

The logo for SKOPIT, featuring the word "SKOPIT" in a bold, sans-serif font. The letter "O" is replaced by a target symbol consisting of a circle with a crosshair.

THE
STRUCTURAL
STEEL
CLAMPING
SYSTEM
Catalogue



For the installation of mechanical and electrical equipment and services

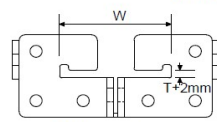
DATA SHEET

Working Load Limit

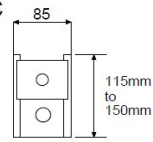
Perpendicular load 1T

Parallel load 300kg

Skopit Structural Clamping System or SSC

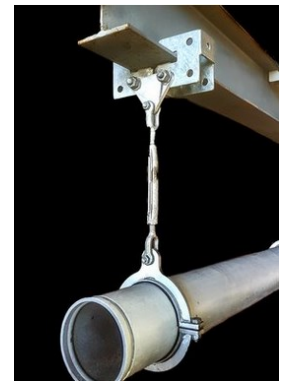
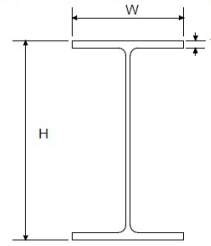


Side view



End view

Universal Beam/column



Part Numbers

Beam Size

SSC 150UB18 = 150UB18 H=155 W=75 T=9.5

SSC 180UB22 = 180UB22 H=179 W=90 T=10

SSC 200UB25 = 200UB25 H=203 W=133 T=8

SSC 200UB30 = 200UB30 H=207 W=134 T=10

SSC 250UB31 = 200UB31 H=252 W=146 T=9

SSC 250UB37 = 250UB37 H=256 W=146 T=11

SSC 310UB32 = 310UB32 H=298 W=149 T=8

SSC 310UB46 = 310UB46 H=307 W=166 T=12

SSC 360UB51 = 360UB51 H=356 W=171 T=11.5

SSC 360UB57 = 360UB57 H=359 W=172 T=13

SSC 410UB54 = 410UB54 H=403 W=178 T=11

SSC 410UB60 = 410UB60 H=406 W=178 T=12.8

SSC 460UB67 = 460UB67 H=454 W=190 T=12.7

SSC 460UB82 = 460UB82 H=60 W=191 T=16

SSC 530UB82 = 530UB82 H=528 W=209 T=13

SSC 530UB92 = 530UB92 H=533 W=209 T=15.6

SSC 610UB125 = 610UB125 H=612 W=229 T=19.5

Column Size

SSC 100UC15 = 100UC15 H=97 W=99 T=7

SSC 150UC37 = 150UC37 H=162 W=154 T=11.5

SSC 200UC60 = 200UC60 H=210 W=205 T=14.5

SSC 250UC90 = 250UC90 H=260 W=256 T=17.3

SSC 310UC118 = 310UC118 H=315 W=307 T=19

SSC 310UC158 = 310UC158 H=327 W=311 T=25

NOTE—Skopit Structural Clamps can be ordered to fit all types of structural steel members/profiles e.g. Angle iron, PFC (channel) and pipe.

Manufactured from 6mm or 10mm 316 stainless steel or mild steel (HDG or painted)

Universal beams and columns in the above tables reflect the heavier steel sections in their particular groups.

Skopit Clamps can be manufactured to suit beams and columns that are not listed in the above table.

Check profile of steel section before ordering, there may be imported or modified steel sections.

The Structural Steel Clamping System Installation Guide.

First things first

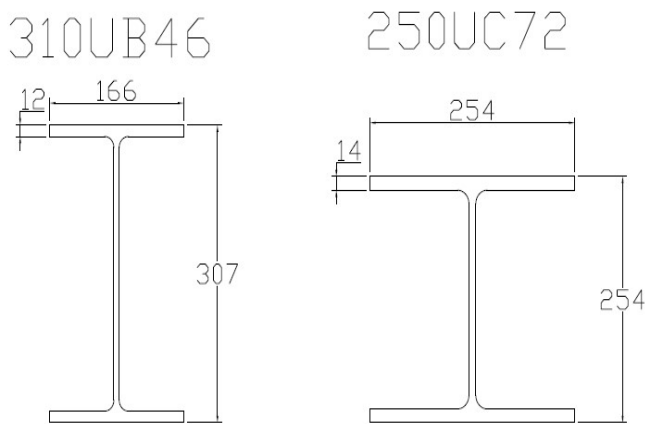
Australian standard structural steel sections are used in refineries, mineral processing plants, industrial facilities and other large/medium structures throughout the nation.

Even though in some older plants there maybe imported structural steel I beams, these will be very similar to the Australian I beam which is now referred to as, UB for Universal Beam and UC for Universal Column.

UBs are generally used in the horizontal position whilst UC is in a vertical position, although this has changed over the years and either UB and UC could be in either position.

The height of a UB measures more than the width while a UC is pretty much the same width and height.

The first number in a UB section like 310UB46 means the height of the beam is 310 mm (within 2-4 mm), UB = Universal Beam and the 46 = 46 kilograms per meter. This is the same for 250UC72; 250mm high, UC = Universal Column, 72 kilograms per meter.



The structural steel clamping system

The structural steel clamping system (SSC) attaches itself to the flange of the beam or column. When manufacturing the clamp we need to know what type/size beam you're working with, if it's a 310UB46, we know that the flange is 166mm wide and 12mm thick.

These are the two main measurements we need for manufacturing, width and thickness of flange.

SSC system clamp comes in two halves. They are a matching pair except for one half has the 6mm spacer

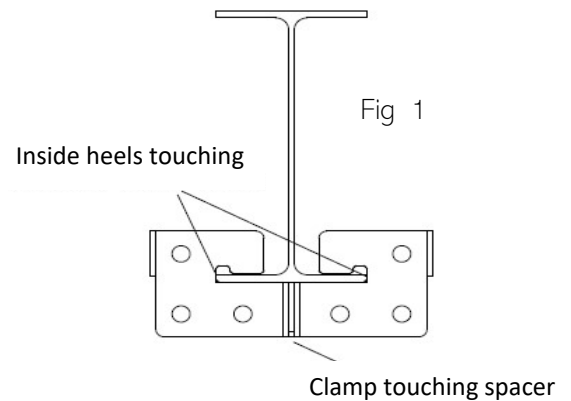
located at the top of the connecting plate.

When putting the two halves together on a beam, make sure the two halves are bolted together straight away. Do not leave either half sitting on a beam without been secured.

Unsecured clamp can become a dropped object resulting in injury

When bolting together make sure the inside heel of the clamps touches the outside edges of the beam flange, the top of the two halves where the connecting plates are should be just touching. (the 6mm spacer should be just touching the opposite clamp)

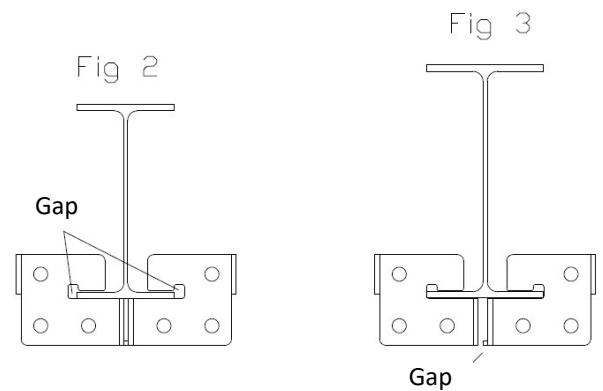
When this looks right and the two halves are in alignment with each another, proceed to insert the bolt through the body of the two halves for securing clamp to beam. Fig 1.



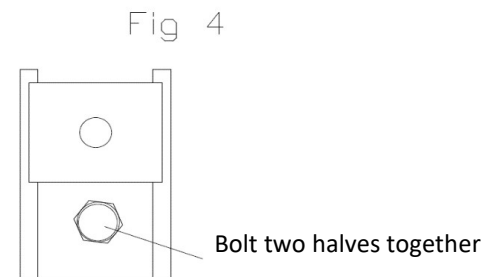
If there are gaps at the heel or spacer of the clamp, this means the clamp is the wrong size for the beam and will not secure itself properly as in fig 2 and 3.

Stop work and locate correct clamp for beam.

It is the responsibility of the installer to make sure the correct clamp attaches to the correct beam as just indicated. It is quite easy to see the difference. If at all unsure, do not proceed with installation until it has been verified that both clamp and beam are matched.

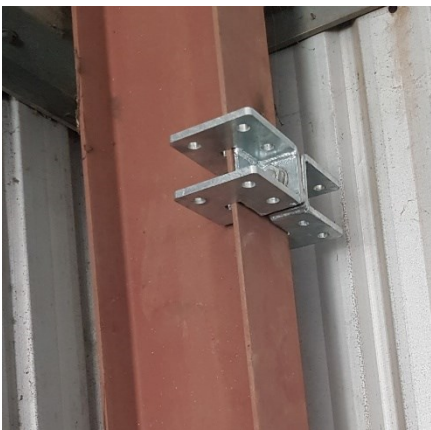


Once the clamp is bolted together (Fig 4) and secured to beam, both halves should be inline/square to each other. If not, loosen a little and realign. Torque bolt up to required setting.



Secondary brackets that are to be installed must pick up bolt holes on both halves of clamp. This evenly distributes weight across all of the clamp.

This is essential to maintain the integrity of the clamp, beam and secondary bracket.



WARNING - Install correct clamp to beam/column, ensure secondary brackets are bolted across both halves.

4.0 CONCLUSION

Based on the testing conducted, the mild steel and stainless steel clamps manufactured for Australian UB and UC I-beam members specified in Appendix A are suitable for the working load limits and load direction in Table 4.1 below.

Clamp Description	Load Direction Relative to Beam	WLL
6 mm Mild Steel	Parallel	300 kg
6 mm Stainless Steel	Parallel	300 kg
10 mm Mild Steel	Parallel	400 kg
6 mm Mild Steel	Perpendicular	1000 kg
6 mm Stainless Steel	Perpendicular	1000 kg

Table 4.1: Certified Clamp Capacity

The clamps may be fixed to vertical or horizontal members which have been prepared to ensure clean surfaces at all interfaces.

Yours faithfully



Shane Hull
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For and on behalf of Glynn Tucker Consulting Engineers