

- B9. British Ermeto Corporation Ltd.,
Beacon Works,
Hargrave Road,
Maidenhead, Berks.
Tel. Maidenhead 23423
- Manufacture of high pressure pipe couplings and valves for application to hydraulic and gas systems; manipulation of high pressure pipe work; supply of high pressure flexible hose.
- J.V. Sheldon
S.T. Wise
- Pipe couplings in mild steel, stainless steel, brass etc. for hydraulic systems to 700 bars and gas systems to 350 bars. Small size stainless steel couplings up to 1.5 kb.
Shut off, control, needle, non-return etc., valves etc. to 700 bars.
Special purpose valves for nuclear projects etc.
- B10. British Hydromechanics Research Association,
Cranfield,
Bedford, Beds.
Tel. Cranfield 422.
- Basic research into, and design of seals and hydraulic machinery.
Much of our work is concerned with lower hydraulic pressures but it does extend into the high pressure field. (7500 bars).
- M.J. Fisher
B.S. Nau
- Reciprocating shaft seal test rig to 700 bars. 0-100°C
Static seal test rig to 1.6 kb. -40°C to +100°C.
- B11. ✓ British Insulated Callenders Cables Ltd.,
Central Research and Engineering Division,
38 Wood Lane,
London W.12.
Tel. SFEpherds Bush 1212.
- Development studies on hydrostatic extrusion.
- A.J. Bangay
P. Gregory
- Fielding and Platt press 7.5 kb apparatus.
- B12. The British Non-ferrous Metals Research Association,
Euston Street,
London N.W.1.
Tel. EUSTon 6411.
- Long range study of developments in hot and cold working of metals leading to industrial processes.
- J. Crowther
B.R. Oliver
- At present sub-assemblies for conventional hot extrusion on a 500 ton forging press. Extension of these facilities to allow a study of cold and warm hydrostatic extrusion is being considered, meanwhile work is likely to be sponsored elsewhere.
- B13. ✓ The British Petroleum Co. Ltd.,
Research Centre,
Chertsey Road,
Sunbury-on-Thames, Middx.
Tel. Sunbury 5533.
- (a) Chemical reactions involving hydrocarbons under high pressure.
(b) Measurement of viscosity and compressibility of hydraulic fluids at high pressure.
(c) Measurement of viscosity of lubricants at high pressure.
- (a) Stainless steel autoclave, 200 ml, up to 6 kb and 260°C.
(b) CINCo rolling ball viscometer, 100 ml samples, up to 1.4 kb.
(c) Viscometer tube and sinker, 100 ml samples, for use up to 10 kb with the Imperial College pressure viscometer (Dr. K.E. Bett).
- J.K. Hambling) (a) D. Illing)
J.R. Crowther) (a) E.F. Coxon) (b) W.C. Pike)
R.F. Pywell) (c)

<u>Organisation</u>	<u>Field(s)</u>	<u>Equipment</u>
B14. The B.S.A. Group Research Centre, Mackadown Lane, Kitts Green, Birmingham 33. Tel. Stechford 3657	Gas pressure bonding/hot isostatic compacting. Bonding of metals, densifi- cation of metal, ceramic and cermet powders, etc. R.S. Bennett R.L. Sands	Autoclave with 3" dia. x 6" long working volume, pressures up to 1 kb and temperature conditions of up to 1500°C.
B15. Budenberg Gauge Co. Ltd., P.O. Box 5, Altrincham, Cheshire. Tel. Altrincham 5441.	Design and manufacture of mechanical (tube type) pressure gauges to 10 kb. Design and manufacture of deadweight testing equipment to 7 kb (7.8 kb projected).	
C1. Dept. of Chemical Engineering, Cambridge University, Pembroke Street, Cambridge. Tel. Cambridge 58231.	The synthesis of carboxylic acids using carbon monoxide at high pressure in the presence of organo- metallic catalysts. J.M. Davidson C.N. Kenney	Up to 500 bars : Baskerville autoclave.
C2. Dept. of Mineralogy and Petrology, Cambridge University, Downing Place, Cambridge. Tel. Cambridge 51741.	Phase synthesis and phase equilibrium studies, mostly hydrothermal. Synthesis of high oxidation state compounds at high oxygen pressure. Phase transitions, reaction mechanisms, reaction kinetics. R.G.J. Strens J.D.C. McConnell	Present pressure range (Tuttle type bombs) to 1 kb at up to 1000°C; to 4 kb at up to 900°C.
C3. Laboratory of the Physics and Chemistry of Solids, Cavendish Laboratory, Free School Lane, Cambridge. Tel. Cambridge 54481.	Physical studies on solids - defect structure, optical, structural and electrical properties. Chemical effects at high pressure. ✓ A.D. Yoffe	$\frac{3}{4}$ " tetrahedral anvil apparatus 70 kb up to about 1000°C. Van Valkenberg type opposed anvil diamond apparatus for optical studies. N.P.L. type diamond apparatus for X-ray studies at high pressure.