

## PROGRESS MONOROLL INCREASES YOUR ENERGY EFFICIENCY

### Energy-efficient production

Sometimes, innovation is a marathon not a sprint. This is certainly true of the Progress MonoRoll HE (High Efficiency). Thanks to its unique design developed over many years, the MonoRoll requires 20-25% less energy versus traditional pellet mills with the potential to save nearly USD 40,000.= per year, per pellet mill and achieve ROI in three years\*. It's also more durable and robust, produces less noise and is easier to operate with hardly any vibration – thus offering improved cost of ownership and excellent ROI for feed mill owners and manufacturers.

### The challenge

The traditional pellet mill uses two or three rollers to press the conditioned mash feed into their final (pelletized) form. For many years it would feature three rollers, each set at a 120-degree angle; which evolved to a dual-roller. But neither technology could truly solve the challenge of excessive force on the heavy bearings of the solid main shaft – which in turn made the machine both energy and economically inefficient and even unstable, with heavy noise and vibration.

### The solution

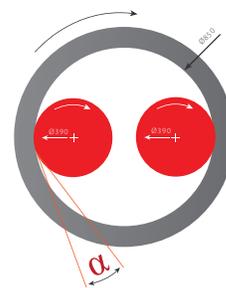
After more than three years of intense re-development, the MonoRoll pellet mill is officially – the only single-roll machine available today, and based on unique technology. The MonoRoll pellet mill is strong, sturdy and virtually silent with minimal vibration and much lower RPM than traditional pellet mills. Furthermore, the wider diameter of the single roller significantly reduces the risk of roll slip common in conventional pellet mills.

### The result

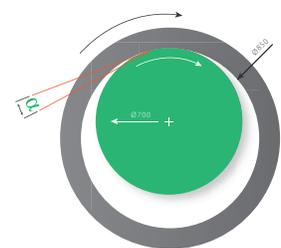
The MonoRoll pellet mill is ready to make a real impact. Specifically, it delivers:

- Up to **25% increase in energy efficiency** versus conventional pellet mills - enabling customers to increase their output using the same energy consumption.
- Improved cost of ownership: initial calculations suggest nearly USD 40,000.= per pellet mill\* per year, resulting in ROI within three years – and even less at higher capacity.
- More uptime - “**less plugs**” - and increased efficiency with larger production runs - the smaller feeding angle ensures an even distribution of the product preventing rollslip.
- **Longer lifetime of the die and roll** as a consequence of less vibration due to the lower die speed.
- **An extremely high-quality pellet at a consistent and highly efficient production rate.**

Original type with two rollers

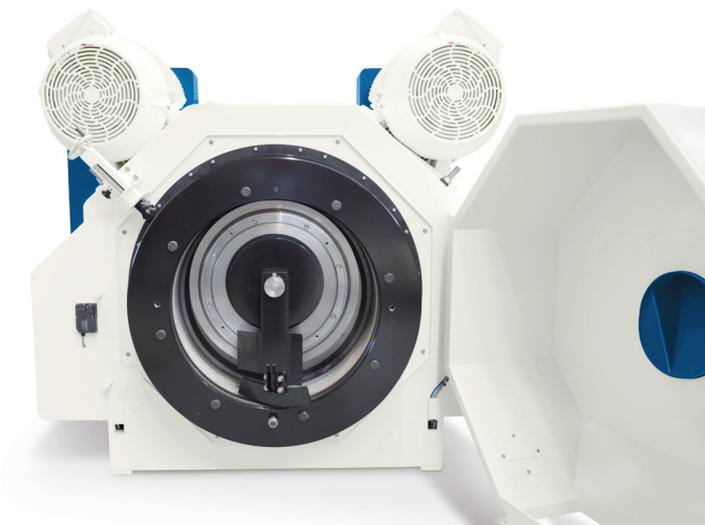


MonoRoll with one roller



Ultimately, the MonoRoll pellet mill offers the potential to operate at higher capacity - but using less energy and labour. This has been a long innovation journey but now we are ready to really shake up the industry with this technology.

**It's proven, it's effective, and it gives feed mill owners and managers what they need the most - the ability to be more competitive in their markets.**



\* Tests assume a minimum realizable capacity of 30 t/h for the MonoRoll press. Based on a 16 hour-per-day/6 days-per week/50 weeks-per year operation this yields around 145,000 ton per year. In terms of energy gain, the MonoRoll saves 3 to 5 kWh/ton. We assume 4 kWh/ton at a capacity of 30 t/h, with 1 kWh electricity assumed to cost around 7 cents.