

# CHAIN SENSOR SYSTEM



# AUSTRALIAN WEIGHING EQUIPMENT Way ahead in Weighing

#### **PRODUCT GUIDE**

Weighing Systems / Onboard Weighing

# **Chain Sensor System**

#### ABOUT THE CHAIN SENSOR SYSTEM

The Chain Sensor System is a simple and versatile onboard weigher which is suitable for most forklifts, reach trucks, stock pickers and side loaders. It is more expensive than our standard hydraulic based weighing systems, but the Chain Sensor System offers a higher level in accuracy - with up to 0.5% accuracy of machine capacity. With this system fitted to your machines, you can get an instant weight reading of any lifted load- the operator will no longer need to deviate from their working path to weigh loads on a platform scale or weighbridge. There are a choice of indicators

available to pair with the Chain Sensor System, and a range of peripheral devices to customize the unit to better suit your applications and enhance safety, including; printers, audible alarms and hydraulic bypass systems. The simple design of this system features no moving parts and requires minimum maintenance which will save you time and money in the long run. Enjoy the benefits of installing the Chain Sensor System to your machines, including:

- Improved safety and adhere to OH&S standards
- Save time & money
- Low purchase price and installation costs
- Eliminate overload fines on loaded trucks
- Check consignment weights and incoming/outgoing goods
- Avoid trips to the weighbridge or platform scales
- Avoid machinery and racking overloading

#### **FEATURES**

- ± 0.5% accuracy of machine capacity
- 9Vdc to 70Vdc
- No loss of lifting capacity
- Rubber mounted bracket
- Rugged electronic design
- Australian design & manufactured
- Digital backlit display

- Reeving kits included
- Suits most chain types, or custom designs available
- Weatherproof housing
- Continuous weight read-out
- Proof loaded to 300% of capacity
- Compatible with Weight Master Totaliser and Safe Weigh
- Wide range of power supply designed for mobile equipment

#### **■ SUITABLE FOR**

- Forklift
- Reach Truck
- Stock Picker
- Side Loader

#### **HOW IT WORKS**

The Chain Sensor System load cell is fitted as a replacement link in the lifting mechanism chain. When a load is lifted, the load cell senses the tension in the chain and sends data to the indicator which displays instant weight reading.

The Chain
Sensor Systems are
the next level up in
accuracy - offering
up to 0.5% accuracy
of machine capacity. A
simple and versatile
onboard weigher.



Weighing Systems / Onboard Weighing

# **Chain Sensor System**

#### **■ SPECIFICATIONS**

		Chain Sensor System Specifications				
Туре		Load cell digital technology with microprocessor control				
Capacity		Suitable for most forklifts				
Accuracy System:		$\pm 0.5\%$ of capacity (e.g if lift capacity is 1000kg then an accuracy of worst case $\pm$ 5kg)				
Resolution		1, 2, 5, 10, 20, 50, 100, 200 (selectable to suit forklift)				
Temperature		-10°C to 70°C operating range				
Supply	Voltage:	9Vdc to 70Vdc standard				
	Current:	Less than 200mA				
Housing	Material: Size: Material:	Weatherproof (IP65) 250mm (w), 150mm (h), 125mm (d) Powder coated aluminium case stainless steel bracket				
Display		Digital LCD with other output options required e.g. alarm, printer, wi-fi are available				
Warranty		12 months on instrument and sensors 6 months on calibration				
Fitting time		Four (4) hours typically				
Recalibration		Recommended six (6) monthly				
Manufacture		100% Australian made				
Printer type	Characters: Supply: Current: Fields:	60 mm plain paper 20 per line 12v DC 16 to 60v with optional adapter 200 mA standby 1A peak printing Date, time, gross weight, net weight, tare, number of loads, total, grand total and customised header				
Pressure diversion System (when fitted)		Hydraulic pressure diversion system suitable for interlocking into main lift ram to stop forklift lifting only lowering to ground when in overload status				
Other Option	ns:	Wifi, Bluetooth, datalogging, software, links to computers, weigh in motion, relay outputs				



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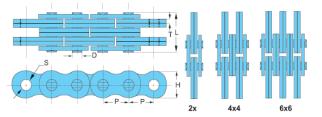
# **Chain Sensor System**

#### **■ CHAIN LOAD CELL SELECTION CHART**

#### **AL Series**

AL Series leaf chains - light duty - consist of link plates with the same contour and thickness as the pin link plates of ANSI roller chains having the same pitch.

	Pitch	Lacing	Min. Tensile Strength	Pin Dia	Pin Overal Length	l Link Thickness		Hole Dia. (min)	Approx. Weight
Chain No.	Р		kN {kgf} 16.7 {1,700}	D	L	Т	Н	s	kg/m
AL-422	12.70	2 x 2	16.7 {1,700}	3.97	8.40	1.50	10.40	4.02	0.38
AL-444	12.70	4 × 4	33.3 {3,400}	3.97	14.85	1.50	10.40	4.02	0.74
AL-466	12.70	6 x 6	50.0 {5,100}	3.97	21.30	1.50	10.40	4.02	1.10
AL-522	15.875	2 x 2	27.5 {2,800}	5.08	10.85	2.00	13.00	5.13	0.62
AL-544	15.875	4 × 4	54.9 {5,600}	5.08	19.35	2.00	13.00	5.13	1.22
AL-566	15.875	6 x 6	82.4 {8,400}	5.08	27.80	2.00	13.00	5.13	1.81
AL-622	19.05	2 x 2	38.2 {3,900}	5.94	12.65	2.40	15.60	6.00	0.87
AL-644	19.05	4 × 4	76.5 {7,800}	5.94	22.55	2.40	15.60	6.00	1.71
AL-666	19.05	6 x 6	115 {11,700}	5.94	32.45	2.40	15.60	6.00	2.54
AL-822	25.40	2 x 2	64.7 {6,600}	7.90	16.35	3.20	20.80	7.97	1.51
AL-844	25.40	4 × 4	129 {13,200}	7.90	29.80	3.20	20.80	7.97	2.98
AL-866	25.40	6 x 6	194 {19,800}	7.90	43.20	3.20	20.80	7.97	4.44
AL-1022	31.75	2 x 2	98.1 {10,000}	9.48	20.05	4.00	26.00	9.57	2.69
AL-1044	31.75	4 × 4	196 {20,000}	9.48	36.70	4.00	26.00	9.57	5.31
AL-1066	31.75	6 x 6	294 {30,000}	9.48	53.30	4.00	26.00	9.57	7.93
AL-1222	38.10	2 x 2	141 {14,400}	11.04	24.20	4.80	31.20	11.14	3.57
AL-1244	38.10	4 × 4	282 {28,800}	11.04	44.00	4.80	31.20	11.14	7.07
AL-1266	38.10	6 x 6	424 {43,200}	11.04	63.85	4.80	31.20	11.14	10.56
AL-1444	44.45	4 × 4	373 {38,000}	12.64	51.30	5.60	36.40	12.74	10.34
AL-1466	44.45	6 x 6	559 {57,000}	12.64	74.55	5.60	36.40	12.74	15.16
AL-1644	50.80	4 × 4	471 {48,000}	14.21	58.05	6.40	41.60	14.32	12.98
AL-1666	50.80	6 x 6	706 {72,000}	14.21	84.45	6.40	41.60	14.32	19.41



Load cells for chain systems come in all of the above standard configurations as standard. Should you require a custom design, please let us know and we will manufacture to suit your requirements. Please specify model type when ordering loadcell chain systems.

#### **BL Series**

Heavy Duty BL series leaf chains incorporate link plates from the next larger size pitch ANSI roller chains.

Lacing	Min. Tensile Strength	Pin Dia	Pin Overall Length	Link Plate Thickness Height		Hole Dia. (min)	Approx Weight
	kN {kgf} 16.7 {1,700}	D	L	Т	Н	S	kg/m
2 x 2	23.5 {2,400}	5.08	10.85	2.00	12.00	5.13	0.68
	23.5 {2,400}	5.08	12.95	2.00	12.00	5.13	0.84
	35.3 {3,600}	5.08	17.20	2.00	12.00	5.13	1.13
	47.1 {4,800}	5.08	19.41	2.00	12.00	5.13	1.28
	47.1 {4,800}	5.08	23.60	2.00	12.00	5.13	1.65
	69.6 {7,100}	5.08	27.80	2.00	12.00	5.13	1.96
	39.2 {4,000}	5.94	12.65	2.40	15.00	6.00	1.07
2 x 3	39.2 {4,000}	5.94	15.10	2.40	15.00	6.00	1.27
	58.8 {6,000}	5.94	20.10	2.40	15.00	6.00	1.69
4 x 4	78.5 {8,000}	5.94	22.56	2.40	15.00	6.00	1.89
	78.5 {8,000}	5.94	27.50	2.40	15.00	6.00	2.40
	118 {12,000}	5.94	32.45	2.40	15.00	6.00	2.80
	63.7 {6,500}	7.90	16.38	3.20	18.10	7.97	1.68
	63.7 {6,500}	7.90	19.75	3.20	18.10	7.97	2.04
	95.6 {9,750}	7.90	26.45	3.20	18.10	7.97	2.83
	127 {13,000}	7.90	29.80	3.20	18.10	7.97	3.18
	127 (13,000)	7.90	36.50	3.20	18.10	7.97	4.0
	191 (19,500)	7.90	43.20	3.20	18.10	7.97	4.73
2 x 2	103 (10,500)	9.48	20.17	4.00	24.10	9.57	2.59
2 x 3	103 {10,500}	9.48	24.20	4.00	24.10	9.57	3.20
	155 {15,800}	9.48	32.55	4.00	24.10	9.57	4.4
4 x 4	190 {19,400}	9.48	36.90	4.00	24.10	9.57	5.04
4 x 6	206 {21,000}	9.48	45.00	4.00	24.10	9.57	6.3
	286 {29,200}	9.48	53.30	4.00	24.10	9.57	7.5
2 x 2	141 {14,400}	11.04	23.98	4.80	30.10	11.14	3.70
2 x 3	141 {14,400}	11.04	28.90	4.80	30.10	11.14	4.6
3 x 4	216 {22,000}	11.04	38.85	4.80	30.10	11.14	6.5
4 x 4	282 {28,800}	11.04	43.39	4.80	30.10	11.14	7.4
4 x 6	282 {28,800}	11.04	53.70	4.80	30.10	11.14	9.29
6 x 6	424 {43,200}	11.04	63.85	4.80	30.10	11.14	11.1
2 x 2	186 {19,000}	12.64	28.04	5.60	36.20	12.74	4.83
2 x 3	186 {19,000}	12.64	33.90	5.60	36.20	12.74	6.5
3 x 4	299 {30,500}	12.64	45.50	5.60	36.20	12.74	9.10
4 x 4	373 {38,000}	12.64	51.30	5.60	36.20	12.74	10.3
4 x 6	373 {38,000}	12.64	62.95	5.60	36.20	12.74	12.0
6 x 6	559 {57,000}	12.64	74.57	5.60	36.20	12.74	14.5
2 x 2	235 {24,000}	14.21	31.62	6.40	42.20	14.32	7.3
2 x 3	235 {24,000}	14.21	38.20	6.40	42.20	14.32	9.00
3 x 4	387 {39,500}	14.21	51.40	6.40	42.20	14.32	11.3
4 x 4	471 {48,000}	14.21	58.05	6.40	42.20	14.32	12.9
4 x 6	471 {48,000}	14.21	71.25	6.40	42.20	14.32	18.0
6 x 6	706 {72,000}	14.21	84.46	6.40	42.20	14.32	22.5
2 x 2	353 {36,000}	17.38	35.59	7.20	48.20	17.49	9.8
2 x 3	353 {36,000}	17.38	43.25	7.20	48.20	17.49	12.1
3 x 4	554 {56,500}	17.38	58.40	7.20	48.20	17.49	16.9
4 x 4	706 {72,000}	17.38	65.86	7.20	48.20	17.49	18.9
4 x 6	706 {72,000}	17.38	81.05	7.20	48.20	17.49	24.0
6 x 6 1	060 {108,100}	17.38	96.15	7.20	48.20	17.49	28.7
8 x 8 1	156 {118,000}	17.38	122.8	7.20	48.20	17.49	36.0
2 x 2	530 {54,000}	23.73	47.94	9.50	60.30	23.84	14.4
2 x 3	531 {54,100}	23.73	57.90	9.50	60.30	23.84	17.9
3 x 4	795 {81,100}	23.73	77.82	9.50	60.30	23.84	24.9
4 x 4 1	062 {108,200}	23.73	87.78	9.50	60.30	23.84	28.4
4 x 6 1	062 {108,200}	23.73	107.70	9.50	60.30	23.84	35.4
6×6 1	592 {162,300}	23.73	127.62	9.50 -S	60.30	23.84	42.0
					S S	S	S S P P P P



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# **Chain Sensor System**

#### ■ AWE - THE BEST IN THE BUSINESS

AWE has built a reputation in providing world class products and services to customers from a wide range of industries for many unique applications. All the products come with AWE Quality Guarantee- giving you the assurance that they have been tested to meet or exceed the specifications and requirements of your application. At AWE, it's more than just delivering perfectly-designed equipment, it also requires a team of dedicated people who will back you up with great service and support. Any servicing, installation and technical support issues you encounter can be addressed either onsite or remotely by our engineers and tradesmen who carry qualifications as:

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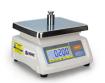
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#### ■ AWE PRODUCT RANGE





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**Packaging Equipment** 



**Onboard Weighing** 



**Batching Consoles** 



**Test Weight** 





Weighing Systems / Onboard Weighing

# **Chain Sensor System**

#### ■ WHO IS "AUSTRALIAN WEIGHING EQUIPMENT GROUP"

Jeff & Trevor Baillie started Australian Weighing Equipment (or AWE) in 1981, focusing on weighing solutions based on engineering principles. For nearly 40 years AWE has built its reputation as a leading supplier of robust weighing, packaging & bulk handling equipment. Our innovative engineering and continuous product developments have led to designs that will stand up to the rigours and demands of your applications.

AWE has increased its investment in manufacturing facilities with a new 3,200sq/m factory in Sydney which has

- A CNC Machine Shop
- Heavy Metal Fabrication Shop
- Larger work areas for our team of qualified tradesman

Acquisitions of Bradwood Packaging and Dendy Packaging and Design Engineering has increased our packaging and engineering experience.

In 2008, AWE established a manufacturing facility in China -AWE Group Packaging and Bulk Materials Handling Equipment, a purpose-built 5,000sq/m factory in Suzhou China (70kms From Shanghai).

All of the products we offer are Australian designed and manufactured under our strict quality control system in our own factories both locally and internationally.

#### **■ LOCATIONS OF AUSTRALIAN WEIGHING EQUIPMENT**



Australian Weighing **Equipment - Sydney Office** 

8 Heald Road Ingleburn NSW 2565



**Australian Weighing** Equipment - Melbourne Office

37 Barrie Road Tullamarine, VIC, 3043



Australian Weighing Equipment - Brisbane Office

7 Darnick Street Underwood, QLD1 4119

#### AUSTRALIAN WEIGHING EQUIPMENT ON SOCIAL MEDIA



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Dealer's Information:



Brochure: 150920