AURY AUSTRALIA

Screens and other vibratory equipment, built to last... but not costing you the earth

Aury Australia is a Sino-Australian joint venture company, an offshoot of a large mining equipment manufacturer, based in Tianjin, China. Made up of a dedicated team of professionals, the company intends to provide the best screening and vibrating equipment into Australasia and the Pacific.

Aury Australia is an integral part of a group of companies, with a turnover well in excess of $500,000,000 per annum. Whilst not fully debt-free, our group looks to source working capital internally, where possible.

Following world's best practice, using proven designs, Aury Australia takes advantage of the economies provided by large-scale Chinese production, with the aid of technical know-how developed in Australia.

Our team has sound research and design capability, backed up by technical expertise of a number of engineers who have been working with vibration technology for many years. Our design engineers have combined traditional vibrating technology with leading edge thinking and design techniques to produce capital equipment that is superior to anything found in the market today.

Fully-Integrated Production

Unlike many other capital equipment manufacturers, Aury's production facility is fully-integrated. All components used in our screens are manufactured by us. This covers integral components like exciters, cross beams and exciter beams, all machined and assembled in our Tianjin facility.

Partial exterior and interior views of our principal production facility in Tianjin, China

Our principal production facility in Tianjin covers over 17,000 square metres under roof. We also have a highly advanced CNC machining centre, large in-floor CNC milling/boring machine, highly specialised three-coordinates measuring machine, as well as a machine workshop and a wide range of machining equipment, both large and small.

We have an air-conditioned clean room, which is primarily used for dimensionally checking exciter housing.

Worldwide Sales Centred In Australia

The application and technology for our equipment has been developed in Australia. It is for this reason that sales effort outside of China will be based from Australia.

Aury (Tianjin) will service the China market.

奥瑞（天津）工

The Difference That Is An Aury Screen

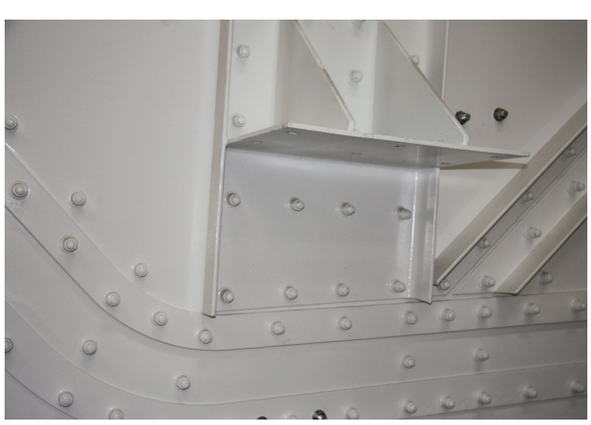
The combination of many years of experience, applied research and field trials has resulted in a range of screens that are a cut above the rest. With attention to detail we have made sure that the screen you receive from Aury Australia will achieve the desired results.

Built to last, our screens have been designed to be extremely sound structurally. Because of the arduous duty that is the norm for this type of vibrating equipment all efforts, in both design and production, to eliminate stress and avoid cracking have been exerted.

Our screens have many features that make them unique. We take the principle of structural strength, but with lighter mass, to provide a product that uses less power and has lower operational noise, while cutting down on the need for unnecessary maintenance.

Aury screens have been used in coal processing for many years.

A feature of our screens is that our side plates are weldless. They are assembled using Huck-bolts to assure minimal stress on the structure. The exciter beam is a box beam construction and very strong, minimising unnecessary weight.



All steel plates are weldless and are assembled using Huck-bolts, to reduce stress on the structure.

Attention To Detail

The cross beam used in our screens is a special circular pipe, which is made for strength while keeping to lightweight requirements. The surface is coated with a special two-pack polyurethane or rubber to provide greater corrosion and abrasion resistance.

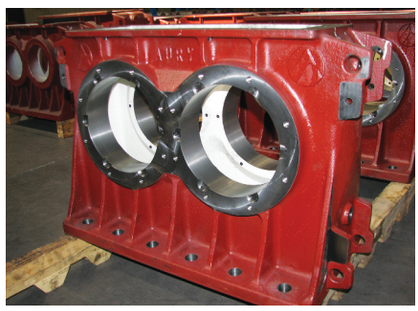
All components used in the manufacture of the screens are blast cleaned before being painted. All assembly points are sealed to prevent water ingress.

Our steel damping springs are designed to provide 96% to 98% vibration isolation.

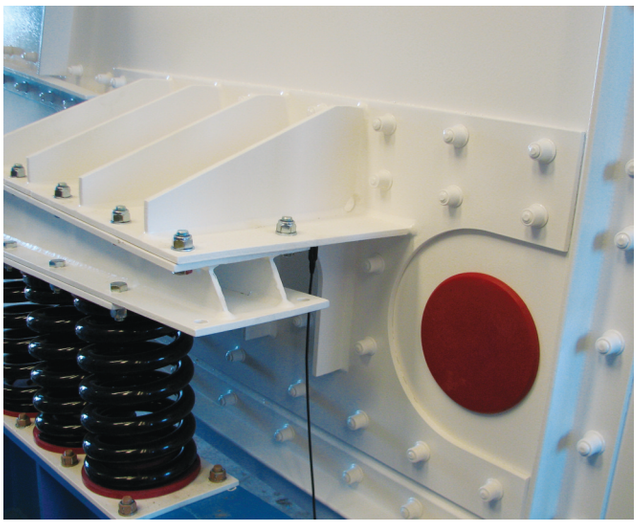
A Note On Testing

Design and manufacture of all our screens is done to world's best practice. Each screen is designed to a client's exacting requirements.

Before a screen leaves our factory we test run and carry out frequency analysis to ensure it operates as required at the correct speed and amplitude to suit the application.



Banana Screens



ABS3673 Single deck banana screen on a test frame (top), the distinctive red polyurethane plug, an Aury screen trademark (left)

Single Deck

Current Models

ABS1848
ABS1861
ABS2448
ABS2461
ABS3061
ABS3073
ABS3085
ABS3661
ABS3673
ABS3685
ABS4361
ABS4373
ABS4385

Guide to choosing screen models: First three letters refer to product, the four numbers refer to size: e.g., ***ABS1848*** *(**A**ury **B**anana **S**creen **1.8** x **4**.8 m)*

Double Deck

Current Models

ABS1848
ABS1861
ABS2448
ABS2461
ABS3061
ABS3073
ABS3085
ABS3661

Our single deck banana screens have been used extensively for coal washing applications over many years. Screening deck angles normally used are 25° down to 5°. Other deck angles are available to suit your application.

Featuring all heavy duty construction, our banana screens are designed and manufactured for very rigorous environments. They are available in single and double deck configurations.

Cross beam cleats are cast steel saddles which are Huck-bolted to the round cross beams. Special washers are employed to ensure the Huck-bolts have positive connection Cross beams are protected by 6mm thick polyurethane coating.

Alternative surface coatings such as rubber or ceramic composite coatings are available.

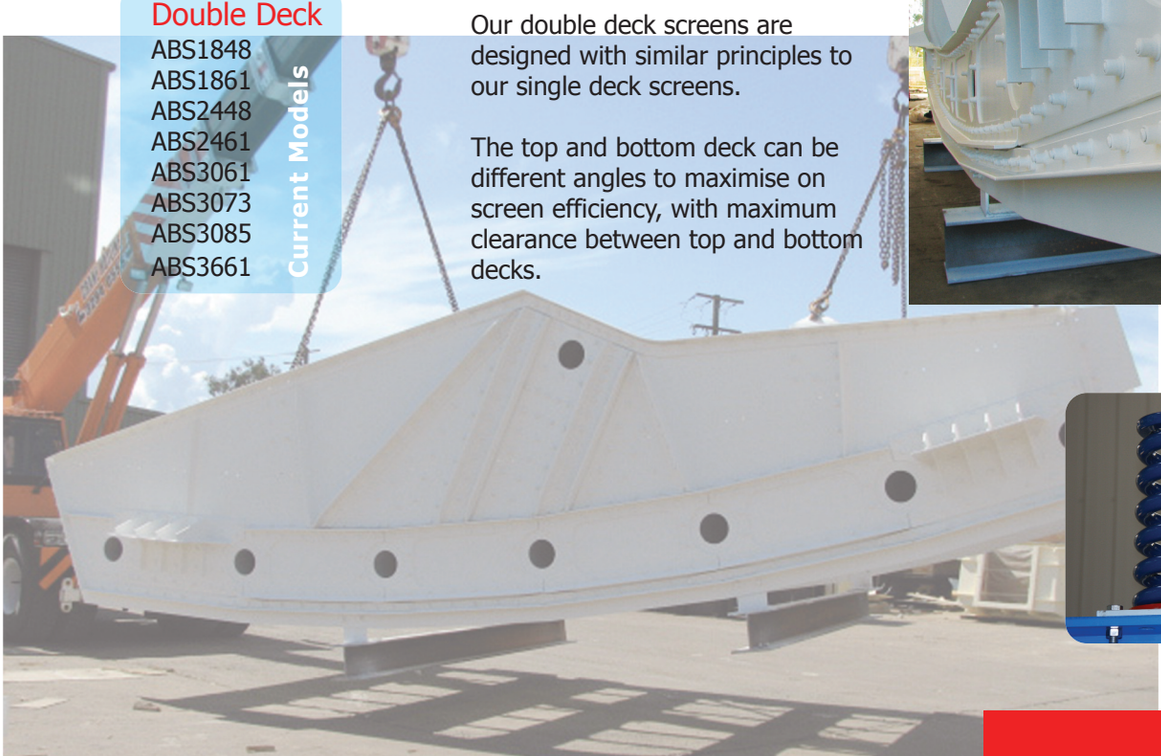
Cross beam cut outs in the side plates are plugged with a polyurethane plug to prevent the ingress of fluids and solids.

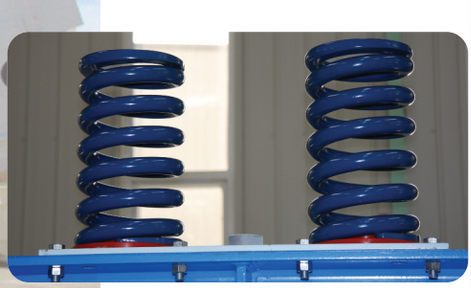
Extended side plates minimise corrosion by eliminating internal joints and crevices making drip angles redundant.

Our double deck screens are designed with similar principles to our single deck screens.

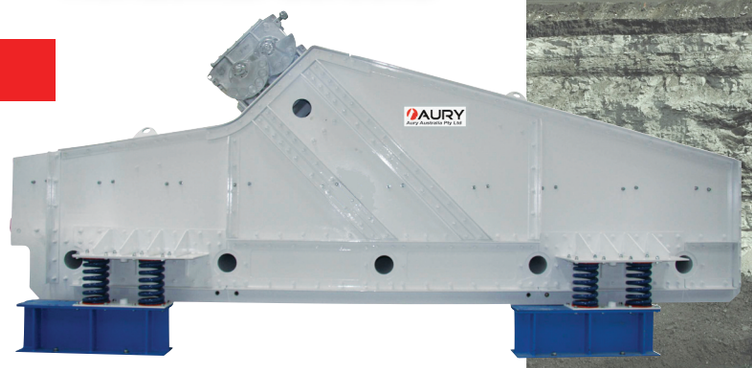
The top and bottom deck can be different angles to maximise on screen efficiency, with maximum clearance between top and bottom decks.

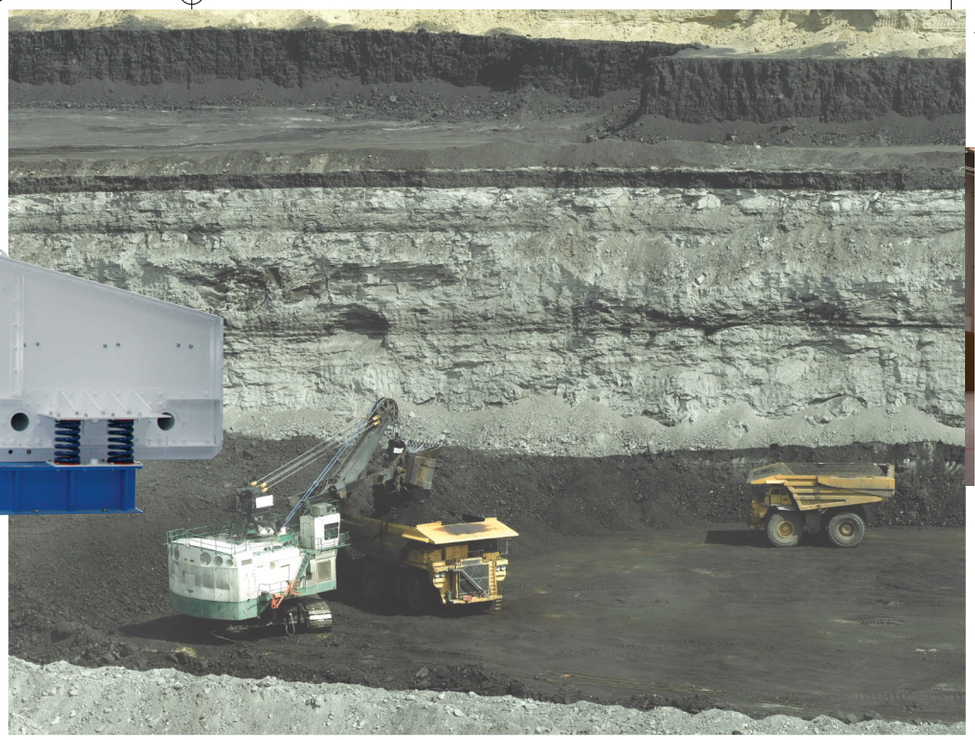
Note extended side plates





Horizontal Screens





Single Deck

Current Models

AHS1848
AHS1861
AHS2448
AHS2461
AHS3061
AHS3073
AHS3085
AHS3661
AHS3673
AHS3685
AHS4361
AHS4373
AHS4385

Aury screen components are all manufactured in our own workshops, with great attention to quality and detail using state-of-the-art equipment and leading edge production techniques.

Single deck horizontal screen model AHS3061

Round tubular cross members are stress relieved prior to machining and are sized to cope with unexpected but normal overload conditions. The end flanges are attached to the cross beams with full penetration welds with robotic controlled welding machines. The welds exceed the Australian standards (AS 1554 Special purpose welds part 5).

The round tubular cross beams minimise build up of under-flow material on the cross beams and reduce the possibility of pegging when larger apertures are used as compared with rectangular cross members.

Double Deck

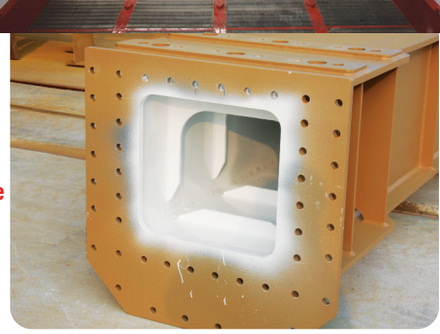
Current Models

AHS1848
AHS1861
AHS2461
AHS3061
AHS3073
AHS3085
AHS3661

Exciter beams are a fabricated box beam construction, stress relieved and flanges and exciter mounting pads are all machined. All welds exceed the Australian welding standards AS 1554 Part 5.

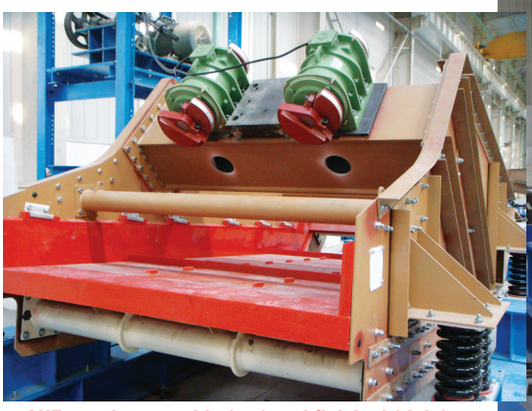
Horizontal screens are available in single and double deck configurations.

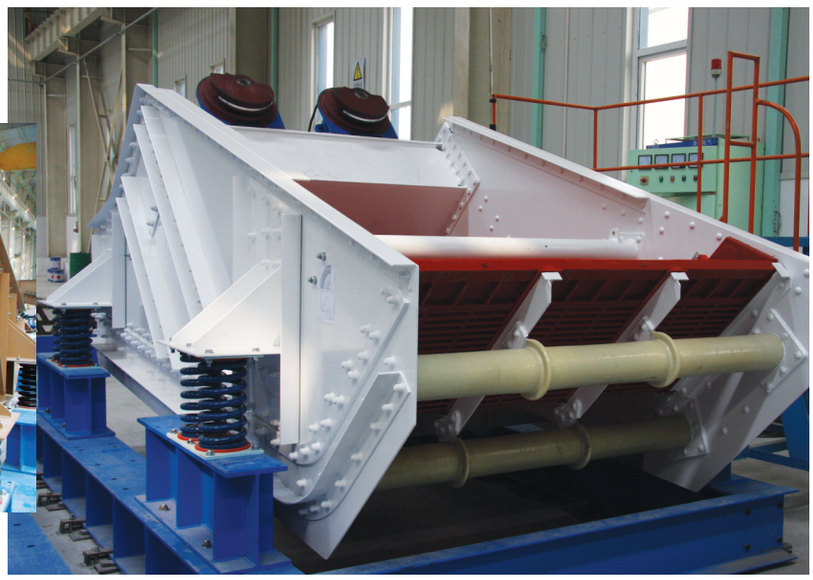
Exciter beam installed, prior to final assembly



End flange detail

High Frequency Screens





AHF1836 in assembly (top) and finished (right)

HF Screens

Current Models

AHF1236
AHF1530
AHF1536
AHF1836

This page features the AHF 1836 (screen), our most popular model. Measuring 1.8 m x 3.6 m, this unit is the largest in our current range.

The Aury AHF screen features twin vibrator motors counter rotating to produce a linear motion. Available in 1000 rpm and 1500 rpm.

The AHF screen has a 45° sloping feed section and the screen is generally up hill 5° to improve de-watering. The cross beams are liberally sized round tubular beams with machined clamps for attachment to the longitudinal rails.

Drives and Guards

Typical Aury exciter guards

Aury screen drives can be fitted on either side of the screen or can be mounted above and in the centre of the screen.

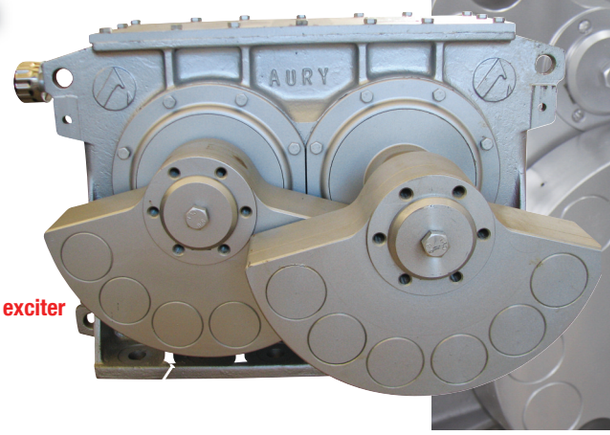
The drive and intermediate shafts are connected with either universal couplings or Aury polyurethane disc coupling.

Drive shaft, lay shaft and vee-belt assembly

The Vee belt drive is fitted to a base plate with a lay shaft mounted in two plumber block bearings. The Vee belts are easily accessible for ease of maintenance and adjustment.

Exciter guards are ruggedly built and comply with relevant Australian safety standards.

Exciters



Typical Aury exciter

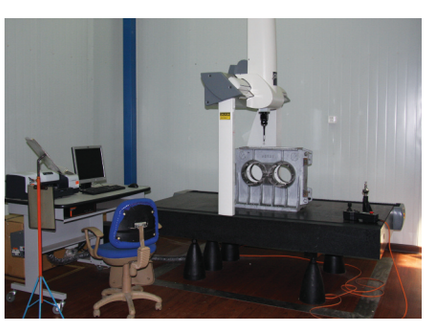
All Aury screen components are manufactured by us in our own workshop.

The Aury linear motion exciter is a low noise, long life exciter with lip and labyrinth seals to prevent ingress of dust and moisture.

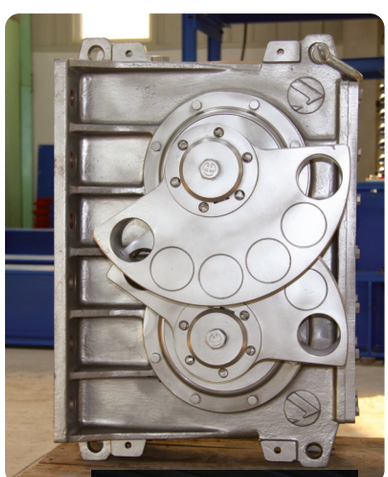
The Aury special ventilation breather prevents foreign matter entering the exciter and allows good heat dissipation, hence the exciters run cooler than otherwise possible without the breather.

Three dimensional measuring units for checking exciter housing dimensions and alignment in an air conditioned room to ensure accuracy.

Precision CNC lathe are used to manufacture exciter components, plug weights and labyrinth seals.



Quality control room



Aury exciter ventilation

Service

Aury after sales service can be carried out on-site or our Brisbane workshop.

Our service engineers are experienced in installation, supervision and commissioning, site inspection and training. Aury spare parts are supplied Australia-wide from our principal works in Brisbane.

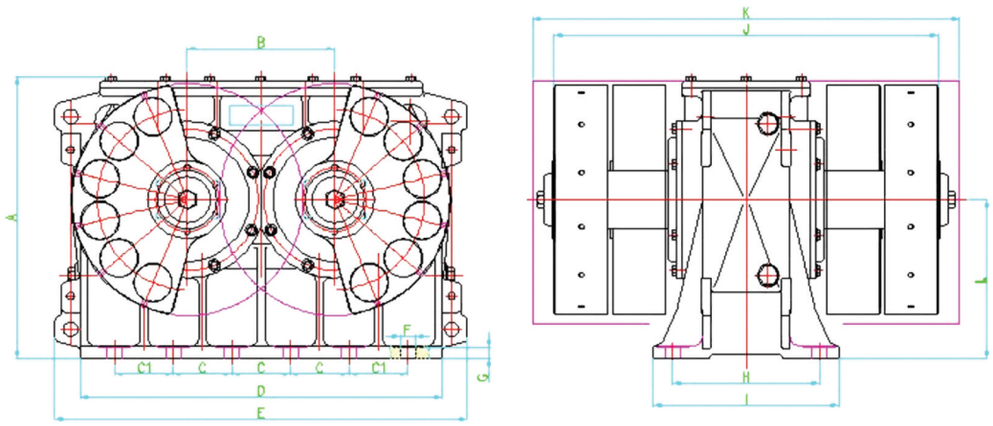
We also offer an exciter service exchange program.

Aury engineers checking screen frequency modes as part of their shop testing procedure (above). All Aury screens go through a vigorous test program during test running, where frequencies are checked to determine the optimum operating speed and checked for any anomalies in screen assembly.

Technical Data - Exciters

Model No.		ZDQ30A	ZDQ30AF	ZDQ30AS	ZDQ20A	ZDQ20AF	ZDQ20AS	ZDQ10A	ZDQ10AF
Exciter speed/rpm	max	1000	1000	900	1000	1000	900	1000	1000
	min	650	650	650	650	650	650	650	650
working moment/kg·cm	max	3466	3924	4642	5792	6580	7176	9922	11162
	min	2078	2356	2788	3372	3830	4182	5728	6420
static moment/kg·cm	max	1733	1962	2321	2896	3290	3588	4961	5581
	min	1039	1178	1394	1686	1915	2091	2864	3210
Exciter force output/KN	max	189	215	206	317	360	319	543	611
Motor power/kw	nom	7.5	11	15	15	18.5	18.5	22	22
Mass with plug weight/kg	nom	500	520	556	910	950	985	1300	1360
Plug material		steel	steel	steel	steel	steel	steel	steel	steel

Aury ZDQ Directional Force Exciters - Dimensions



Model No.		ZDQ30A	ZDQ30AF	ZDQ30AS	ZDQ20A	ZDQ20AF	ZDQ20AS	ZDQ10A	ZDQ10AF
Outline dimensions (mm)	A	575	575	575	576	576	576	680	680
	B	277	277	277	302	302	302	377	377
	C	120	120	120	120	120	120	120	120
	C1	120	120	120	120	120	120	150	150
	D	600	600	600	740	740	740	910	910
	E	751	751	751	845	845	845	1020	1020
	F	Φ25	Φ25	Φ25	Φ31	Φ31	Φ31	Φ31	Φ31
	G	35	35	35	35	35	35	30	30
	H	260	260	260	300	300	300	390	390
	I	340	340	340	380	380	380	470	470
	J	594	630	698	786	840	896	902	952
	K	701	737	805	893	947	1003	1009	1059
	L	320	320	320	325	325	325	380	380
Bolt		M24	M24	M24	M30	M30	M30	M30	M30
Bolt Grade		AS1110PC8.8 (830 MPa UTS)							
Note		Allowable maximum force may limit plug weight/speed combinations							

Due constant product development, all specifications in this brochure are subject to change without notice.

AURY

Aury Australia Pty Ltd
Address, phone nos. etc