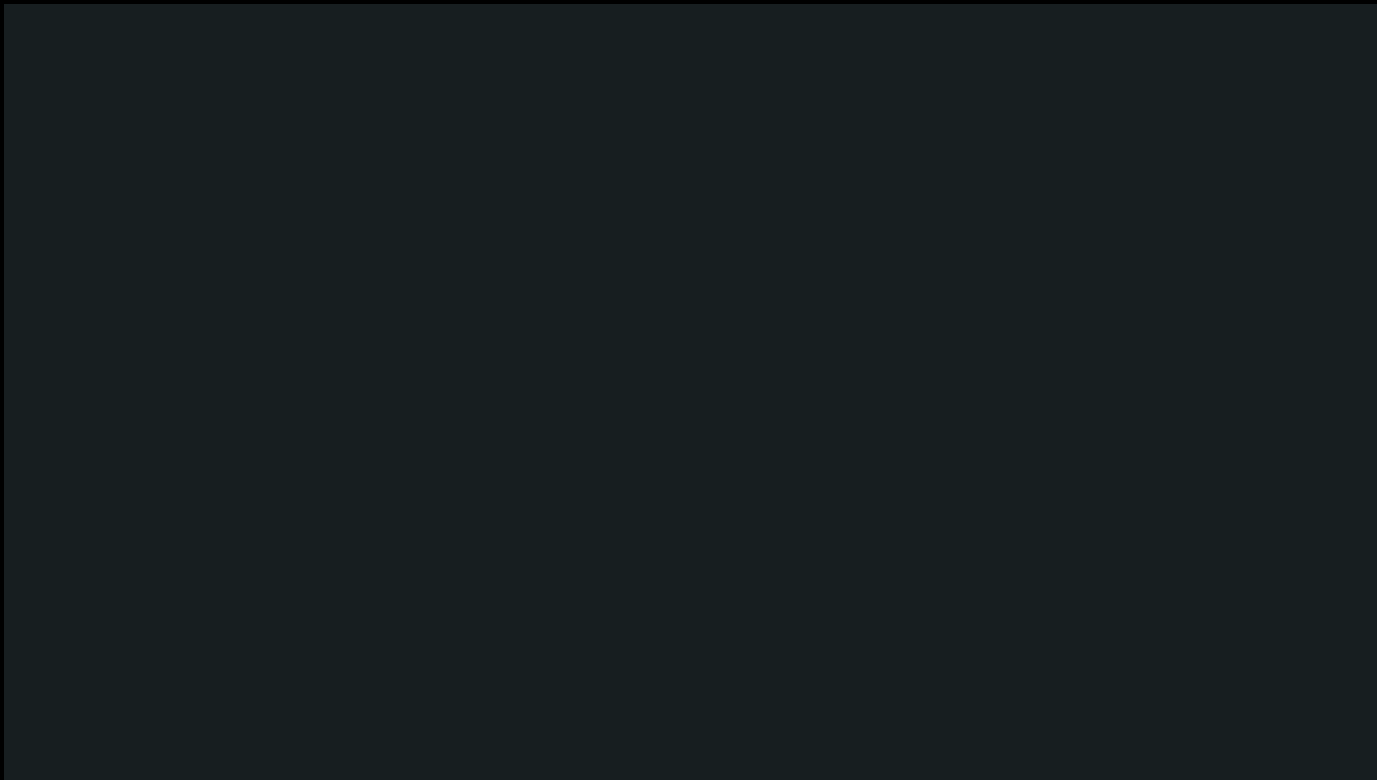


# Hitech Presents The CRCP Process



- Continous Reinforced Concrete Pavement
- Long lifetime
- Heavy Load Capacities
- High Resilience
- Low Maintenance
- WPS – Placer/Spreader for highest productivity and quality





# WIRTGEN slipform pavers conquer the world

Company Use







- Jointed Reinforced Concrete Pavement [Dowels and tie bars]
- Reinforcement conventionally placed in front of the paver [on baskets]
- DBI / TBI [dowel bar inserter / tie bar inserter] for installation of dowels with the machine – during the paving process
- Easier logistics
- Lower cost [steel baskets, transportation, labor]
- Higher Quality
- Reduced risk of misplaced dowels and tie bars

# Types of reinforcement

- dowel bars and tie bars on baskets

Company Use







- Automated process
- Replacing conventional dowel/tie bar baskets
- Cost savings
- Reduction of CO<sup>2</sup> footprint
- Increased productivity
- Reduction of risk of poor dowel alignment

# WIRTGEN slipform pavers conquer the world

Company Use









- Slipforming of curb & gutter
- Paving ~800 m/shift
- 2hrs for „virtual stringline“ included
- AutoPilot 2.0 instead of conventional stringline
- Operator ran system – no surveyor needed



# Benefits of stringless operation & AutoPilot 2.0

- Time and cost savings (compared to stringline setup/break-down)
  - Improved logistics
  - Safety aspects
  - Higher quality, no risk of manipulation
- 
- No surveyor needed
  - Data can be build on the jobsite – accroding to the real circumstances (not theoretical positions/elevations)
  - Data check/editing functions
  - All in package, no licence fees



# REVOLUTIONARY OFFSET PAVER

SP 33





# Addressing contractors' biggest challenges

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Company Use

- Utilization rates of special equipment
- Reduction of down times
- Productivity / Efficiency
- Total Cost of Ownership (TCO)
- Sustainable investments
- Quality ensurance
- Labor shortage
- Skilled labor shortage



# New Operating Concept

8" Color Touch Display

 **WIRTGEN**



# New Operating Concept

Additional 2<sup>nd</sup> Control Panels

 **WIRTGEN**





# New Slipform Paver SP 33

Extended Application Range with Crosspave

**W** WIRTGEN



OFFSET



Wirtgen SP 33 Offset 0164  
FAST CONVERSION

CROSSPAVE





- ▶ Extended application range
  - curbstone / curb and gutter
  - sidewalks
  - new jersey barriers
  - water drainages, U-/V-channels
  - minor slab pavements up to 3.0m width
  - ...
- ▶ Crosspave feature
- ▶ New HMI [human-machine-interface]

# MUCHAS GRACIAS! PREGUNTAS?

Thank you very much! Questions?



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