Precautions for the use of PWB® Lifting Clamps

Important: Before using PWB Anchor Lifting Clamps be sure to read the instruction manual.

Checking loads before use

- Ascertain the weight of a load and its centre of gravity.
- When lifting a load longer than 1m, calculate the centre of gravity in the lateral (side to side) direction.
- Ensure the load is free of oil and water.

Use clamps suitable for the lift

- Select clamps according to the mechanism and capacity necessary for the lift.
- Use clamps within the specified capacity (maximum working load, opening size and material hardness).
- Do not lift loads that have a thickness less than 1/4 of the maximum clamp opening size.
- Match the clamp working load capacity to the weight of the load. A load should weigh at least 1/5 of the working load weight of the clamp.
- When lifting loads where the surface is slippery (e.g. oil, water etc.), remove the oil first and ensure that the clamp teeth are in good condition.
- Select the appropriate clamp.
- When lifting diagonal materials, use a model SBB clamp and refer to the instructional manual for the correct lifting procedure.
- When lifting long materials vertically (more than 10 times in length/width), use the model SBB Clamp and refer to the instructional manual for the correct lifting procedure.
- Do not use clamps instead of hooks.
- Never use clamps that have been hit hard or had impact type loads placed on them.
Precautions when attaching clamps

- Determine the position to attach clamps so that the safety lock lever (or clutch) does not touch the wire, chain, lifting shackle, or other objects when lifting or lowering.
- Ensure clamps are attached at a position higher than the centre of gravity of the object.
- Make sure the clamps are set close together on the load.
- Make sure that the safety lock (latch or lever) has been set securely.
- Always determine positions for attachment taking into account where the load will be set down.

General precautions

- Do not clamp steel plates from the side if they are to be raised vertically.
- When using many points for lifting, pay attention to unbalanced loads.
- When lifting heavy or long objects (more than 1m), ensure the lift is completed with 2 to 4 lifting clamps.
- Use only certified lifting wires and chains.
- Before lifting check for twists and kinks.
- Use clamps with the correct orientation.
- Do not lift several different objects using separate clamps suspended from one hook.
- Do not lift more than one steel plate with one clamp.

Precautions when lowering and setting down

- Anticipate the impact load where you will be lowering the object.
- Operate a crane slowly to reduce the chance of high impact on the clamps (loading shock).
- After removing clamps from objects ensure that they do not collide with each other.
PWB® Horizontal Lifting Clamps

Horizontal Plate Clamps - Model HO

- Lightweight, induction-hardened, special alloy cam with a lifting hole.
- No side-slipping construction.
- Automatic, powerful clamping mechanism, clamps securely in proportion to the weight of the load. Leaves the materials free from unnecessary scars.
- Main body made of high tensile steel with a welded construction, resistant to cracks.
- Simple construction and operation.
- Baked epoxy finish.
- Must be used in pairs for horizontal lifting.
- Spring closed action on 1 tonne WLL unit (pictured).
- Sprung open on 2tonne & 3 tonne WLL units.
- Manufactured in Japan.

Applications: Horizontal lifting, moving of steel plate

Australian Standard: AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>I (mm)</th>
<th>J (mm)</th>
<th>WLL per pair (Tonnes)</th>
<th>Set (comprising)</th>
<th>Effective Thickness (mm)</th>
<th>Weight (kg)</th>
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PWB® Horizontal Lifting Clamps

Horizontal Plate Clamps - Model HPC

- Must be used in pairs for horizontal lifting.
- Spring closed action on 1.5 tonne WLL unit.
- Sprung open on 3 tonne and 5 tonne units.
- Manufactured in China.

Applications: Horizontal lifting, moving of steel plate
Australian Standard: AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>WLL per pair (tonnes)</th>
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<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>J (mm)</th>
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PWB® Multi-Directional Lifting Clamps

**Screw Clamp - Model SBB**

- Patented ‘torque confirmation device’ (visible red ring indicates when tightening force is achieved).
- For horizontal and vertical lifting applications.
- Spring type pressure locking device.
- Twin shackle allows for movement in any direction.
- Double safety feature with screw type vice and automatic clamping mechanism.
- Forged special alloy steel body with galvanised finish.
- Clamp screw and swivel jaw made of induction hardened, alloy steel.
- Tightening force must be minimum of 150kgf-cm.
- Attachment and detachment are easily performed with the patented spring collar.
- Manufactured in Japan.

**Applications:** Lifting, moving of steel plates

**Australian Standard:** AS 4991

### PWB® Multi-Directional Lifting Clamps

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model</th>
<th>WLL (tonnes)</th>
<th>Hardness Range</th>
<th>Effective Thickness (mm)</th>
<th>Weight (kg)</th>
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<td>43496</td>
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</table>
PWB® Multi- Directional Lifting Clamps

Screw Clamp - Model SBBA

- Patented ‘torque confirmation device’ (visible red ring indicates when tightening force is achieved).
- Suitable for most bisalloy steel (up to Hv600).
- Spring type pressure locking device.
- Twin Shackle allows movement in any direction.
- Double safety feature with screw type vice and automatic clamping mechanism.
- Clamp screw, edge pad and swivel jaw made of induction hardened, alloy steel.
- For steel plates with higher hardness range.
- Tightening force on SBBA must be a minimum of 300kgf-cm.
- Manufactured in Japan.

Applications: Lifting, moving of steel plates
Australian Standard: AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model</th>
<th>WLL (tonnes)</th>
<th>Hardness Range</th>
<th>Effective Thickness (mm)</th>
<th>Weight (kg)</th>
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| Model | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | I (mm) | J (mm) | K (mm) | L (mm) | M (mm) | N (mm) | O (mm) | P (mm) | Q (mm) | R (mm) | S (mm) |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SBBA-05 | 23     | 25     | 27     | 22     | 41     | 29     | 140    | 223    | 15     | 24     | 96     | 20     | 46     | 26     | 150    | 15     | 24     | 27     |
| SBBA-1  | 30     | 45     | 32     | 31     | 61     | 46     | 203    | 166    | 18     | 34     | 124    | 24     | 55     | 36     | 150    | 22     | 34     | 32     |
| SBBA-2  | 37     | 43     | 36     | 43     | 66     | 45     | 210    | 183    | 25     | 38     | 134    | 32     | 70     | 44     | 150    | 25     | 36     | 32     |
| SBBA-3  | 40     | 47     | 45     | 40     | 60     | 60     | 240    | 170    | 30     | 42     | 137    | 36     | 80     | 50     | 150    | 30     | 30     | 31     |
PWB® Vertical Lifting **Clamps**

**Vertical Plate Clamp - Model E**

- Dependable latch type safety lock (spring type clamping mechanism).
- Automatic Powerful clamping mechanism, clamps securely in proportion to the weight of the load. Clamps with a force of more than twice the lifting load, yet leaves the material free from unnecessary scars.
- Induction hardened, special alloy steel cam.
- Main body made of high-tensile steel with a welded construction, resistant to cracks.
- Round swivel jaw to grip steel materials securely.
- Easy to handle, large sized lifting shackle.
- Baked epoxy finish.
- Crack resistant, welded construction.
- Lightweight, easy to use, safety lock latch.
- PWB VPC & SBBA state higher grade steel suitability.
- Manufactured in Japan.

**Applications:** Lifting, moving and turning steel plates

**Australian Standard:** AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model</th>
<th>W.L.L (Tonnes)</th>
<th>Hardness Range</th>
<th>Effective Thickness (mm)</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>I (mm)</th>
<th>R (mm)</th>
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<td>260</td>
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</table>
PWB® Vertical Lifting Clamps

Anchor Plate Lifting Clamp - Model VPC

- Rigid steel construction.
- Manufactured in China.

Applications: Lifting, moving and turning steel plates
Australian Standard: AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model</th>
<th>WLL (tonnes)</th>
<th>Hardness Range</th>
<th>Effective Thickness (mm)</th>
<th>Weight (kg)</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>I (mm)</th>
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PWB® Vertical Lifting Clamps

Vertical Non-marring Clamp - Model NE

- Screw type, wedge clamping mechanism with smooth rotation.
- Automatic powerful clamping mechanism, clamps securely in proportion to the weight of the load.
- Large-sized, high tensile steel wedge to securely grip steel plates without scars.
- Main body made of high-tensile steel with a welded construction, resistant to cracks.
- Easy to handle, large sized lifting shackle.
- Stopper cam locking mechanism to prevent slippage.
- Guide pin which allows visual indication of locking.
- Baked epoxy finish.
- Manufactured in Japan.

Applications: Lifting, moving and turning steel plates

Australian Standard: AS 4991

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Model</th>
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<th>Hardness</th>
<th>Jaw Opening (mm)</th>
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PWB® Drum Clamps

Drum Clamps

Three designs are available to provide safe, fast lifting and repositioning of 210 litre (44 gallon) drums, with or without lids. The available types are:

- Vertical drum clamp (suitable for drums with a lid)
- Horizontal drum clamp (suitable for drums with a lid)
- Vertical drum tong (for drums without a lid)

Standard features include:

- Main body made of high tensile steel with welded construction that is resistant to cracks.
- Design factor 5:1.
- Epoxy painted finish.

Applications: Lifting

Australian Standard: AS 4991