

Pipe Coil Technology Limited

Drum Winding Technology





Pipe Coil Technology Limited produce four types of drum take-up and payoff machines for use with plastic pipe, tube, hose and conduit. These are: pintle type, rim drive type, gantry type and under-roller type. For most applications a pintle type machine will offer the optimum blend of performance, versatility and cost effectiveness, however for some applications there may be technical or commercial factors which necessitate the selection of one of the other types. All drum winding machines for plastic flexibles are designed to give reliable long term operation in an extrusion environment.

Pintle type take-up and payoff stands

Benefits;

- ▄ Eliminates manual handling of drums and support shafts
- ▄ No overhead crane or lifting device needed to load and unload drums
- ▄ Compact footprint and low headroom requirement
- ▄ Can cover a wide range of drum sizes on one machine

Standard features;

- ▄ Powered and synchronised drum lift/lower
- ▄ Independent pintle width adjustment
- ▄ Drum rotation by AC electric drive with speed or torque control
- ▄ Automatic layering
- ▄ Foot mounted and fitted with lifting eyes

Optional features;

- ▄ Wheel mounting, or wheel mounting with powered travel
- ▄ Length measurement system
- ▄ Dual station configuration for quick drum changeover

Additional technology that can be specified with pintle type machines;

- ▄ Low Ovality Technology for use with high density polyethylene pipe
- ▄ Traversing stands for use with more rigid products that can not be deviated from process centre line



Standard Machine Sizes

Model	SWL	Drum dia range	Drum width range	Max speed	Drive power
PTE/PP05	500 kG	0.5 to 1.2m	0.3 to 1.0m	60 rpm	0.75 Kw
PTE/PP10	1,000 kG	0.8 to 1.8m	0.4 to 1.2m	45 rpm	1.0 Kw
PTE/PP25	2,500 kG	1.2 to 2.5m	0.6 to 1.6m	30 rpm	1.5 Kw
PTE/PP40	4,000 kG	1.8 to 3.5m	1.0 to 1.8m	25 rpm	2.5 Kw
PTE/PP60	6,000 kG	1.8 to 4.0m	1.0 to 2.0m	20 rpm	4.0 Kw
PTE/PP100	10,000 kG	2.0 to 4.6m	1.0 to 2.4m	15 rpm	7.5 Kw

Alternative machine sizes can be supplied to meet customer specification.

Rim drive type machines;

This type of machine is generally only used in production processes where drum dimensions do not vary, or the variation is very limited, and drums are individually mounted in support frames.

Benefits;

- ▄ Lower cost alternative to pintle type machines
- ▄ Compact footprint and low headroom requirement

Standard features;

- ▄ Locking mechanism to retain drum securely during operation
- ▄ Drum rotation by AC electric drive with speed or torque control
- ▄ Automatic layering
- ▄ Foot mounted and fitted with lifting eyes

Optional features;

- ▄ Length measurement system
- ▄ Dual station configuration for quick drum changeover





Gantry type machines

This type of machine is generally only used in processes where it is essential to have a 'roll through' capability for the drums. Apart from enabling drums to be loaded and unloaded from either side, this type of stand offers no benefits over pintle type stands.

Benefits;

- Eliminates manual handling of drums or support shafts
- No overhead crane or lifting device needed to load and unload drums
- Can cover a wide range of drum sizes on one machine

Standard features;

- Powered drum lift/lower
- Independent pintle width adjustment
- Drum rotation by AC electric drive with speed or torque control
- Automatic layering
- Foot mounted and fitted with lifting eyes

Optional features;

- Length measurement system
- Dual station configuration for quick drum changeover



Additional technology that can be specified with pintle type machines;

- Traversing stands for use with more rigid products that can not be deviated from process centre line

Under-roller type machines

This type of machine has very limited applications within the plastics sector. It is only suitable for payoff applications where line tensions are very low, drum dimensions do not vary greatly and drums are of steel construction with rims that are capable of supporting gross drum weight.

Benefits;

- Low cost
- Extremely compact footprint and low headroom requirement

Standard features;

- Drum rotation by AC electric drive with speed or torque control
- Foot mounted and fitted with lifting eyes

Optional features;

- Dual station configuration for quick drum changeover

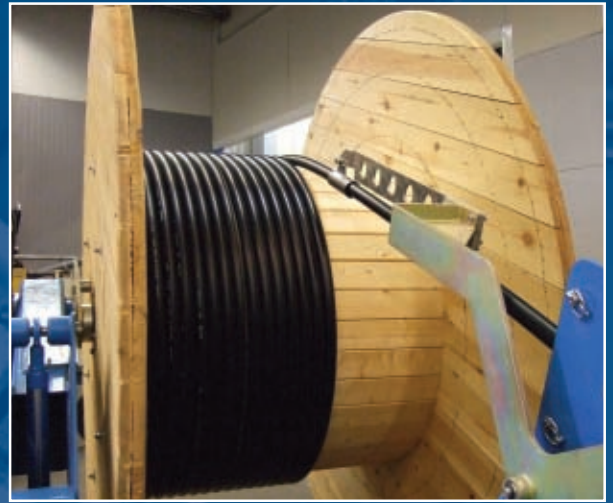


Drum to drum rewinding systems

Fully integrated systems combining payoff and take-up stands, or dual role stands, for efficient transfer of product from drum to drum at controlled speed and controlled tension. Rewinding lines can be integrated with customer specified in-line processes or quality control measures to give fully integrated systems. Systems are specified on a project by project basis.



Pipe Coil Technology Limited



Why industry leaders choose Pipe Coil Technology Limited

- /// We are committed to achieving the highest level of customer satisfaction and to building long term, mutually beneficial, partnerships with our customers
- /// We are experts at what we do; understanding customer needs, supplying technically superior solutions on time and in budget and providing excellent after sales support throughout product lifetime.
- /// Our project management, engineering and technical sales teams include specialists from the extrusion, oil & gas and automation industries who between them have many years experience in creating, delivering and implementing complex equipment solutions.

Products

For plastic pipe, tube, hose & conduit manufacture:

- /// Automatic coiling & packaging technology
- /// Semiautomatic coiling technology
- /// Off-line, high speed coiling technology
- /// Low ovality coiling technology (for HDPE pipe)
- /// Drum winding technology
- /// Engineered coiling solutions

For wire rope and large diameter cable manufacture:

- /// Drum take-up and payoff stands
- /// Turntables and spoolers
- /// Wire spooling and rewinding

For sub-sea umbilical, flow-line and cable manufacture:

- /// Carousels and loading systems
- /// Drum handling, moving and spooling equipment
- /// Production machinery; S-Z lay machines, rotating taping heads, caterpillar haul-offs, drum take-up & payoff stands
- /// Wire spooling and rewinding

For sub-sea umbilical, flow-line and cable installation:

- /// Carousels and loading systems
- /// Drum handling and spooling equipment
- /// Cable guides and transfer equipment

Pipe Coil Technology Limited

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