

PENSTOCKS, STOPLOGS AND HANDSTOPS

General Specification

The general specification sheets follow the format of BS7775, the British Standard for Penstocks. Our standard quotations are based upon this format for concise and easy identification of products.

Specific Specification

Examples of the most common particular specification sheets are reproduced here. These are by no means exhaustive and individual specific sheets can be provided upon request.

Table 1 - Cast Iron Penstocks

Component	Symbol CF1	Symbol CF2	Symbol CF3
Frame, door and wedges	BS EN 1561 grade 250	BS EN 1561 grade 250	BS EN 1561 grade 250
All seal faces	BS 1400 grade LG2 or BS 2874 grade CZ114	BS 1400 grade PB4C or BS 2874 grade PB102	BS 1400 grade PB4C or BS 2874 grade PB102
Spindles & couplings	BS EN 10088 grade 1.4305	BS EN 10088 grade 1.4305	BS EN 10088 grade 1.4401
Spindle nuts	BS 1400 grade LG2	BS 1400 grade PB4C	BS 1400 grade PB4C
Flush Invert Seals	Urethane Compound	Urethane Compound	Urethane Compound
Fasteners	Stainless Steel BS 6105 Grade A4	Stainless Steel BS 6105 Grade A4	Stainless Steel BS 6105 Grade A4

Notes:- 1/ The preferred option is CF1

2/ BS1452 :1990 has now been superseded by BS EN 1561:1997 which does not allow for the provision of Grade 220 (tensile strength) cast iron. To ensure the required technical characteristics for a penstock valve are not compromised, this standard should now read EN-CJL-250 (250 being the new tensile strength).

Table 2 - Fabricated Penstocks - with Steel Frames & Doors with Low Friction Seals

Component	Symbol ML1	Symbol ML3	Symbol ML4
Frame & door	BS EN 10025 grade S275	BS EN 10088 grade 1.4301	BS EN 10088 grade 1.4401
All seal faces & adjusters	Polyolefin	Polyolefin	Polyolefin
Spindles & couplings	BS EN 10088 grade 1.4305	BS EN 10088 grade 1.4305	BS EN 10088 grade 1.4401
Spindle nuts	BS 1400 grade LG2	BS 1400 grade PB4C	BS 1400 grade PB4C
Flush Invert Seals	EPDM	EPDM	EPDM
Fasteners	Stainless Steel BS 6105 Grade A4	Stainless Steel BS 6105 Grade A4	Stainless Steel BS 6105 Grade A4

Note:- EPDM is ethylene propylene monomer