

Date : 13/9/2016

Report Submitted by Andrew Price/aka Sir Master Orri Vigleiksson Deputy Earl Marshal Combat Rules.

Intent of report is to indicate some key areas to check on a helm prior to purchase or prior to use if the purchaser wants to make sure it is not bounced by marshals as per the Lochac Combat Handbook

Helm Issue with <http://www.medieval-fightclub.com/products/Heavy-Duty-Anglo%252dSaxon-style-Helm-with-face-grill.htm>

Now listed as

<https://www.medieval-fightclub.com.au/armour/helms-and-helmets/sca-and-hmb/heavy-duty-anglo-saxon-style-helm-with-face-grill.html>



Image of said helm



I cannot guarantee that this helm is of identical construction to others sold as they were mass produced and this one in my possession looks near identical to others I have seen I believe them to be assembled in a production line style.

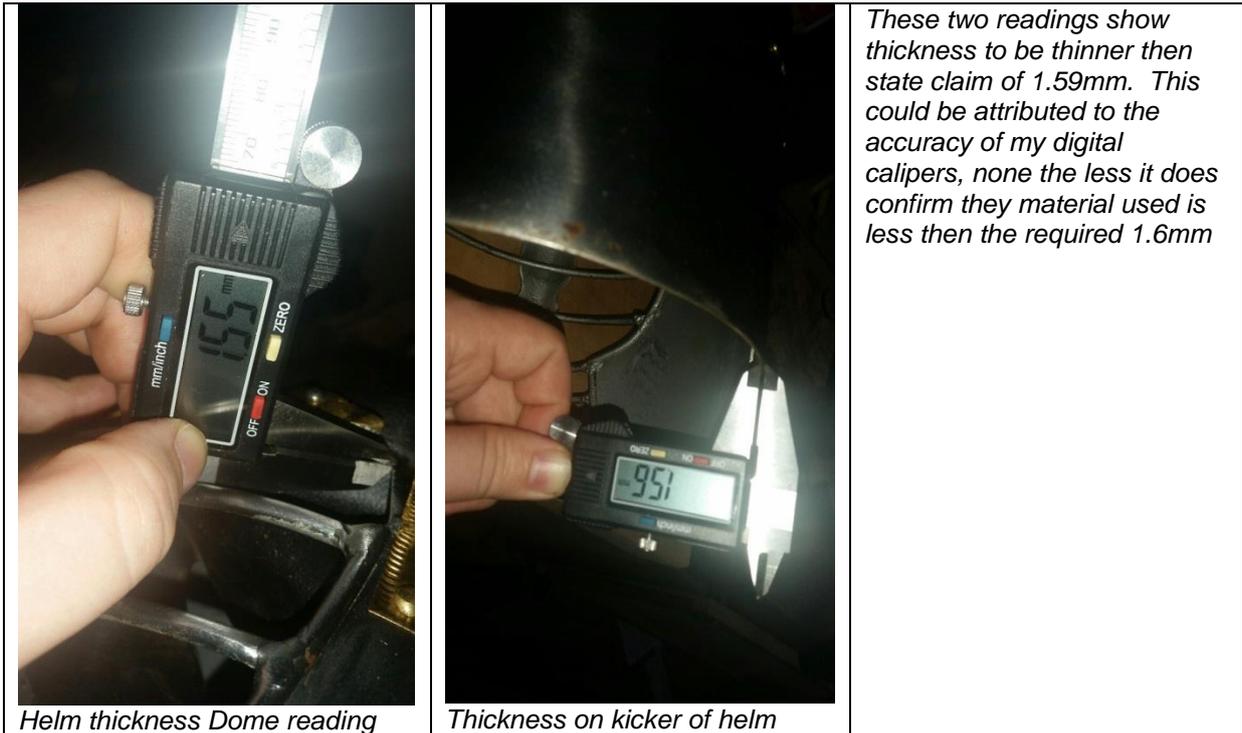
**The website does clearly state that this helm is not suitable for SCA.**

As marshals we are not required to assist with purchasing disputes. If someone has purchased one of these helms and believes they were misled that is entirely up to them to pursue. Our rule set has not changed for some time and the specifications are freely available and when purchasing any armour it is the purchasers responsibility to make sure it complies.

**Issue 1 – Helm thickness.**

MFC Website states 16ga (1.59mm) so according to the website it is thinner than our requirements. Refer to section 7.4.1.3

*Helms, including face guards shall be constructed of steel no less than **1.6mm** thickness (16 gauge), or of equivalent material. Steel of less than 1.6mm is too thin, even if it is sold as 16 gauge.*



*This essentially is the show stopper. For anyone to make this helm legal all plate sections need reinforcing with additional material.*

**Issue 2 – Welds**

*Welding is practically non existent on the helm inspected. There are a few tack welds that do not appear to have full penetration. The inside of the helm shows no beads.*

*Under sections 7.4.1.7 of the handbook*

7. All joints or seams shall be constructed in one or a combination of the following ways:

- (a) Welded on the inside and outside.
- (b) Welded with a single bead that extends through both surfaces.
- (c) Lap joints welded or brazed at the edges of both pieces.
- (d) Riveted with iron or steel rivets, no more than 63.5mm (2<sup>1</sup>/<sub>2</sub> inches) apart, or with equivalent riveting techniques. Screw and/or pop type rivets, along with other light-weight rivets, are not to be used.

The helm does not comply with any of the fore mentioned seam treatments.

The sections of the helm appear to be tack welded and then the brass shim (callipers could not measure how thin it was but I could dent it with my fingernail) is tacked with brass rivets over the outside seams. The mfc website indicates seams are welded on the outside but I cannot confirm this without destruction of the helm. Website does recommend running a full bead around inside of the helm.

**Note: Exterior of shells have been welded. We recommend an additional bead of weld on the internal ridge.**



*Photo of dome showing no bead, any joins appear to be more the galvanized paint pooling rather than a weld*



*Photo of one cheek plate, there is the tiniest of spot welds holding the cheek plate to the kicker visible*



*Photo of other side, faintest of spot welds present showing attachment of kicker to dome.*



*Cheek to kicker weld visible, this appeared to be the only weld holding the two plates together.*



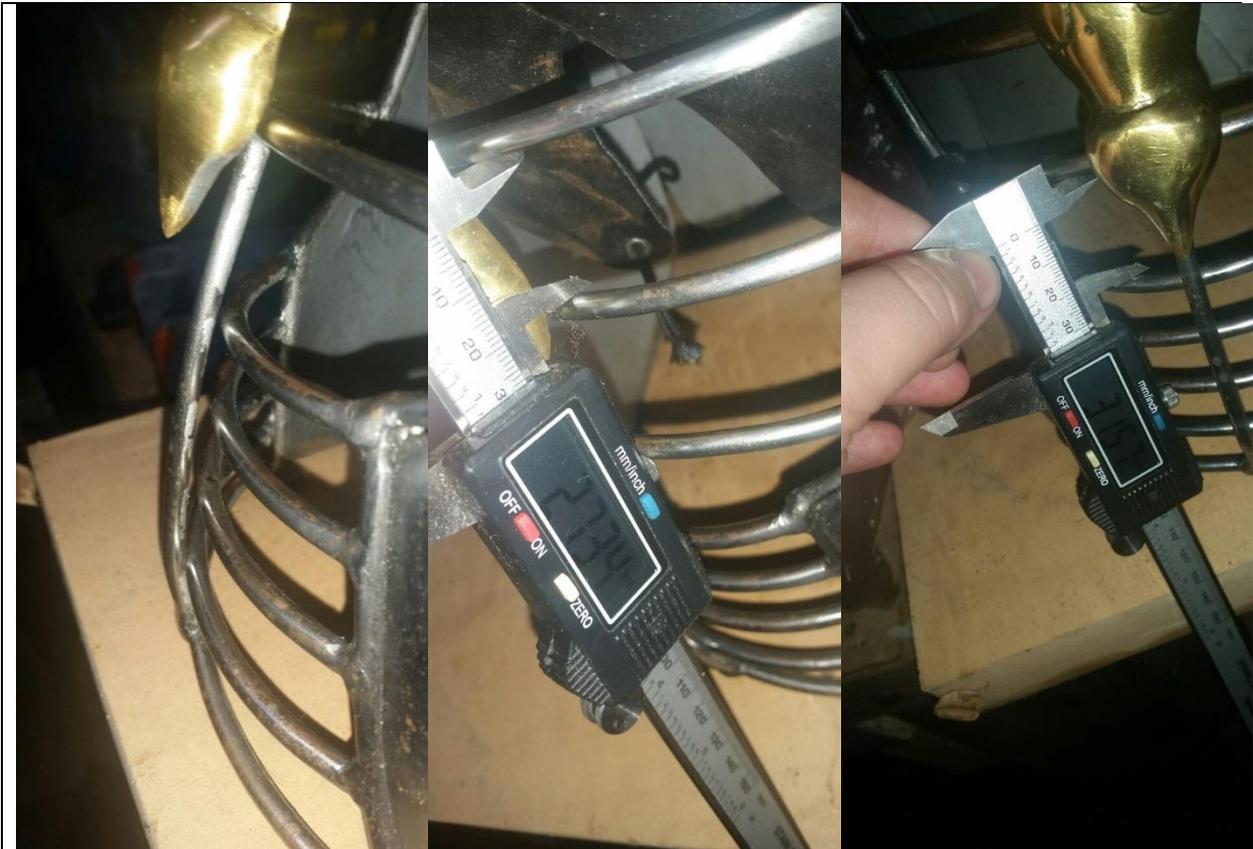
*Picture showing thinness of brass. Did not measure rivet spacing due to section 7.4.1.7.d stating lighter weight rivets not to be used*



*Depression in brass caused by finger nail, indicating material is quite soft and consequently not ideal as a joining material*

**Issue 3 – Bars**

Bar thickness was sufficient as it exceeded 4.76mm at over 5mm



*Picture showing the base bar and bar directly beneath base of nasal being welded to a vertical bar. This although legal per our rule set does lead to a significantly increased chance of the lower bars being forced apart when struck with a blow landing between the bars*

*Gap exceeds the 25.4mm max with a reading of 27.34mm*

*Next bar down exceeds the 25.4mm max with a read of 31.57mm*

*Picture to the right shows bar thickness reading of 5.31mm.*

*In the picture above it can also be seen a single weld in the top where the bars join the cheek plate. This was the only visible weld from the outside of the helm for attaching the bar cage to the helm. There were tack welds at 3 spots along each side of the bar cage on the inside as well but these looked quite insufficient*



#### **Issue 4 – Padding**

*As it stands the helm requires repadding as the padding as delivered is a suspension liner which may afford comparable protection for downward strikes however there is no ability to absorb force from horizontal strikes. I have major reservations as to the strength of the suspension liner as well which was held in by a rivet either side of the helm (same rivet that holds the chin strap). These rivets held a thin strip of steel wrapped in the leather that formed the liner. Long term use with SCA style sword strikes I believe would result in sudden catastrophic failure.*



#### **To make this helm legal for sca combat.**

*\*Remove all the brass to verify external welds*

*\*Weld all internal joins.*

*\*Once welded repeat with another layer of steel as a laminating layer ie it's going to need to be sufficiently attached to the existing steel to bring it up to minimum thickness.*

*\*Relocate bars and weld securely in place to stop 1" dowel from being able to enter through the bar cage.*

*\*Pad the helmet and quite possibly modify the chin strap once repadded to meet requirements of helm staying on wearers head.*