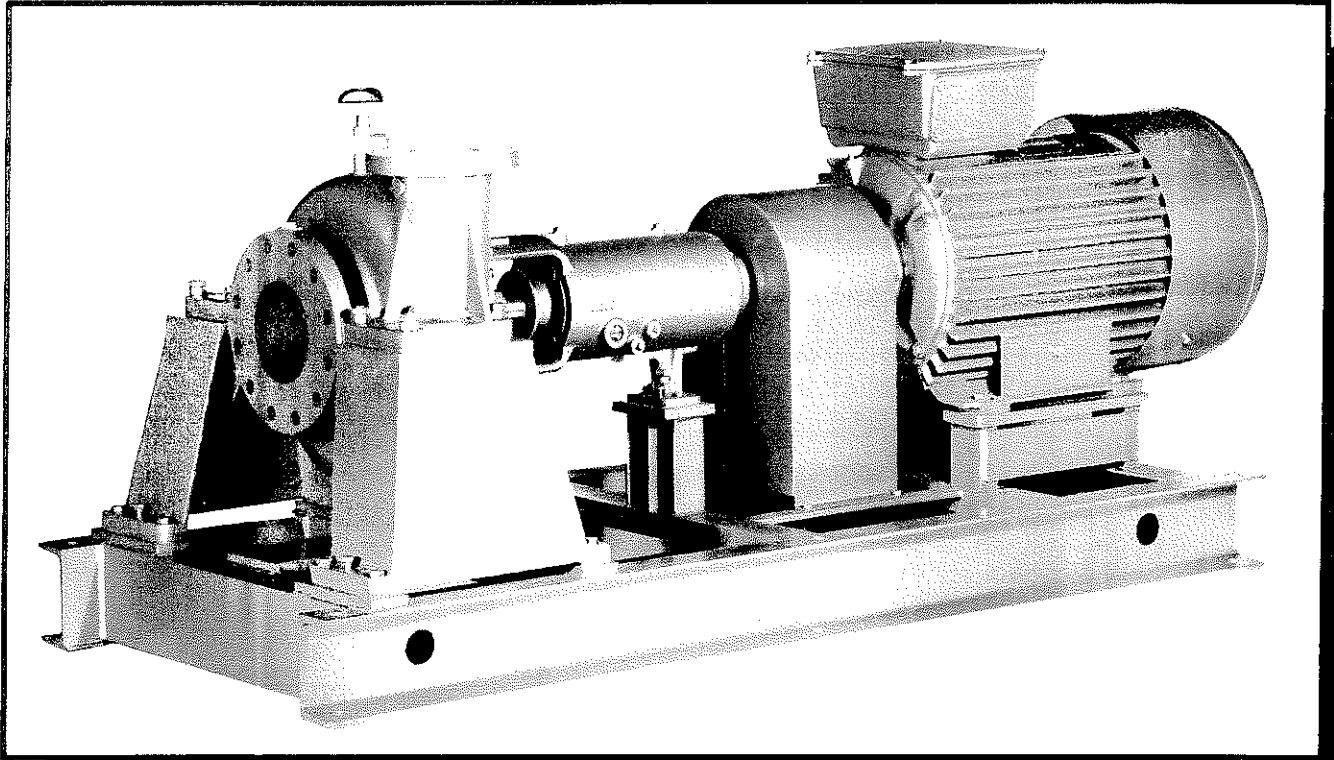
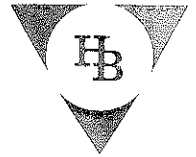


Startem



INTRODUCTION

The **STARTEM** range of centrifugal pumps has been designed to incorporate our considerable experience in the production of high temperature and process pumps capable of meeting the most arduous of conditions.

Centre line suspension of the pump casing enables thermal expansion within the pump to be absorbed without affecting the alignment. By fitting a spacer coupling the rotating element and bearing housing may be removed for overhaul without disturbing the pipe connections.

As an alternative to the water cooled packed gland, various types of mechanical seal may be fitted. A large diameter shaft minimises deflection which together with the robust nature of the pump gives a reliable and long life to the seals and bearings.

MATERIAL SPECIFICATION

Pump Casing: Cast Iron BS 1452 Grade 260 or Cast Steel BS 1504.161 Grade A.

Impeller: Phosphor Bronze BS 1400 LPB1-C or Ni-Resist BS 3468 Type 2-102A.

Neck Rings: Phosphor Bronze BS 1400 LPB1-C or Mild Steel BS 970 070M20.

Shaft: Stainless Steel BS 970 431S29.

Shaft Sleeve: (Where fitted)-Stainless Steel(BS 970 316S16).

Bearings: Roller Type and Angular Contact Thrust Bearing.

Coupling: Fenaflex Single or Spacer Type.

OPERATING CONDITIONS

The pumps are suitable for:-

C.I. Bodies 20bar (300lbf/in²), 177°C

C.S. Bodies 27bar (400lbf/in²), 220°C

FLANGES

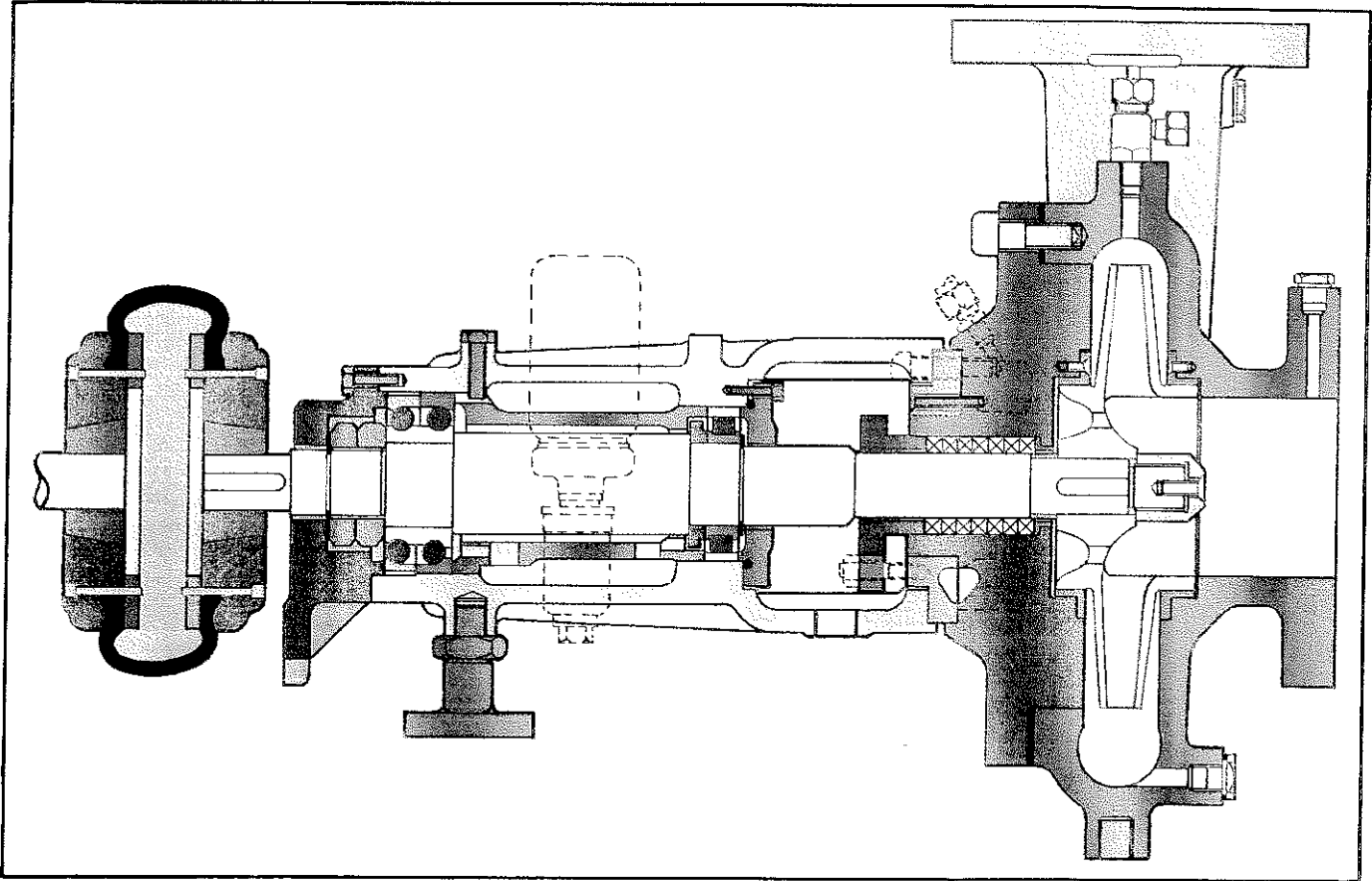
BS 4504-40bar or BS 10 Table H.

Holden and Brooke Limited

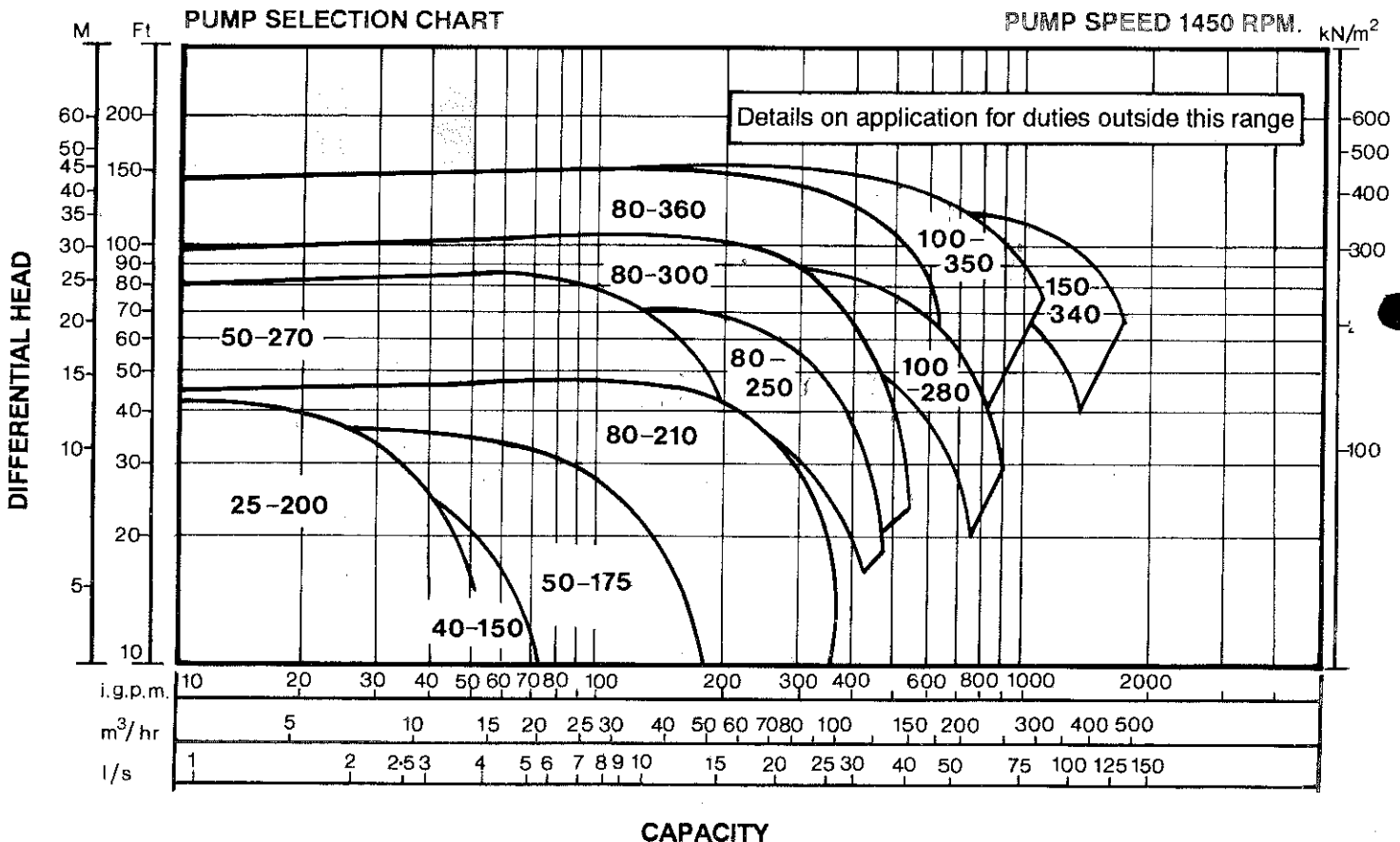
Haverford Street, Manchester M12 5JL, England.

Tel:061-274 4242, Fax:061-274 3068.

TYPICAL SECTION



Note: Improvements in general design and modifications in detail will be embodied for the benefit of clients as and when introduced; consequently this specification is subject to alteration, as may be necessary, without notice.



HEAD OFFICE
 Holden and Brooke Limited, Haverford Street,
 Manchester M12 5JL, England.
 061-274 4242 Fax: 061-274 3068

REGIONAL OFFICES
Southern
 Unit 2, Princess Mews, Horace Road, Kingston-u-Thames, KT12 5SZ.
 081-547 0411 Fax: 081-547 0836

Northern
 Haverford Street, Manchester, M12 5JL. 061-274 4242
 Fax: 061-274 3068

Scotland
 110A Maxwell Avenue, Westerton, Bearsden, Glasgow, G61 1HU.
 041-943 1252 Fax: 041-942 7353

Northern Ireland
 John Hind & Sons Ltd., Prince Regent Road, Belfast, BT5 6RS.
 0232 792121 Fax: 0232 401177