

# Electronic direct-drive packerhead machine for high volume pipe production

The ePak machine series is unmatched in packerhead production technology. The machine's revolutionary eDrive generates more power with greater control to manufacture the highest quality concrete pipe. The unique uniframe design makes conventional three and four post frame designs obsolete and delivers smoother and faster operation of all machine components. Additionally, the frame's bolted, two-piece construction makes installation into existing buildings easier and lowers shipping costs.

### Capacity

Epak's superior power, control technology, and fast component travel speeds result in tremendous output capability. The ePak is capable of manufacturing up to 100,000 tons per year in a single-shift operation.

# **System Benefits**

#### **Powerful Packing Action**

The ePak's rollerhead drive develops more power than conventional drive systems and has a wider torque/speed operating band – allowing precise packing control throughout the whole range of pipe diameters. Directly driven by two 60-pole permanent magnet motors, no gearboxes are required reducing maintenance significantly.

#### Precise Production Control

Equipped with the industry's most sophisticated control hardware and software algorithms,

the ePak's closed-loop control system continually monitors all the critical machine processes and performs the necessary micro-adjustments throughout the production process. This ensures consistant and high quality pipe production throughout the day.

## Fast and Smooth Travel Speeds

The main drive, toptable, and bellpacker are cantilevered to continually bear and smoothly roll upon the ePak's unique main frame. This configuration eliminates hard-to-maintain slide tubes and bearings which cause conventional machine components to shake and vibrate with wear. The result – up to 25% faster component travel speeds than conventional machines and dramatically reduced machine alignment issues, frame vibration, and expensive wear parts.

# Compact Turntable

With the ePak's exclusive uniframe, there is no turntable center post. The turntable is more compact and forms are mounted closer to the center of the turntable permitting faster rotation speeds. An electric chain drive eliminates slippage and permits precise ramp-up and ramp-down speeds as the molds enter the filling and offbearing positions.

#### Dense Bell Consolidation

An advanced bellpacker with a synchronized, four-shaft vibrator delivers powerful vertical vibration impact to quickly and effectively consolidate the pipe bell. The all-electric

design permits smooth, maintenance free operation. A self-cleaning top directs excess concrete to a central discharge point for easy cleanup.

# **Utilize Existing Tooling**

The ePak accepts state-of-the art Hawkeye-Pedershaab tooling or existing tooling of other makes and brands. The ePak rollerhead drive system is configured to run both bi- and uni-directional tooling.

#### **Operation**

The ePak normally uses two outer molds during production. There is always one mold in the fill station in the machine while the other mold is away for demolding of the product at the curing position - by either forklift truck, overhead crane or automated handling. The production cycle can run fully automatic. The concrete is fed into the mold via a concrete belt, the concrete is compacted by means of radial pressing by rollerheads - and the top of the pipe is finished by an oscilating spigot former in the top table. A single operator can easily monitor and control the machine from the control desk as the machine is also equipped with strategically placed cameras.

#### **Models Available**

- ePak 90
- ePak 120
- ePak 150

Additional models available on request.

Powerful Packing Action
Precise Production Control
Fast and Smooth Travel Speeds
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