

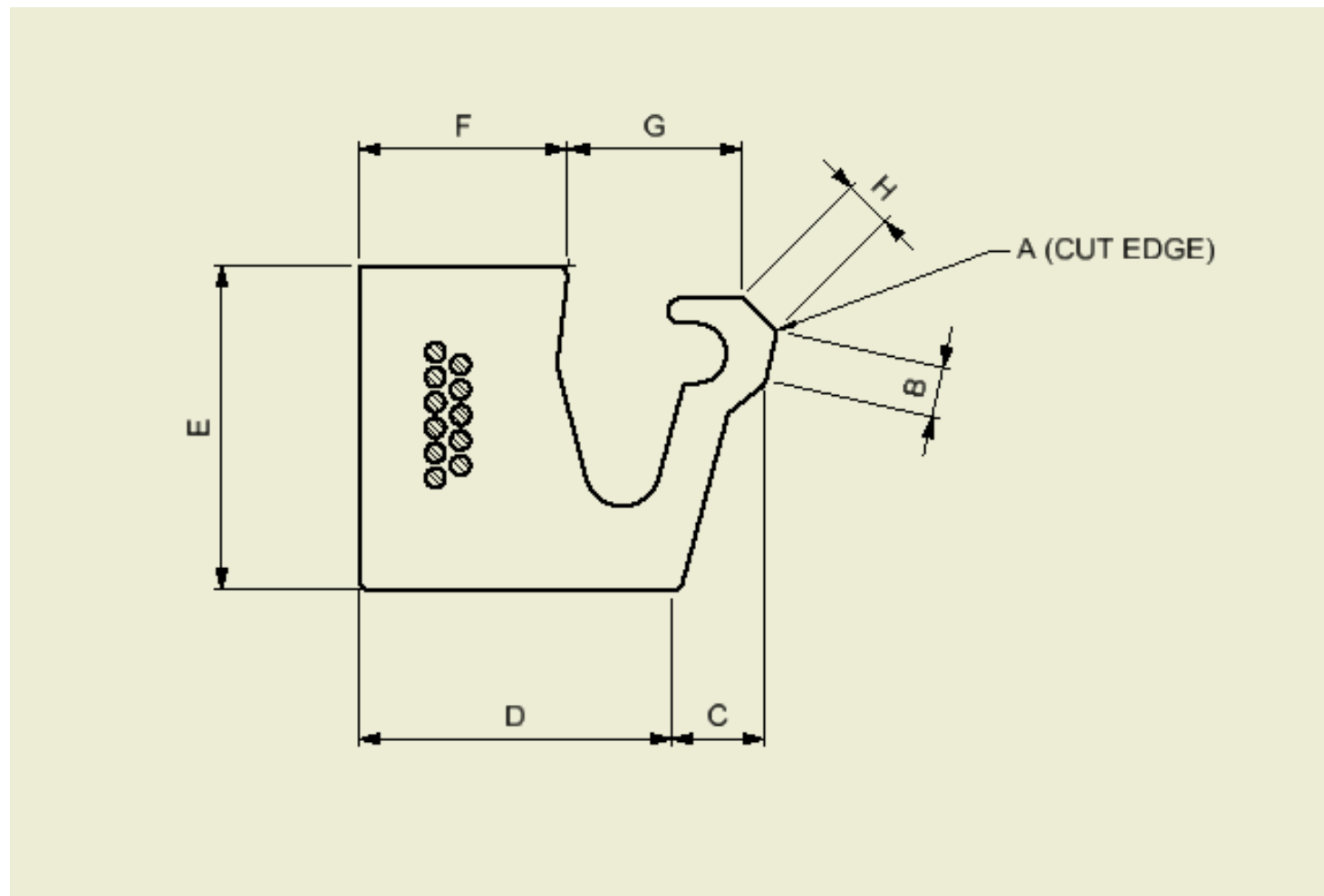


SIP18 – JAMES WALKER INTERNAL INSPECTION STANDARD FOR GLASS BACK (X-GEN) D6 & D7 WALKERSELES.

QUALITY STANDARD

Please use this standard for inspecting an X-Gen D6 or D7 seal.

The diagram shows a general view of the seal and its main features.



Zone A: Sealing edge - **HIGHLY CRITICAL**

Zone B: Outer running face - **HIGHLY CRITICAL**

Zone C: Non-critical

Zone D: Static sealing face - **CRITICAL**

Zone E: Static sealing face - **CRITICAL**

Zone F: Static sealing face - **CRITICAL**

Zone G: Non-critical

Zone H: Inner running faces - **HIGHLY CRITICAL**

VISUAL INSPECTION OF ENTIRE SEAL

Rings to be checked under good lighting (minimum 1000 lux) to ensure no defects are present. Complete a tactile check of the seal with your fingers to detect smaller defects.

Pen marks other than inspection identifications and numbers must be removed from the seal using appropriate cleaning materials.

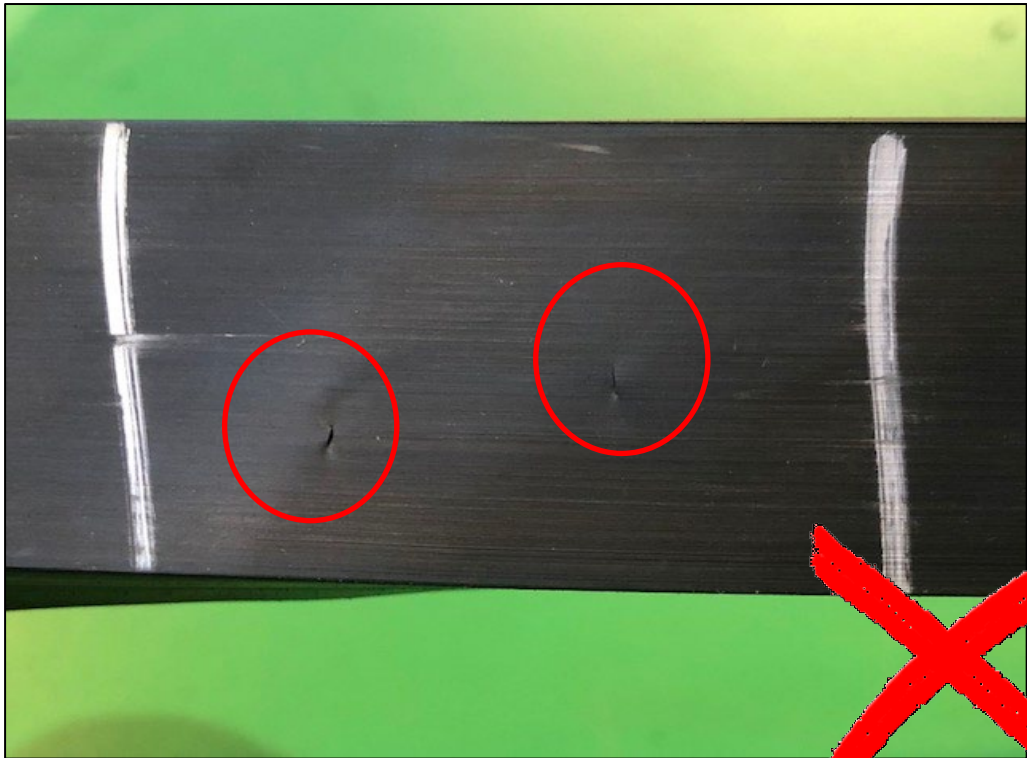
Common defects inherent to the manufacturing process can but not limited to:

- Air Trapping
- Non-Fill
- Scorching
- Outer Diameter Bumps
- Lip Chamfer Quality
- Tearing
- Localised Deformation
- Inclusions
- Splits
- Backrind
- Glass Protrusion

If defects can be lightly cleaned or dressed using fine emery paper and scotchbrite they are acceptable.
If the defect cannot be cleaned or dressed it is a reject.

The sealing face must be left clean and smooth after dressing and must retain the full lip profile.

DEFECT EXAMPLES



Air Trap, split

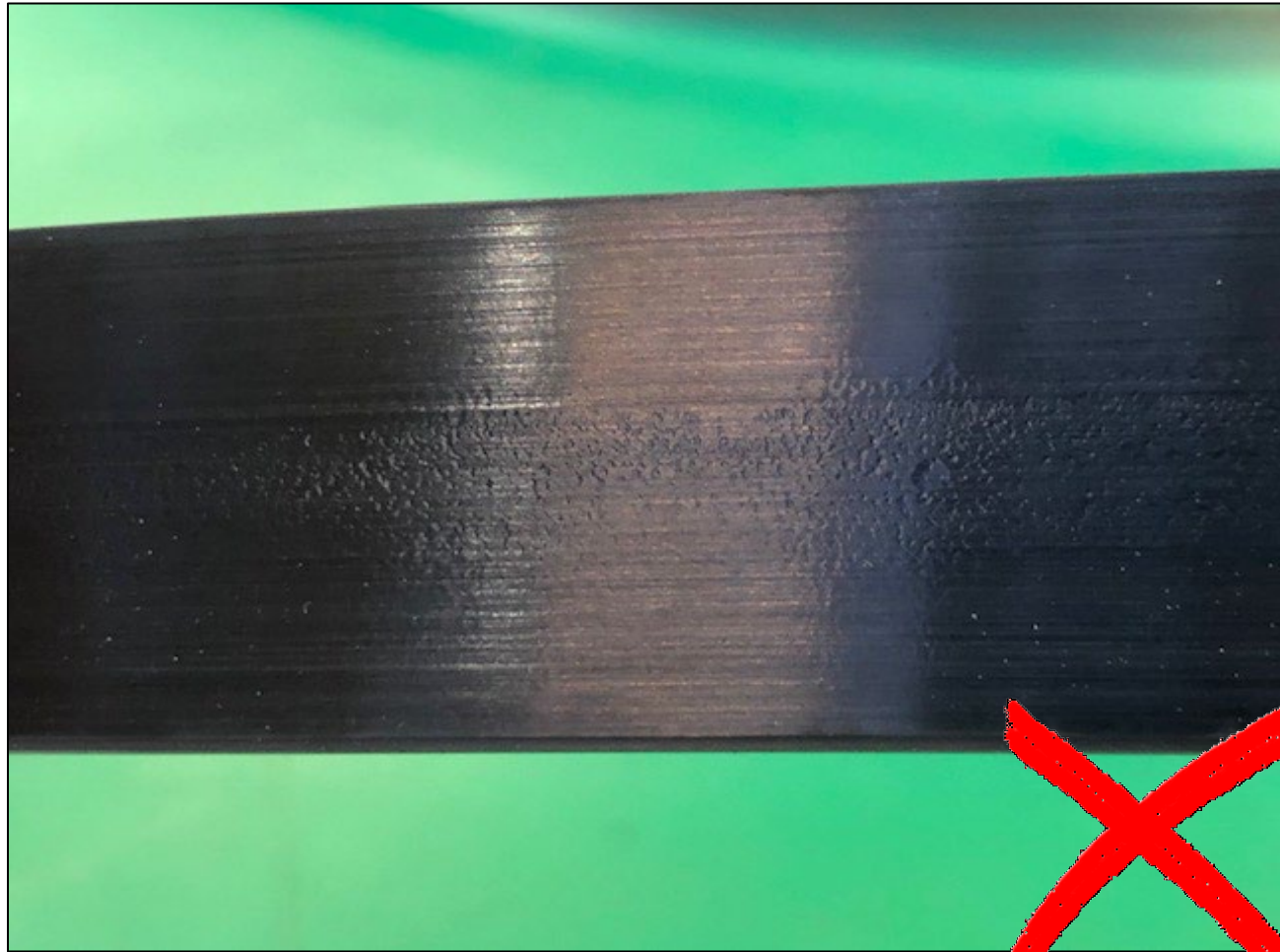


Air Trap, split

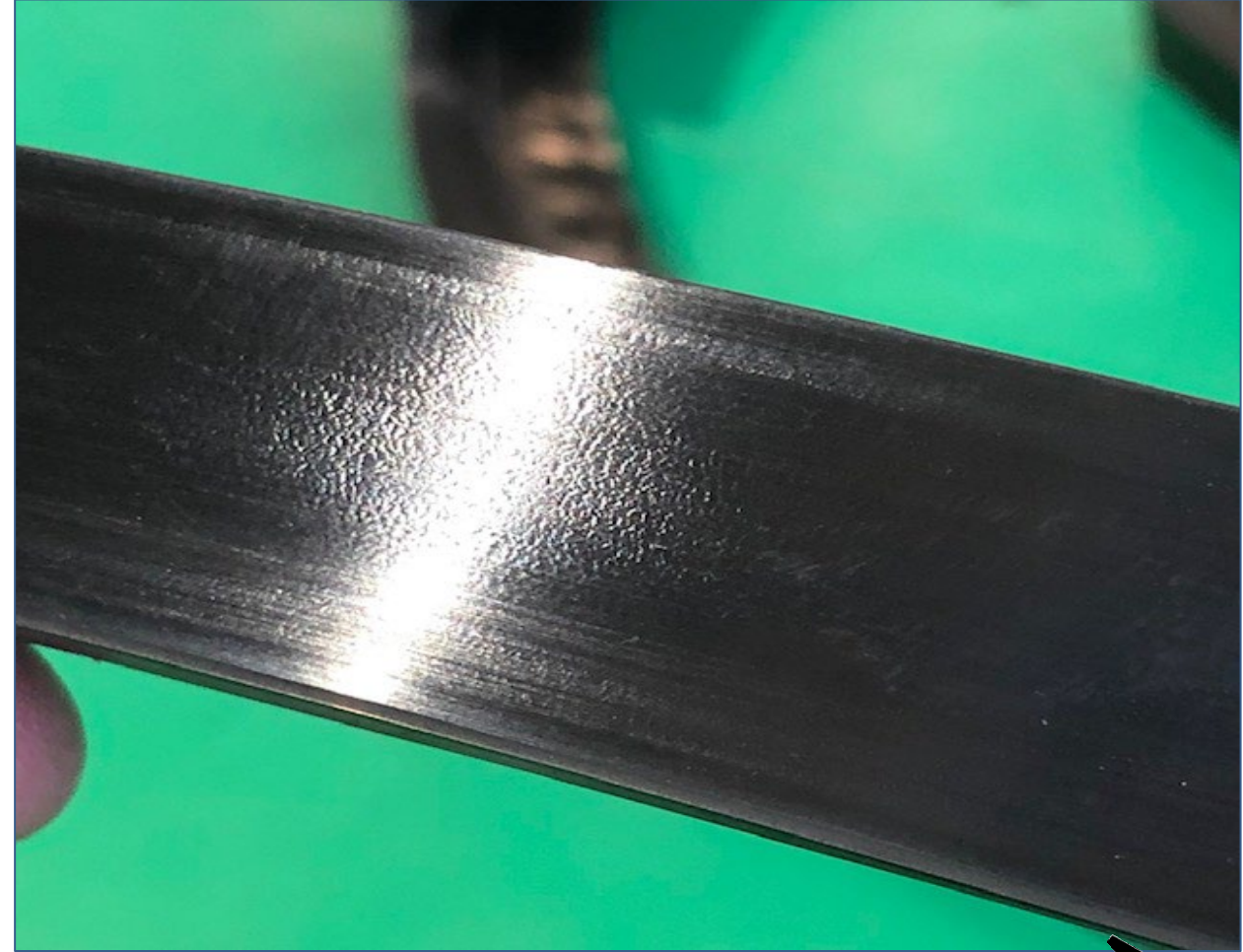


No fill

SCORCHING



Major scorching



Minor scorching

Minor scorching is acceptable and is defined as scorching that doesn't affect the smoothness of the surface finish.

Major scorching causes irregularities in the surface smoothness and is a defect. This is more evident in the tactile check.

OUTER DIAMETER BUMPS



Bump away from join



Bump at join



Due to the nature of loading the mould with glass cord centred extrusion displacement of the cords can occur during the moulding process. This can result in bumps appearing where the two lengths of extrusion are joined.

Small bumps on the outer diameter of the join are allowed, any bumps elsewhere should be rejected.

Indents may also be seen along the outer diameter of the join and should be rejected elsewhere.

LIP CHAMFER QUALITY

Chamfer should be clean cut with sharp edges. There should be no change in visual aspect of the chamfer.

If chamfer looks to be irregular or uneven, measure with a vernier and reject if out of tolerance to James Walker drawing.

Check for holes and splits in the chamfer especially at the join area. A split or hole is a reject as this indicates damage to the join.

Slight dips may be felt at the join area which is different to a hole or a split. A dip of less than 0.2mm is acceptable, provided overall section is maintained and tolerances are met?

When dressing the join around the chamfer, take care to preserve the clean cut sharp edges as this is the critical zone of the seal. A rounded edge on the lip chamfer is a reject.



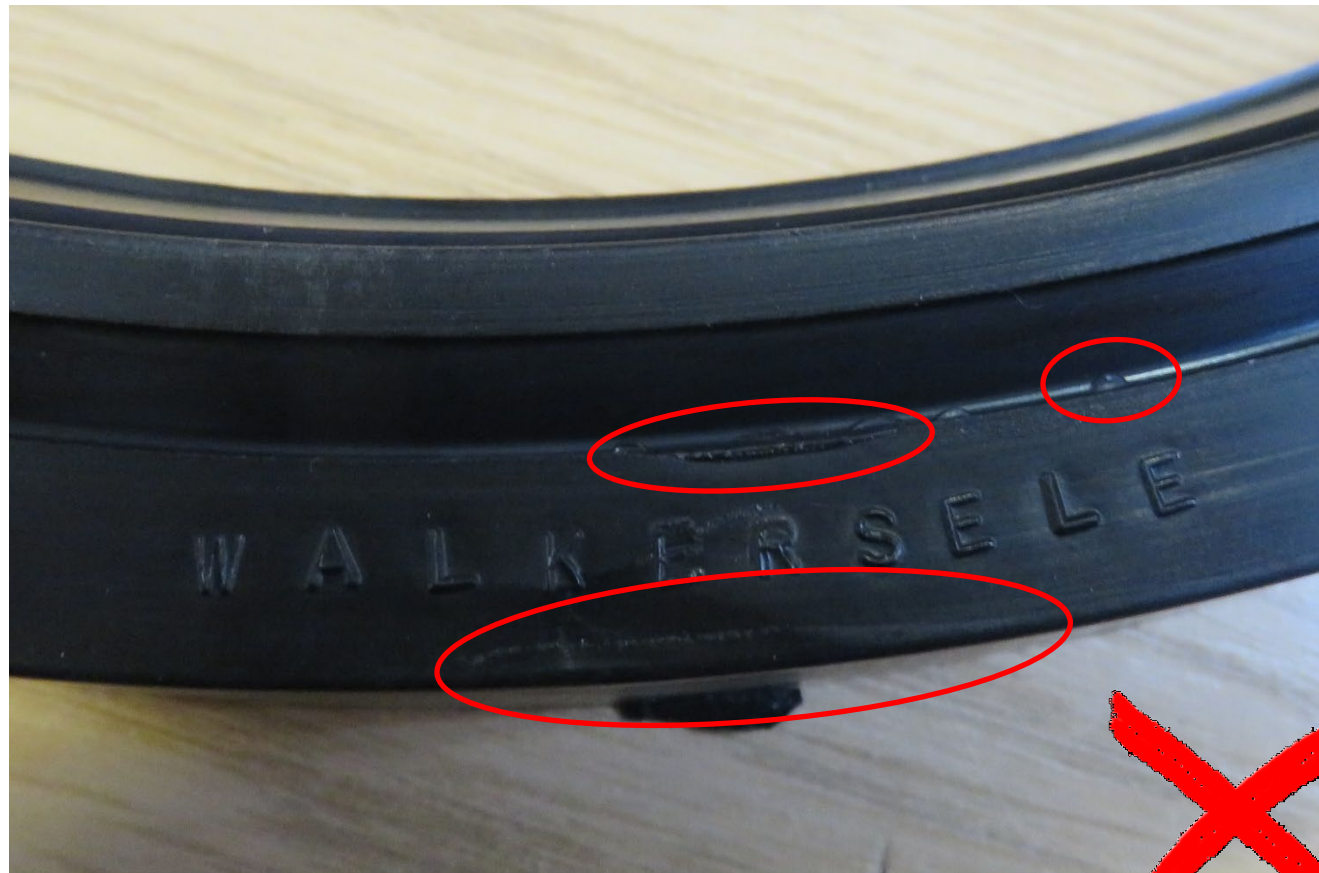
TEARING



Tearing at seal back

Any tearing across any part of the seal should be rejected to prevent faulty seals being put into operation.

DEFORMATIONS



If there are any deformations along seal that are noticeable to the naked eye then reject the seals to maintain a high quality perception of our products.

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INCLUSIONS



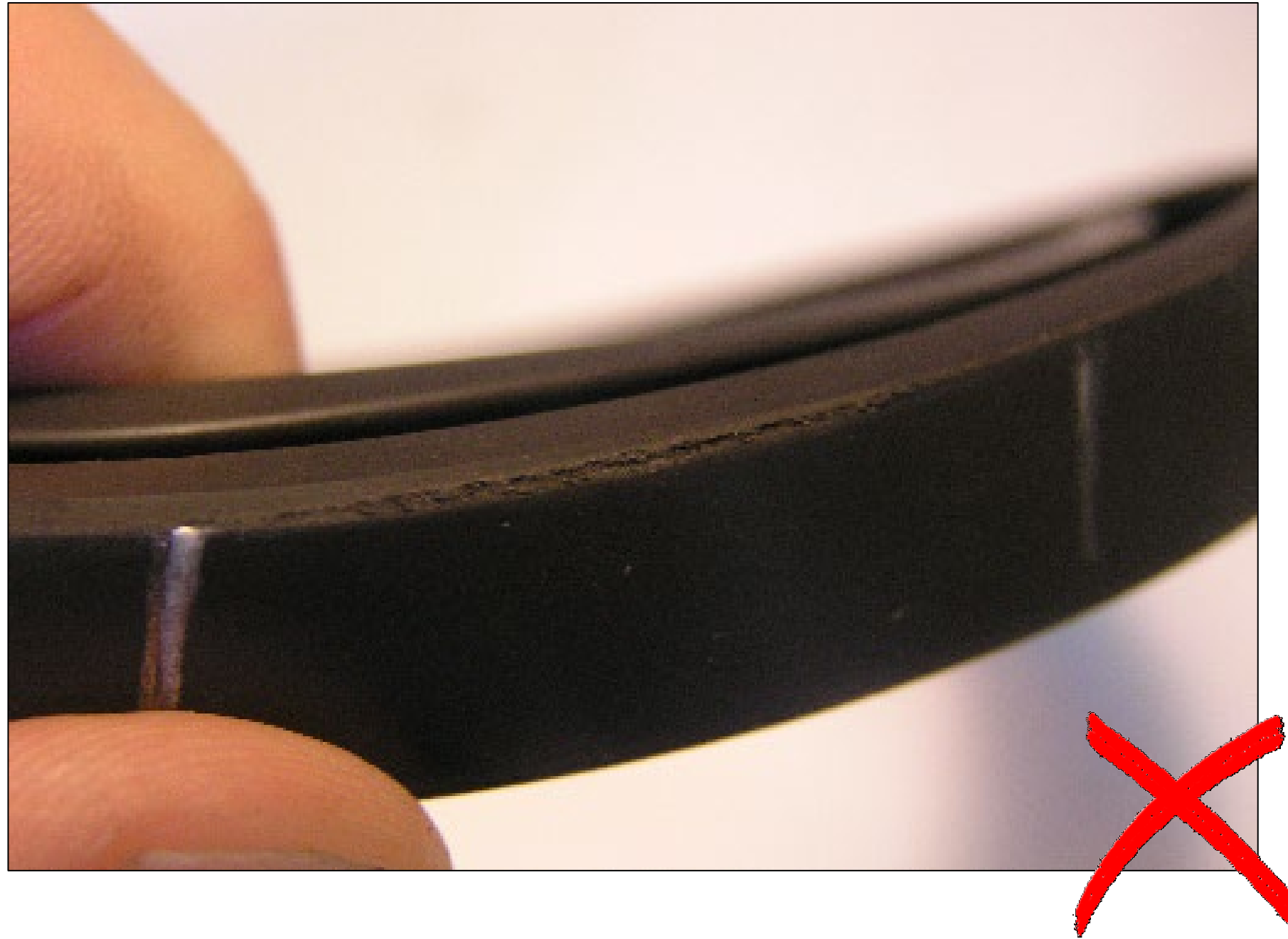
Inclusions refer to any foreign material or substance that is unintentionally incorporated into the rubber during the moulding process. This could be anything from dust or dirt particles, to fragments of metal or other materials from the manufacturing environment. Any inclusion should be rejected.

AIR TRAPPING



Any air trapping that can be seen with the naked eye should lead to the seal being rejected.

BACKRIND



Backrind appears as a torn or gouged recess at the mould parting line. It usually presents as a ragged seam line near the gap where the seal exited the mould. Its appearance is typically irregular. No tool marks or defects seen by the naked eye are permitted.

GLASS PROTRUSION

Due to the flow of rubber during moulding there is a chance of glass protrusion towards the outside surface of the seal. If there are any signs of this then rejects the seal.

MEASURING O/D, SECTION AND DEPTH FOR INSPECTION REPORT

The dimensions highlighted below should be rechecked using the following methods:

Seal to be flat on the inspection bench, top of seal up.

Outside Diameter – *Circumference diameter tape*

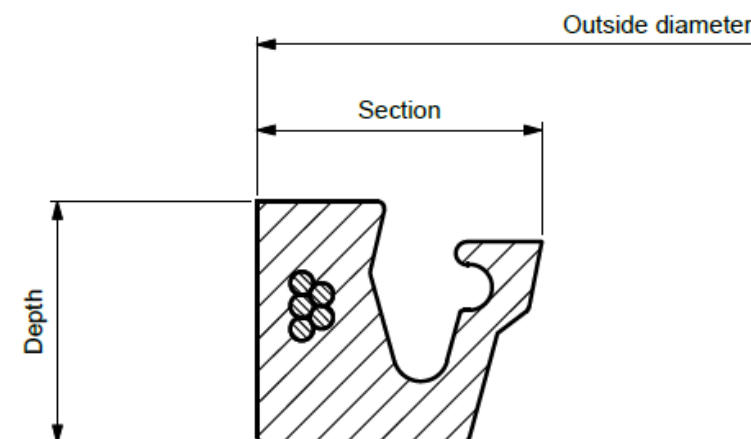
Verify that the measurements recorded by the operator on Form F143 are all within tolerances.

Section (After chamfer) – *Vernier*

Verify that the measurements recorded by the operator on Form F143 are all within tolerances.

Depth - *Vernier*

Verify that the measurements recorded by the operator on Form F143 are all within tolerances.



Verification and Traceability

Verify that the Drawing number, DJ number, Order number and Order number are correct as per the DJ/Drawing.

This SIP is a place holder until a JW 200 series inspection standard has been created.

If there are any discrepancies with if a seal is a reject either contact technical or reject to avoid customer returns.

End