

STEEL PRODUCTS

BENCHMARKING REPORT UNIVERSAL AND STRUCTURAL PRODUCTS

[Authors]

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steel



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5.3 Tung Ho

[Comments on length of product]

There are a significant number of instances where the measured parameters fall below the minimum tolerance. There is no evidence of rolling to aim specification as seen with [REDACTED] and some evidence that, like [REDACTED] metre weight is minimised to maximise yield. However it would appear that only the measured parameters are used to control section, not the calculated metre weight, as a significant proportion of the product across the mix falls well outside the minimum tolerance.

	100UC 14.8kg/m	Web and flange thickness held above aim specification, resulting in heavy metre weight.	Comments from examination: ID labels poorly adhered. A number of kinked bars.	Comments from examination: Nil	Comments from examination: Nil	Comments from examination: One kinked bar
NOT GUC	150UB 14.0kg/m	Flange thickness and section width held below aim. Metre weight mean centred near minimum tolerance, with a number of samples below tolerance. Centering quite variable.				
GUC	150UB 18.0kg/m	Flange thickness, section width and section depth held below aim. Metre weight mean centred between aim and minimum tolerance, with a number of samples below tolerance. Centering quite good.				
GUC	150UC 23.4kg/m	Section control reasonable, but spread in distribution of flange thickness and web thickness has resulted in a number of samples below minimum tolerance for metre weight.				

150UC 30.0kg/m Guc	Flange thickness run below aim. A number of samples below minimum tolerance for metre weight as a result.	Comments from examination: >2mm dish at saw cut, square out of tolerance.
150UC 37.2kg/m Guc	Process is capable, but with a fairly wide degree of variation in measured parameters.	Comments from examination: Nil
180UB 16.1kg/m Guc	High degree of spread in measured parameters. Distributions give clear indication of product from more than one rolling in sample set. Flange and web thicknesses have been run at or below minimum tolerance, resulting in a large proportion of samples falling significantly below minimum tolerance for metre weight.	Comments from examination: Nil
180UB 18.1kg/m Guc	Process is capable, but with a fairly wide degree of variation in measured parameters. Centerings controlled well.	Comments from examination: Nil
180UB 22.2kg/m Guc	Process is capable. Centerings controlled well.	Comments from examination:
410UB 53.7kg/m Guc	High degree of spread in measured parameters. Flange and web thicknesses have been run at or below minimum tolerance, resulting in the majority of samples falling significantly below minimum tolerance for metre weight.	Comments from examination: Light scratches and roll wear. Good saw cut.

410UB 59.7kg/m	<p>High degree of spread in measured parameters. Flange and web thicknesses have been run between minimum and aim tolerance, resulting in a significant proportion of samples falling below minimum tolerance for metre weight.</p>	<p>Comments from examination: Heating / repair marks in the web.</p>
460UB 67.1kg/m	<p>High degree of spread in measured parameters. Flange and web thicknesses have been run between minimum and aim tolerance, resulting in a significant proportion of samples falling below minimum tolerance for metre weight.</p>	<p>Comments from examination: Some light surface scratches. Good brand. Good saw cut.</p>
460UB 74.6kg/m	<p>Flange thickness close to minimum tolerance. Web thickness mean centred on minimum tolerance, with approximately half the samples measured below the minimum tolerance. The entire sample set falls below minimum tolerance for calculated metre weight.</p>	<p>Comments from examination: Web flatness up to 0.5mm. Light rolled in scrap near fillet up to 0.2mm. Some bars oxy-cut to length.</p>
460UB 82.1kg/m	<p>Flange thickness has been run between minimum and aim tolerance, and web thickness at or below minimum tolerance, resulting in the majority of samples falling below minimum tolerance for calculated metre weight.</p>	<p>Comments from examination: Nil</p>

5.4

[Discussion - another manufacturer]