

SPECIFICATION FOR AUSTIN MOORE 'I-BEAM', STEM LENGTHS 165mm, 191mm & 203mm.

SPECIFICATION N° MPC/GEN 1

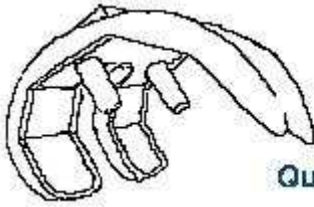
MATERIAL	Co Cr to BS 7252 Part 4, ASTM F75.
HEAT TREATMENT	Castings shall be heat treated in a vacuum atmosphere at 1200°C for 4 hours, and rapid gas quenched in Nitrogen.

TESTING

RADIOGRAPHY	Castings shall be x-rayed on an AQL basis of AQL 2.5, level II . The castings shall have 1 plan shot and be assessed against ASTM E192 plate 2 .
FLUORESCENT PENETRANT INSPECTION	Each casting shall be Fluorescent Penetrant Inspected in accordance with ISO 3452 1994 , and inspected to ISO 9583 1993 Table A1, Inspection Area B . All castings will be processed in the 'As Cast' condition.
MARKING	Please specify your individual requirements Each x-rayed casting can be identified with a unique number to maintain traceability. All castings can be marked with the batch number if required.
FINISH	Castings can be supplied either: <ol style="list-style-type: none"> 1.) As Cast – Grit Blasted (#60 grit), gates ground flush to +1.0mm. 2.) Fully Finished – Grit blasted stem (#60 grit), head machined and polished



<u>KEY</u>	
AQL= ACCEPTED QUALITY LEVELS	CoCr = COBALT CHROME
F/F = FULLY FINISHED	mm = MILLIMETRES
G = GRIT BLASTED	AMIB = AUSTIN MOORE 'I-BEAM'
ST/ST = STAINLESS STEEL	TIR = TOTAL INDICATOR READING



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FULLY FINISHED STEMS WILL BE SUPPLIED IN THE FOLLOWING CONDITION:

To Standard N° **AMIB/FF/G**.

Castings will be inspected 100% to inspection standard **AMIB/FF/G**.

The fully finished components shall be supplied in the non-passivated and non-sterilized condition. This can be provided however, at additional cost.

CERTIFICATION

Each batch of castings will be supplied with certification, the minimum being a Certificate of Conformity quoting Mechanical Test, Chemical Analysis, X-ray Certification numbers, quantity despatched, customer order number and customer part number.

A statement will be included on the Certificate of Conformity to confirm all product supplied has been Fluorescent Penetrant Inspected.

PACKAGING

'As Cast' castings shall be packaged to prevent damage during transit.

Each 'fully finished' casting shall be protected by covering the head with a tubular bandage.

The castings shall be individually sealed in a polythene bag. Each bagged casting shall be placed in a cardboard box separated from each other by bubble pack or equivalent.

Each bag shall be labeled with the following information:

MPC Batch N°

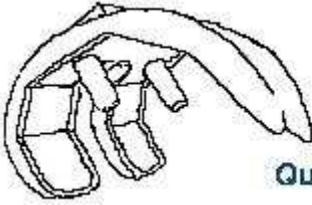
Description

Size

Material Code "C" (for Cobalt Chrome)

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BRIEF DESCRIPTION OF METHOD OF MANUFACTURE OF AUSTIN MOORE

'I-BEAM' STEMS

The components are Investment Cast in two pieces, a stem and a cap. These two components are subsequently electron beam welded together.

MACHINING OF AUSTIN MOORE I-BEAM STEMS

MPC cast designation for 'As Cast' head diameters runs from diameter **39 mm** to **55 mm** in **2 mm** increments. Even sizes are obtained only in the "Fully Finished" condition by machining from the next size down.

Example:

A part designated as a diameter **47 mm** has an actual head diameter of **50 mm**. This allows the part to be machined down to

- 1.) **47 mm**, the optimum head diameter, or
- 2.) **48 mm**, i.e. **0.5 mm** thicker wall than the optimum.

It must be noted that caution is required when machining castings. The castings must run "true" within **0.5 mm TIR**, in the machining fixture, to prevent wall thickness inconsistency.

LATENT DEFECTS

Up to **3%** latent defects will be accepted by the customer on as cast products only.

A **3 month** liability period applies to all castings from the date of delivery to the customer's site.

This ensures rapid feedback and corrective action of potential problems.

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