

# EFFICIENT **BIOMASS** CONVEYING FOR POWER GENERATION



**Guttridge**

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## EFFICIENT BIOMASS CONVEYING FOR POWER GENERATION



GUTTRIDGE HAS THE EXPERTISE AND EXPERIENCE TO MEET ANY CHALLENGE. WITH A CONSISTENT TRACK RECORD OF SUCCESS WITHIN THE POWER INDUSTRY, OUR BIOMASS HANDLING EXPERTS WILL PROVIDE YOU WITH COMPLETE PEACE OF MIND...

### **The challenge of handling biomass**

Biomass handling systems for power generation must meet exacting reliability standards. Energy efficient conveyors with the robustness to operate 24/7 with minimal maintenance are required to handle:

- A diverse range of materials – from wood chips and pellets to food waste
- Streams with ill-defined flow characteristics
- Variability caused by differences in composition, moisture content and microbial degradation



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**Guttridge**  
50 YEARS 1962 - 2012

With a track record of success within the power industry, Guttridge has the expertise and experience to meet this challenge, and is a strong and trusted partner for biomass handling projects, large and small.

### **Guttridge – a ‘right first time’ solution**

Guttridge provides solutions that range from simple, standalone machines to fully integrated, purpose-built plant for large-scale power generation, delivered in partnership with contractors and project engineering companies.

To each project we bring the depth and breadth of experience that ensures a ‘right first time’ solution, even for demanding and novel applications. With fifty years of bulk materials handling experience in a diverse range of industries, we have the ingenuity and expertise to specify, design and manufacture conveying equipment that will match our customers’ exact requirements. Our sales engineers and

design specialists will gladly supply all technical data, readily offer their advice on every aspect of the project and remain enthusiastically involved throughout all stages of design and manufacture to final commissioning and beyond.



## CONVEYING MACHINES WITH LOW LIFETIME COSTS

Guttridge supplies a broad range of machines for biomass transport, all of which offer cost-efficient, reliable operation. With extensive application knowledge, we know how best to engineer conveying equipment that delivers reliability at a competitive price and with desirable maintenance levels, even for hard to handle materials with poorly defined flow characteristics.

A comprehensive in-house manufacturing facility enables tight control over every aspect of machine build so we can guarantee the quality of each and every system. Our skills extend to stainless steel construction with systems routinely manufactured in galvanised, painted or stainless steel finishes.

Guttridge machines are built to last with the design and durability to deliver low lifetime costs.

Guttridge machines particularly valued for biomass applications include:



### Screw Conveyors

- Handle most free-flowing and semi-free flowing materials
- Simple and robust in design with easy access for routine maintenance
- Cost-effective, versatile conveying, tailored to individual requirements



### Bucket Elevators

- Well-established, high efficiency design for free flowing and semi-free flowing materials
- Capable of handling very high throughputs
- Bucket shape and head/boot profiles customised to suit customer requirements



### Chain Conveyors

- Handle a wide range of materials – powders, flakes, grains and pellets
- Effective and simple operation with low maintenance costs
- Conveyor configuration and chain types specified to suit customer requirements



### Centreless Screw Conveyor

- Designed primarily for handling “difficult” materials prone to entanglement in a conventional conveyor
- Reliable operation – no end or intermediate bearings
- Less wear and consequently less maintenance than alternative designs



### Belt Conveyors

- Simple design with no internal parts to which the product can attach
- Suitable for very dusty (requiring containment) and/or low bulk density materials
- Capable of very high throughputs



### Dust Suppression Hoppers (DSH)

- An award-winning, innovative design for simple, effective dust control
- Increased product yield – less waste
- Low maintenance and low operating costs
- Ideal for wood pellets and other pelleted products