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Uhing Tension Control



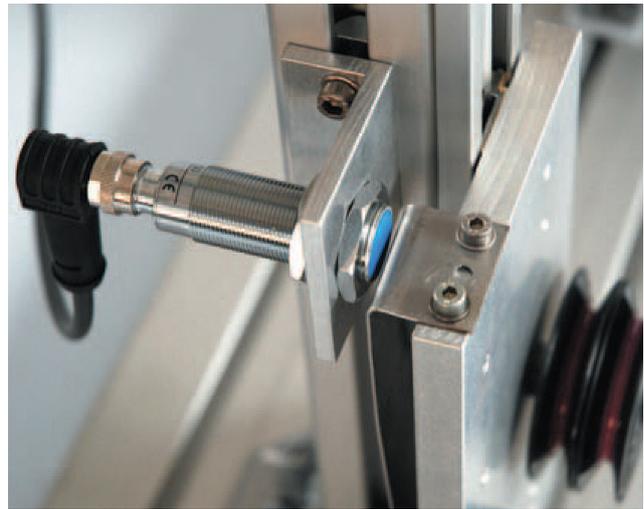
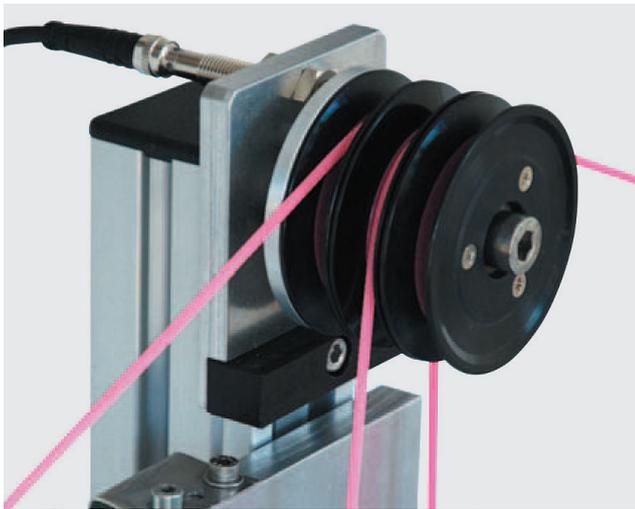
Uhing Tension Control is a dancer system that helps control line tension to improve the quality of wind onto a spool.

It uses pulleys on a weighted carriage to smooth out tension variations and can be configured with a feedback loop to control the speed of the payoff and/or take-up spool – thus giving ultimate fine control of the line tension.

Advantages

- Consistent tension (better quality of lay and reduced stress on the material from over-tension)
- Compact Design
- Robust, durable and built with Uhing Quality
- Simple adjustment
- Maintenance Free

Please contact us for a quotation.
Tel: +44 (0) 1923 222227
Email: technasales@techna.co.uk



1 - Function

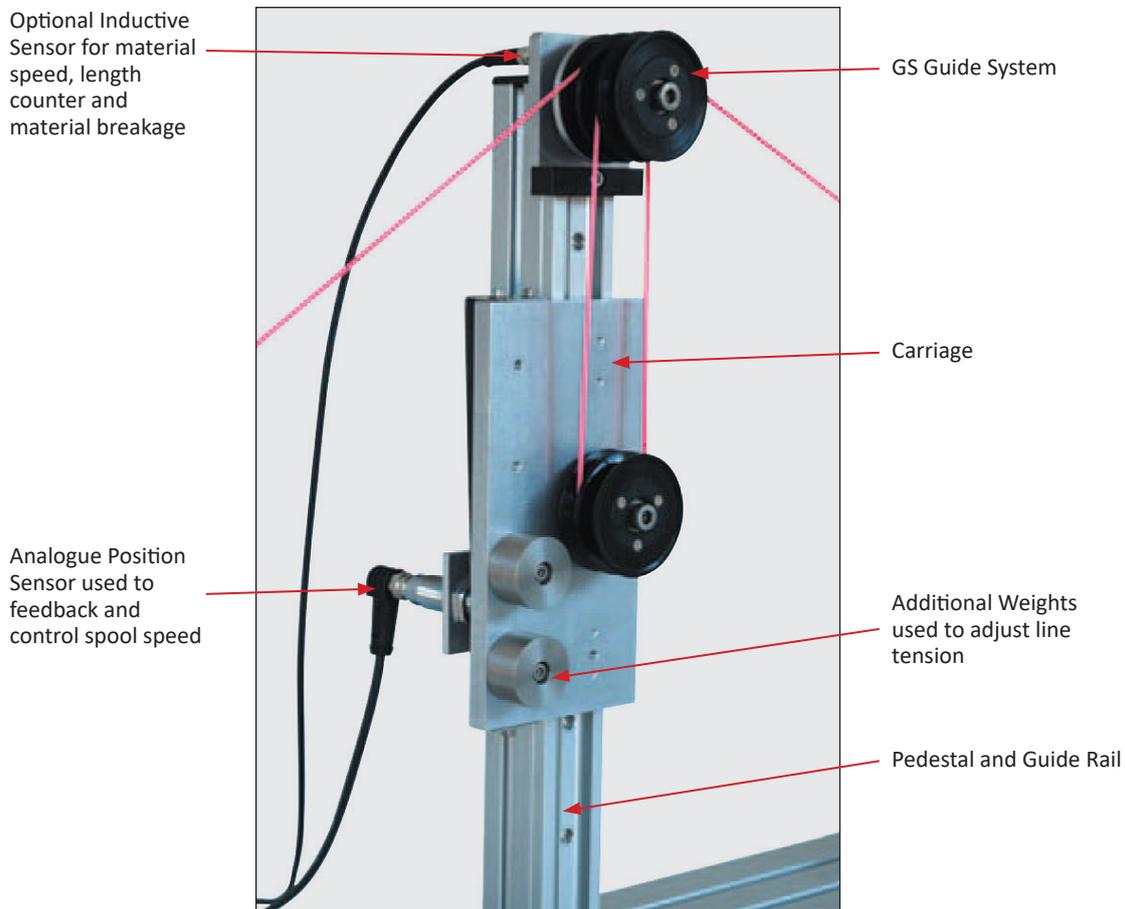
Tension variations occur when payoff and take-up spools are not perfectly synchronised. Dancers are a simple but effective method of controlling the line tension when winding material onto a spool.

The Uhing Tension Control ensures a constant line tension by running the product through a series of pulleys mounted to a weighted carriage. Any acceleration in the take-up will cause the Uhing Tension Control carriage to move in an upward direction to even the tension, whereas slower winding will cause the carriage to move down to avoid slack.

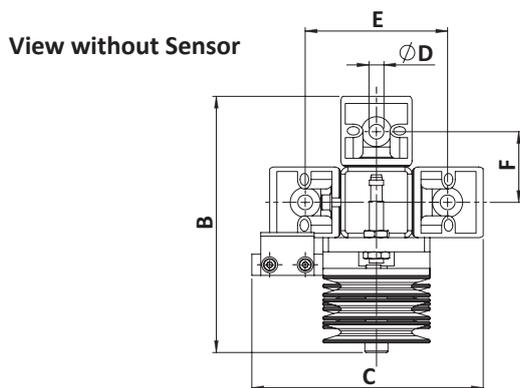
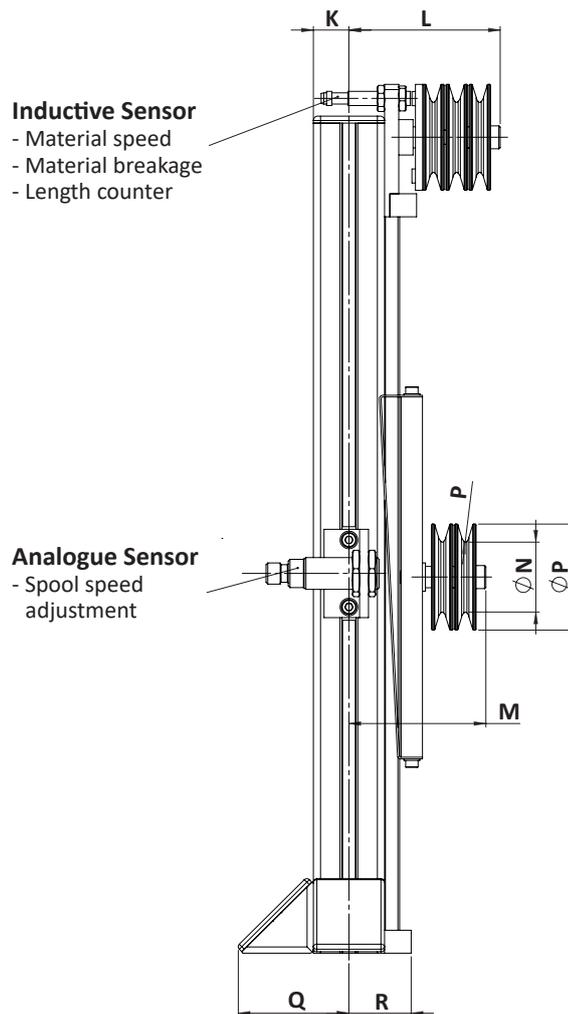
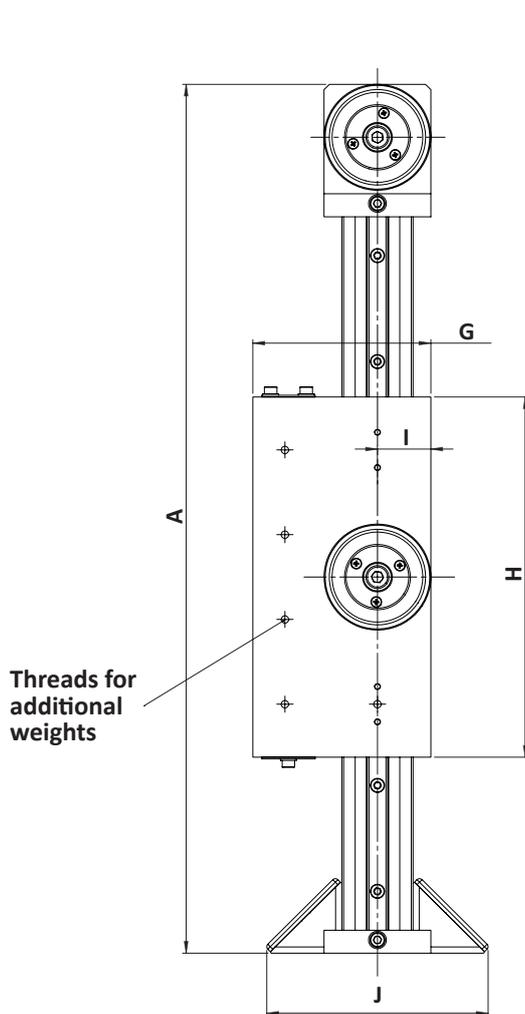
Uhing Tension Control can be adjusted using several pulleys and larger weights to give the desired tension level. A position sensor can be added to measure the carriage's height which can then be used to control the speed of the motorised take-up in a feedback loop which ensures flawless winding.

Uhing Tension Control can be used for round and flat material and further sensors can be incorporated to record the material speed, provide a length counter system or line break alarm (optional accessories).

2 - Example of Application



3 - Technical Data and Dimensions



Technical Data	Type 30 x 30	Type 40 x 40
Tension Force (N)		
Carriage with 1 Roller	3.2 - 5.7	12.7 - 18.5
Carriage with 2 Rollers	1.6 - 2.9	7.8 - 9.7
Material Capacity (mm)		
Carriage with 1 Roller	250	400
Carriage with 2 Rollers	500	800
Additional Weights (g)	100 (4 pieces)	150 (5 pieces)
Carriage Weight (kg)	0.56 - 0.96	2.15 - 2.90

Dimensions (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Type 30 x 30	321	103	91	6.6	60	30	60	130	15	92	15	57	51	20.5	30	R1	46	28
Type 40 x 40	492	145	130	8.4	80	40	100	204	30	125.5	20	85	77	39.6	60	R1	62.2	35