Meadox Medicals has recently introduced a new vascular prosthesis. Manufactured to the specifications of Denton A. Cooley, M.D., the graft is made of 100% Dacron® Polyester. An interesting feature is that pre-clotting though recommended, is not absolutely necessary. Also available is a woven patch graft in addition to the straight and bifurcated prostheses. For complete information on the sizes and cost of these products, circle number 50 on the Reader Service Card.

SMEC, Inc. is offering a pulsatile ventricle pump, a two-chambered device that is said to closely simulate natural cardiac function. The pump is suitable for either full or partial bypass, synchronized or non-automatic use. It will pump over 6 liters per minute and is operated by the SMEC assist system or 801 hand pump (in case of power failure). For details, circle number 54 on Reader Service Card.

Ed Urkiewicz, of Cardiovascular Instrument Company, has announced a new configuration of his modular roller pump system. The new unit is a two-pump module with a rolling base. Options with this unit include battery-power and/or pulsing. Accessories may be added to the base for temperature control and to adapt it to any available oxygenator. Three, four and five pump modules are similarly available. For complete information, Ed will be looking for your circle around number 55 on the Reader Service Card.

Elgar Corporation has introduced the first uninterruptible power source in the 0.5 to 2.5 kva power range for individual instruments and systems to prevent the problems of blackouts, brownouts, and dropouts. The unit offers no-break AC power to users of critical equipment such as dialyzers and blood pumps. The 1 kva unit is the size of an office typewriter and will provide 1000 Va for a minimum of 15 minutes. It offers constant power of 115 volts AC with a fluctuation no greater than 1 to 3 volts. For more information on these units, simply circle number 56 on the Reader Service Card.

Now available from the Pall Corporation is an in-line blood filter for extra-corporeal circuits developed by Drs. Patterson and Twitchell of the New York Hospital - Cornell Medical Center. It is designed to remove fibrin, fat, damaged red cells, platelets, and gas bubbles as small as 25 microns. They have been used in investigational studies as long as 20 hours and the investigators claim that 99% of these particles are removed by this filter. For your own file of information on this product, circle number 57 on the Reader Service Card.

Norm-O-Temp is the name of the normothermia circulator for heat exchanger and/or blanket use that has been recently marketed by Cincinnati Sub-Zero Products. It is capable of handling two units at once, heat exchangers or blankets, and can be used as a blood-warming coil and/or bag of blood. Circling number 58 on the Reader Service Card will bring you complete information on this unit.
Mr. L. H. Witzke of Waters Instruments, Inc. announces the DCR-700, a dye curve recorder, densitometer and cardiac output computer in one compact instrument. The overall unit is about 9" x 17" x 14" and weights about 26 pounds. Solid-state, plug-in circuit boards keep maintenance to a minimum. A single dye injection will display the cardiac output in digital form and the linear dye curve on a four-inch wide graph. Circle number 59 on the Reader Service Card and Mr. Witzke will send you the complete dossier on this instrument.

Waters also has available a new, rapid cardiac output calculator (pictured). Using the "fore-'n-aft" triangle formula, the operator simply dials three measurements from the dye curve onto the cardiolator along with the known quantity of injected dye. The output is read directly in the window of the cardiolator. Mr. Witzke can supply you with information on this product by circling number 60 on the Reader Service Card.

**Oxygenation**

Continuous line pressure monitoring is an important feature of most extracorporeal circuits. A description is given of modifications made on Tycos gauges which allow for phasic or mean line-pressure recordings to be displayed.

Tycos gauges were remodelled by the addition of three-way taps (A). Disposable pressure lines were produced*, 3 feet long and fitted with Male luer-connectors at each end. Included on the pressure line were thumb-roll occluders such as used with standard drip sets (B). By selective occlusion of this thumb-roll mean or phasic line-pressures can be monitored. Accidental or intentional high pressures can sometimes be encountered in an extracorporeal circuit.

As a means of achieving a safe seal with the Male push-in plastic luer connections, luer type safety locks were designed and produced. Two "safety locks" are required for each Tycos gauge used (C) and (D).

A method is described to modify Tycos gauges so as to safely observe extracorporeal line-pressures.

My thanks are due to Sister Mary Regis for the illustration.

Submitted by Maurice Robertson, Perfusionist and Senior Medical Technologist, Thoracic Unit, St. Vincent's Hospital, Sydney, Australia.

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*Tutal Laboratories, Sydney.