
TEST REPORT



A Z U M A
Design

TORQUE TEST



CLIENT – BOOSKA

PRODUCT – INFLATOR SOCKET

TESTED BY

AZUMA DESIGN PTY LTD

AZT0237.23

This document shall not be reproduced, except in full.

Test results in this report are relevant only to the sample tested.

1 Customer Requirements

To determine the breaking torque of the test specimen(s).

2 Test Sample Information

Product Name/Number	Inflator Socket
Customer	Booska
Address	53 Ningi Waters Drive, Ningi QLD 4511
Azuma Test Number	AZT0237.23
Date	27/06/2023
Test Specimen	Plastic moulding interface between 1/2 inch socket and a pocket to suits a 6-point turn knob.
Torque Application Position	Torque applicator applied to the 1/2 inch socket
Test Constraints	Sample is slotted onto the intend 6-point turn knob. Turn knob is restricted from rotation and is secured in a vice.
Test Sample Material	Zytel® 70G30HSL NC010 (Nylon 66 resin 30% glass reinforced) PA66-GF30

3 Testing

3.1 Procedure

The following procedure was applied to the test specimen:

1. The test specimen intended turn application was set up in a Vice
2. A torque adaptor and torque wrench was attached to the test sample
3. A torque was applied by turning the test sample
4. The torque is increased until the test specimen breaks or the torque peaks
5. The torque was recorded and the damage to the test specimen noted

3.2 Results

Test Specimen	Ultimate Torque	Damage to Test Specimen
#1	85 Nm / 62.69 ft lb	Diagonal crack emanating from the corners of the 1/2 inch drive socket
#2	86 Nm / 63.43 ft lb	Diagonal crack emanating from the corners of the 1/2 inch drive socket
#3	80 Nm / 59 ft lb	Diagonal crack emanating from the corners of the 1/2 inch drive socket, additional crack from another corner of the socket
#4	80 Nm / 59 ft lb	Diagonal crack emanating from the corners of the 1/2 inch drive socket, additional crack from another corner of the socket
#5	80 Nm / 59 ft lb	Diagonal crack emanating from the corners of the 1/2 inch drive socket

4 Pictures

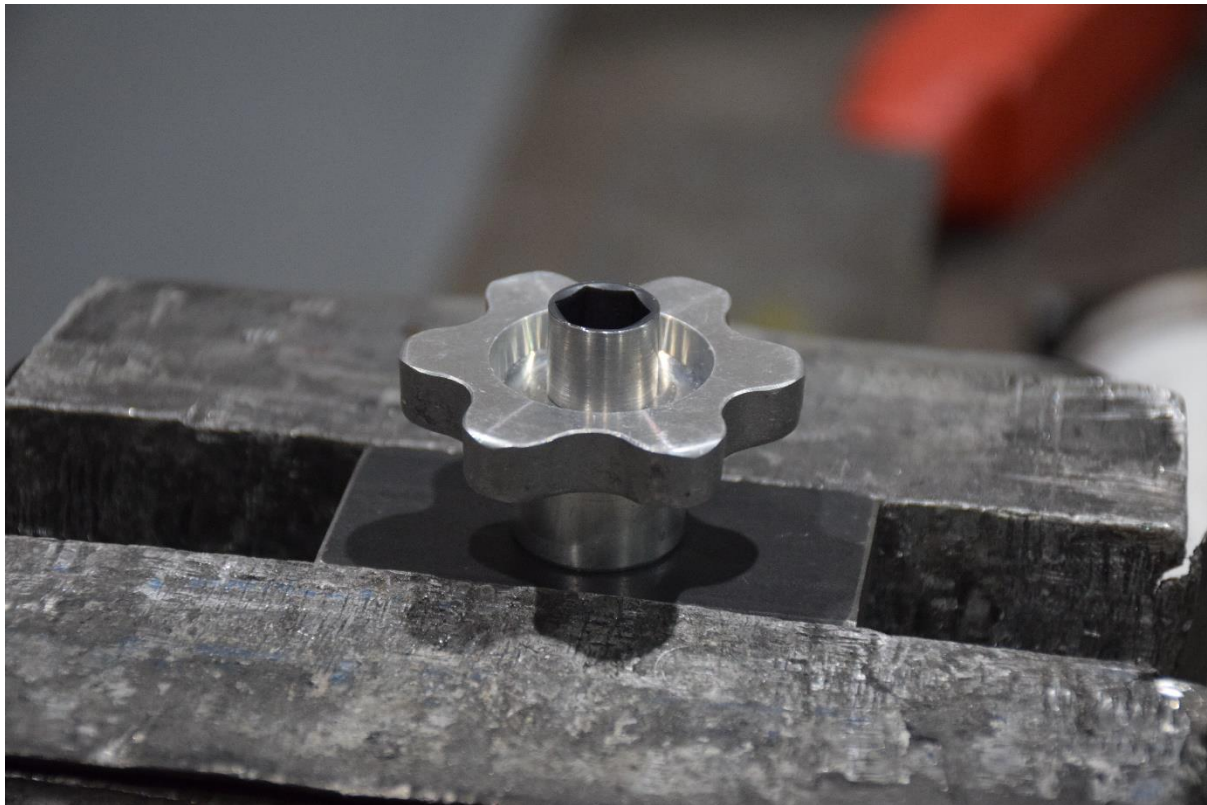


Figure 1: Turn Knob Restricted in Vice with Screw and Plate

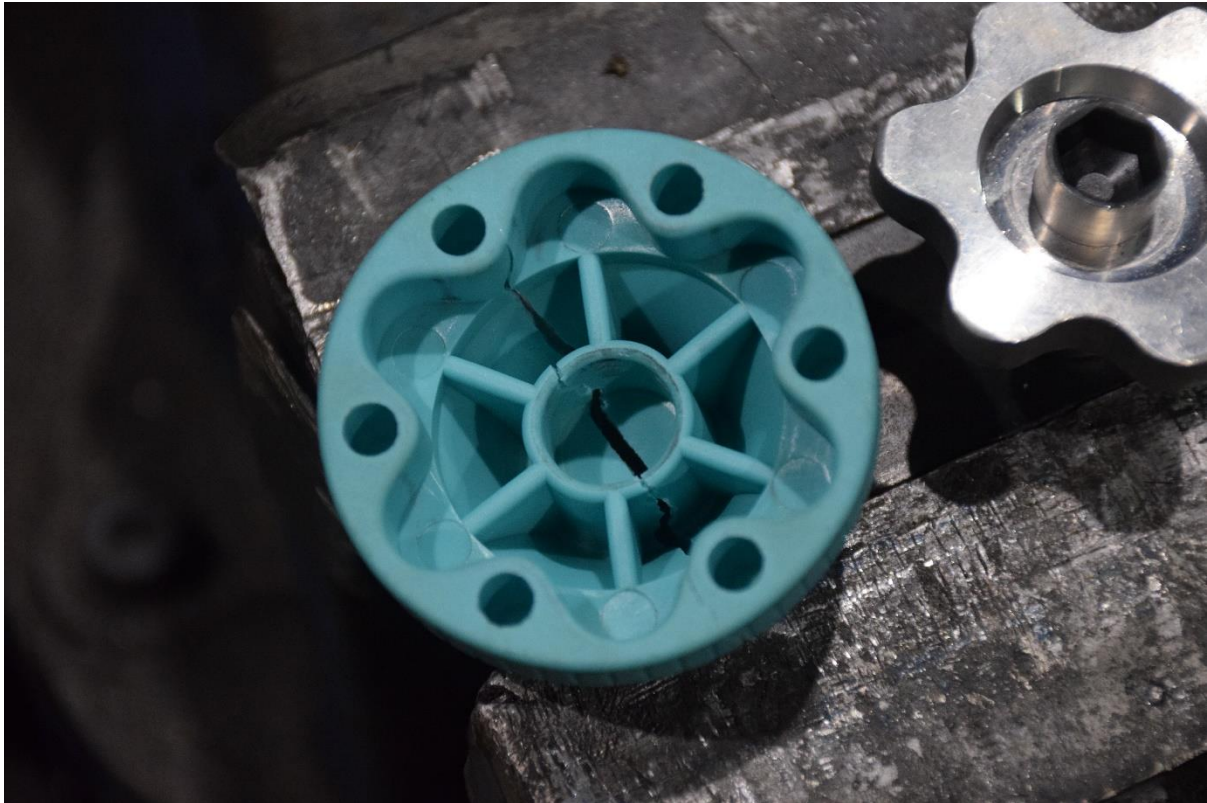


Figure 2: Typical Break - Underside

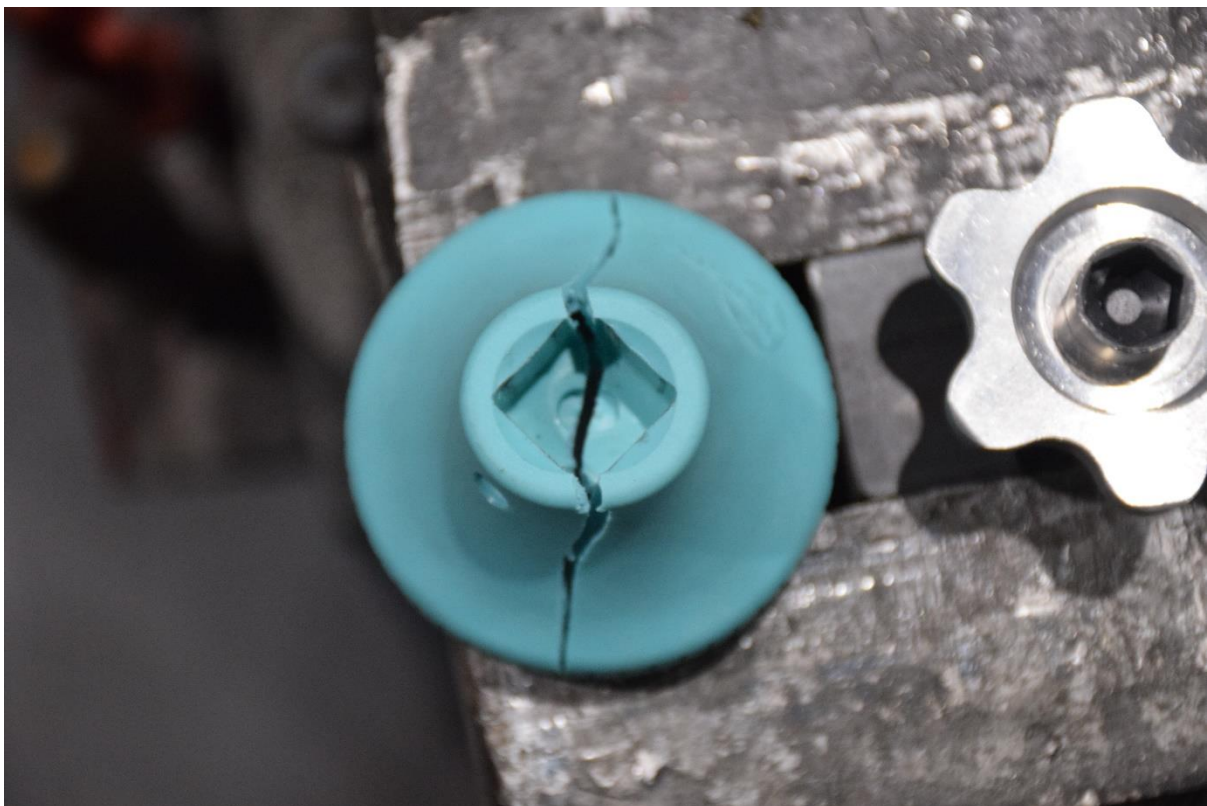


Figure 3: Typical Break - Top Side

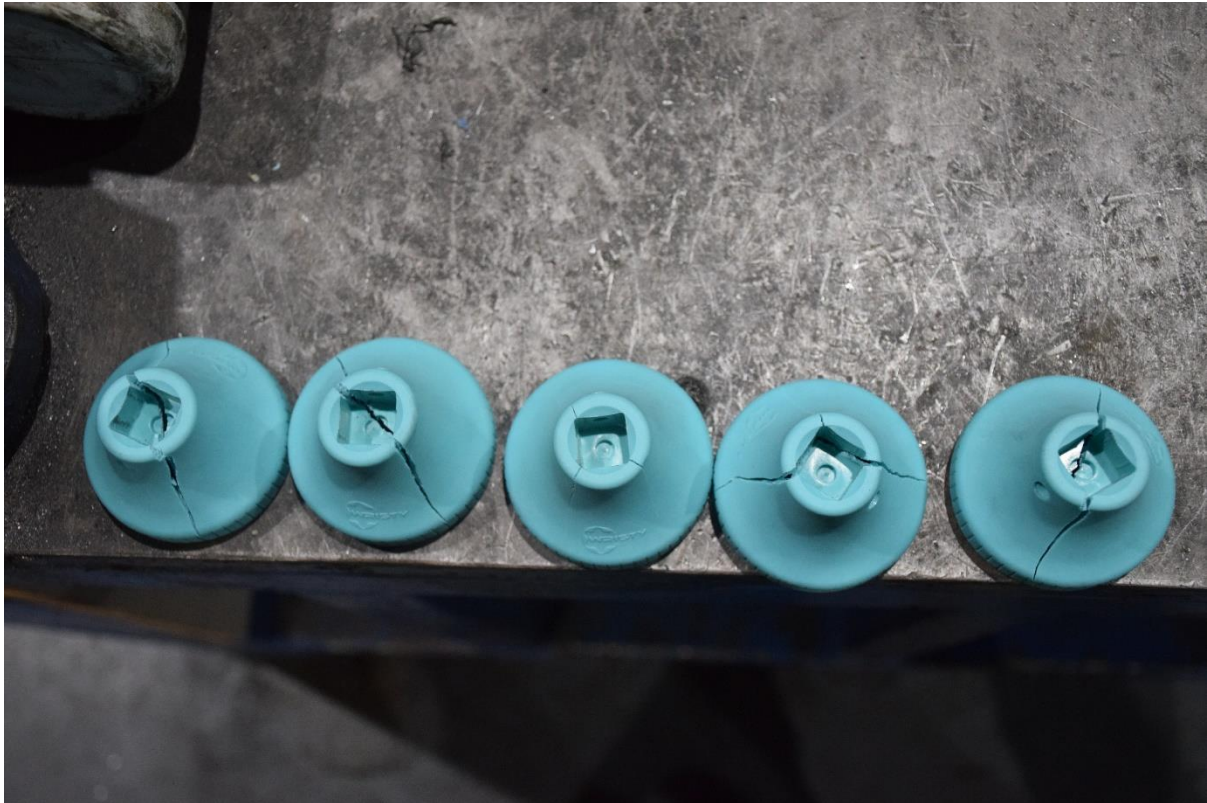


Figure 4: All Samples at Completion of Test

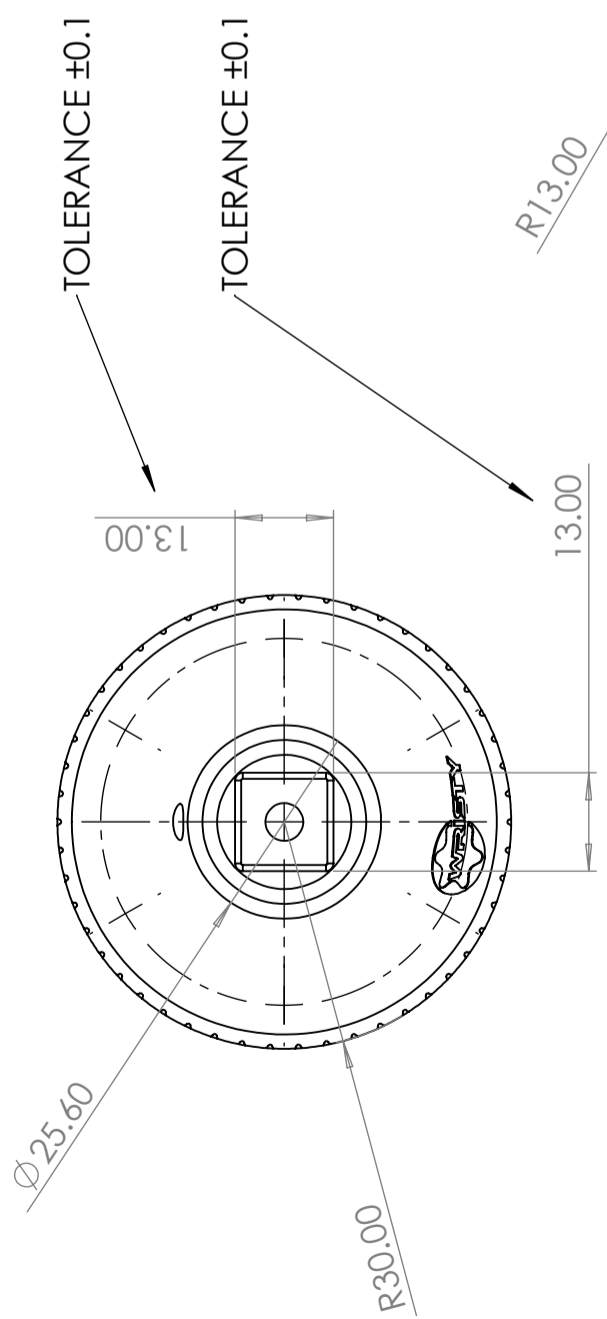
5 Signatories

Tested By: Ash Horne

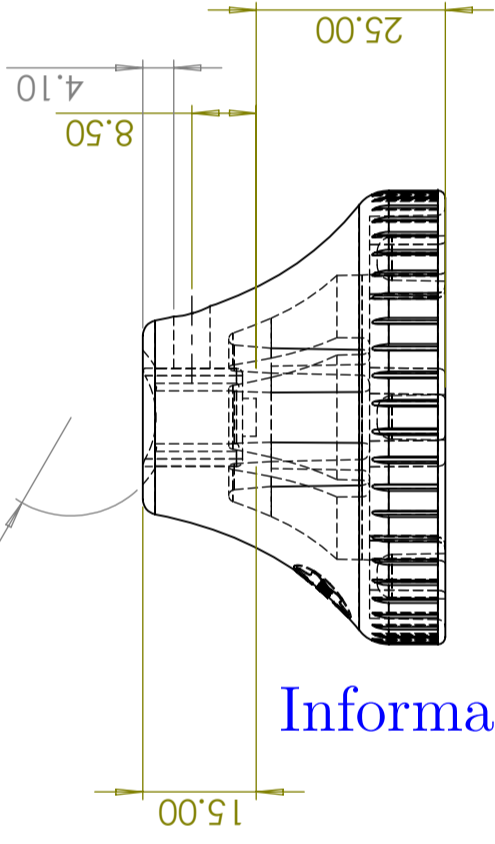
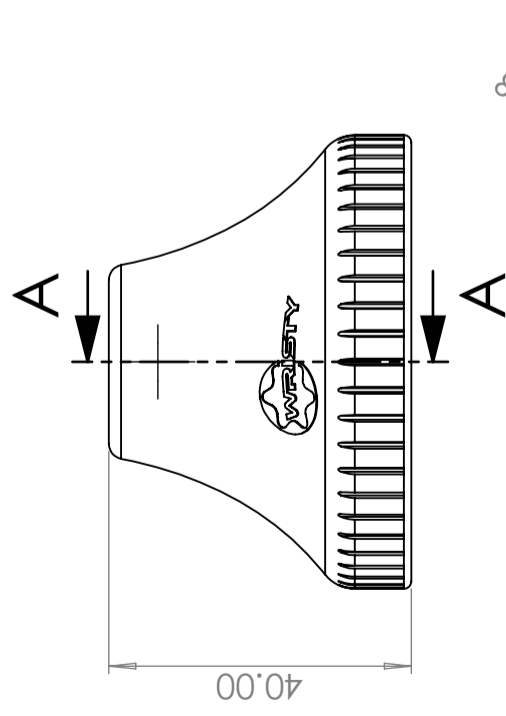
Signature: _____

Date: 28/06/2023

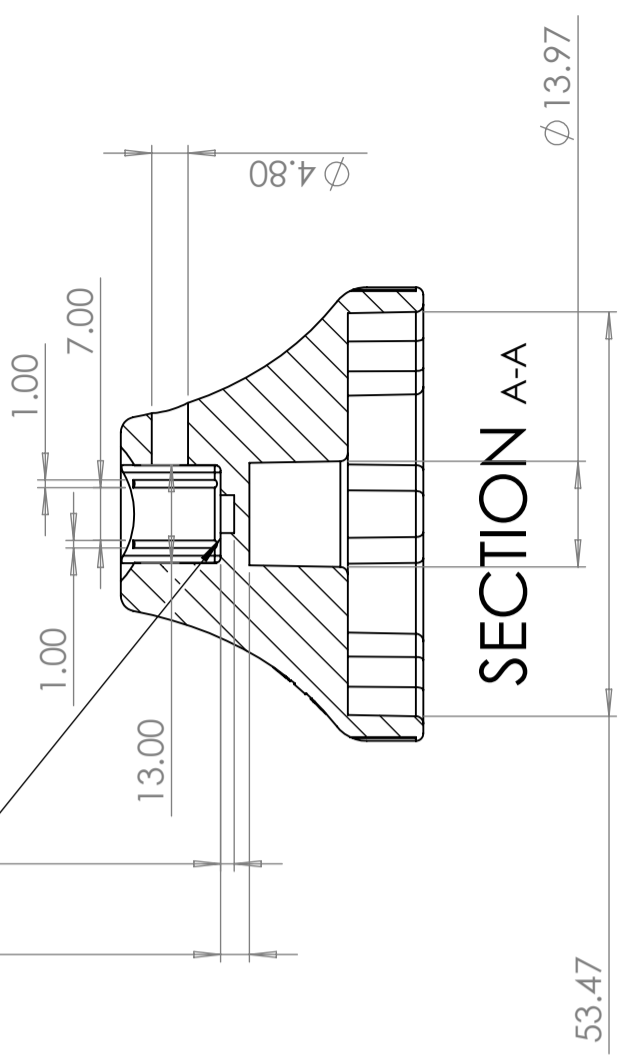
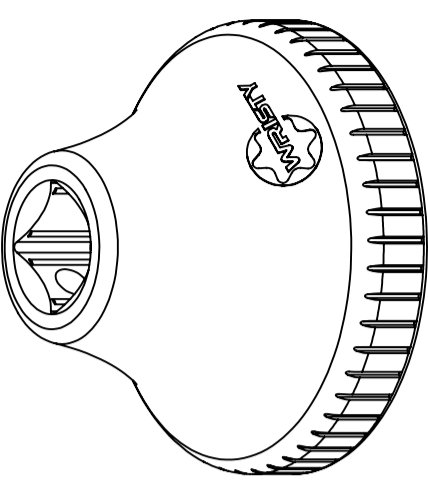
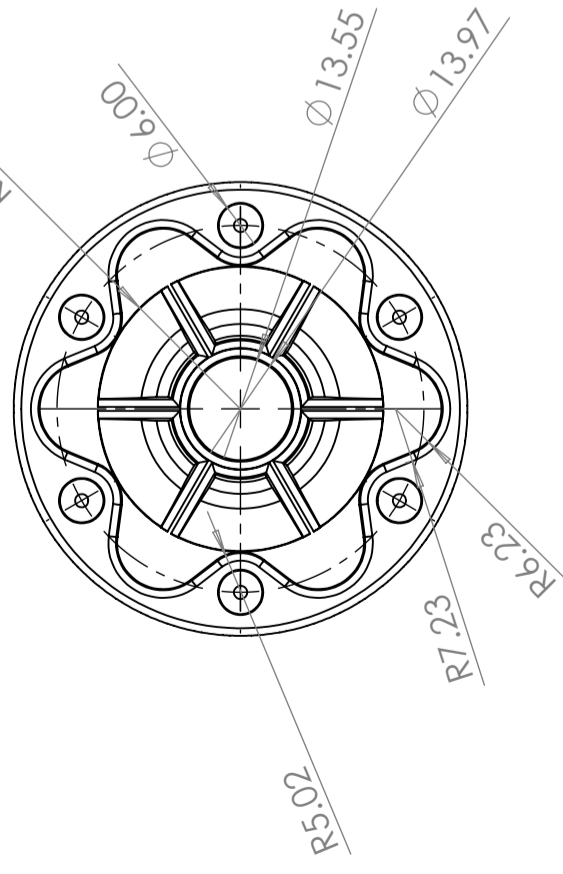
END OF REPORT



RAISED FACE BY 1.8MM



Information Supplied by Customer



CONFIDENTIAL

THESE DRAWINGS ARE PROVIDED ON A CONFIDENTIAL BASIS. COPYRIGHT IS OWNED BY IDEATION DESIGN. NO UNAUTHORISED COPIES OR REPRODUCTIONS OF THESE DRAWINGS TO BE MADE

NOTES:
 - REFER TO 3D CAD FILE OF SAME NAME & DRAWING NUMBER
 - NO SHARP CORNERS
 - BLEND ALL RADII
 - UNSPECIFIED RADII 0.25MM
 - DRAFT 1° UNLESS SPECIFIED
 - METAL PARTS - DE BURR

QUOTATION	YES	PROJECTION	3rd ANGLE	TOLERANCES	INFLATOR SOCKET	SCALE	1:1
PRODUCTION	NO	DO NOT SCALE	A3 SHEET	ALL DIMENSIONS IN mm	INFLATOR SOCKET	ISSUED FOR QUOTATION	Q-02
INFLATOR SOCKET		CHANGE		DATE	REV	28/03/23 Q-01	
ideationdesign		TITLE		SCALE	REV	1:1	
FINISH	PMS 319C COLOUR	CLIENT	WRISTY	INFLATOR SOCKET			
MATERIAL	GLASS FILLED NYLON	DATE	28/03/2023	DRAWN	RB	CHECKED	JS
TOOLMAKER TOOL DRAWINGS TO BE PROVIDED AND SIGNED OFF ON PRIOR TO PRODUCTION		DRAWN		DATE	28/03/2023	IF5001_051	