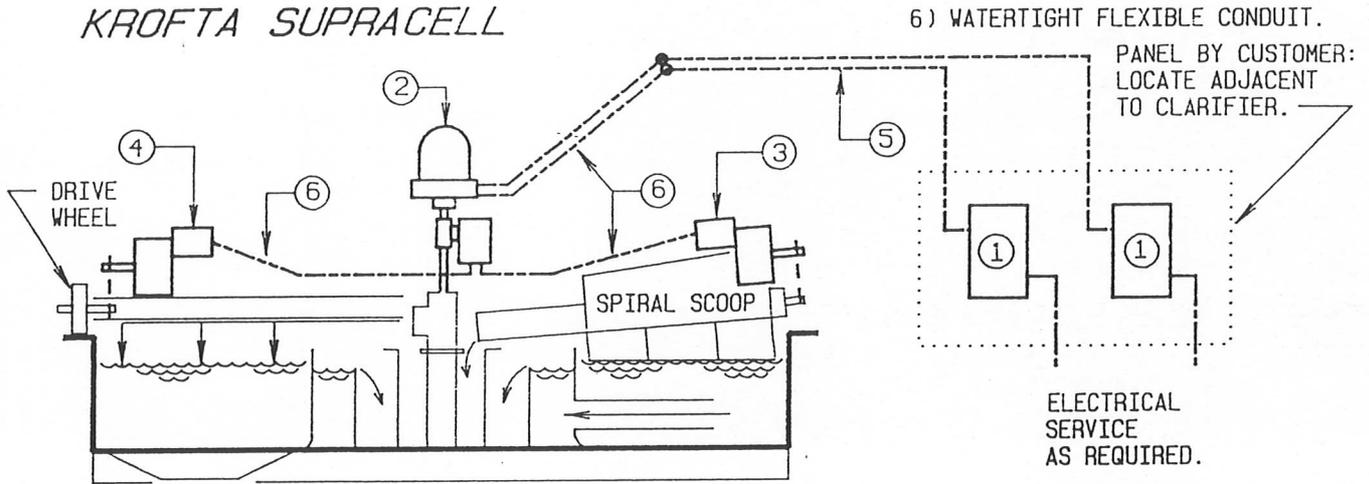


# KROFTA SUPRACELL



- 1) VARIABLE SPEED MOTORDRIVES WITH OPERATOR CONTROLS.
- 2) ROTARY ELECTRICAL SLIP RINGS.
- 3) SPIRAL SCOOP GEARMOTOR.
- 4) ROTATING CARRIAGE GEARMOTOR.

- 5) RIGID CONDUIT ATTACHED TO CEILING OR OVERHEAD BEAM.

NOTES: ALL WIRING BY CUSTOMER ACCORDING TO EQUIPMENT SPECIFICATIONS AND LOCAL ELECTRICAL CODES. SEE SPECIFICATION SHEET FOR SPECIFIC EQUIPMENT SUPPLIED.

## KROFTA SUPRACELL GEARMOTOR AND VARIABLE SPEED DRIVE OPERATION PARAMETERS.

Krofta Supracells are provided with variable speed motor control of the Rotating Carriage and Spiral Scoop. Speeds are operator adjustable and a speed turndown range of 4 to 1 will cover all anticipated operating conditions. Up to 2 HP, standard supply is DC type motors and controllers, 3 HP and over are standard with AC type motors and controllers. All Supracells are designed for 24 hr/day operation with a motor and geardrive service factor of 1.25.

Motor loading conditions for the Carriage motordrive are greatest when the unit is accelerating from rest. During normal running conditions it is lightly loaded, with undefined factors such as wheel rolling friction and water resistance accounting for the major load. The drive wheel tire acts as an overload device, excessive rotational resistance will result in tire slippage on the tank rim before any other drive components are overloaded.

The Spiral Scoop motordrive must handle a cyclical load as floated sludge is scooped off the water surface. The maximum possible scooping depth and therefore greatest load would occur in the unlikely event of water overflow from the unit, from 6" to 12" scooping depth depending on Supracell size. The motor drive is designed for this maximum condition and therefore the normal scooping depth range from 1" to 4" is well within the motor drive capacity.

FOR INFORMATION ONLY

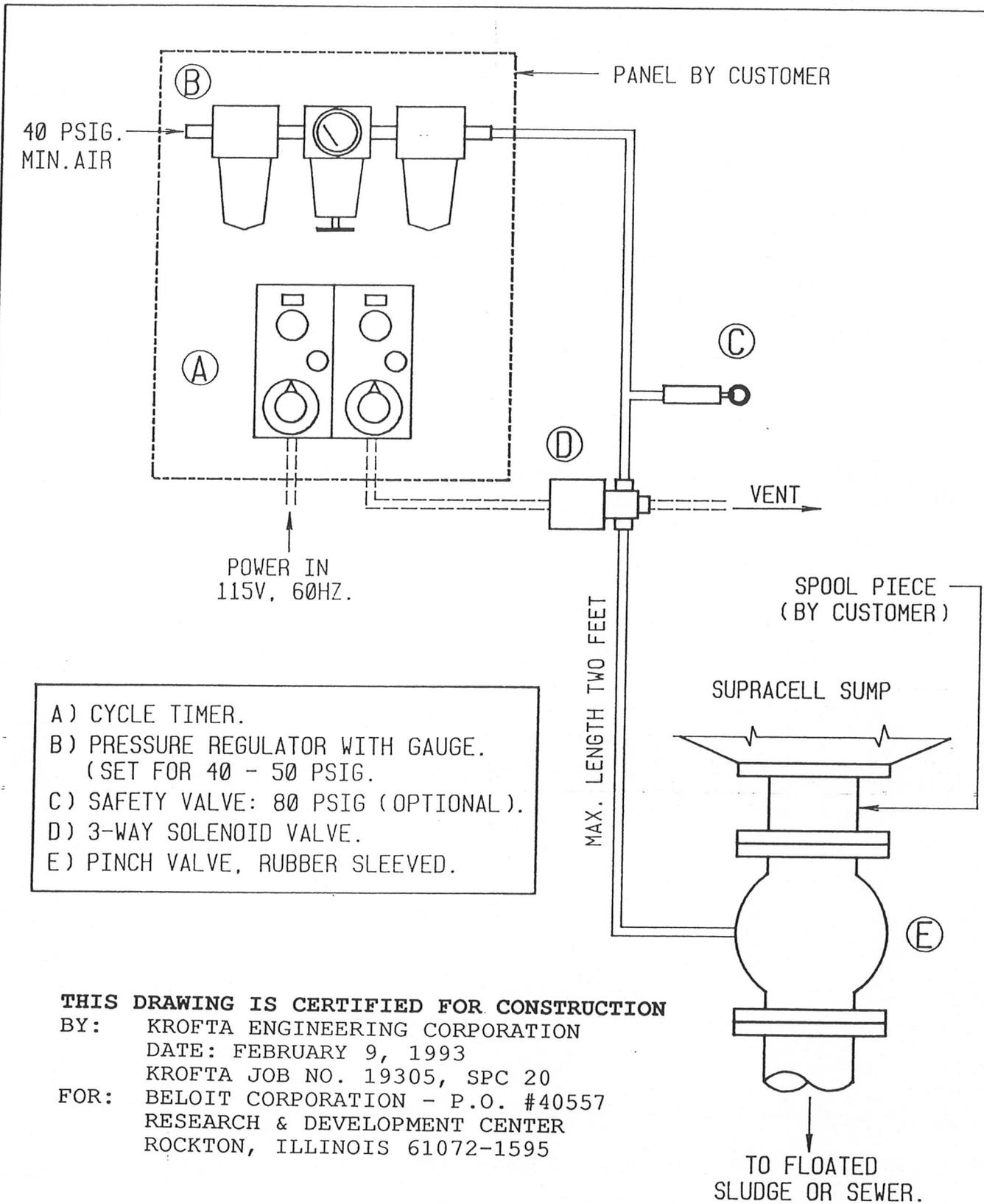


**KROFTA SUPRACELL MOTOR DRIVE  
EQUIPMENT SCHEMATIC**

DATE: NOV. 29, 1990

DWN: PLN SCALE: NTS

DWG: U4-SPC-937



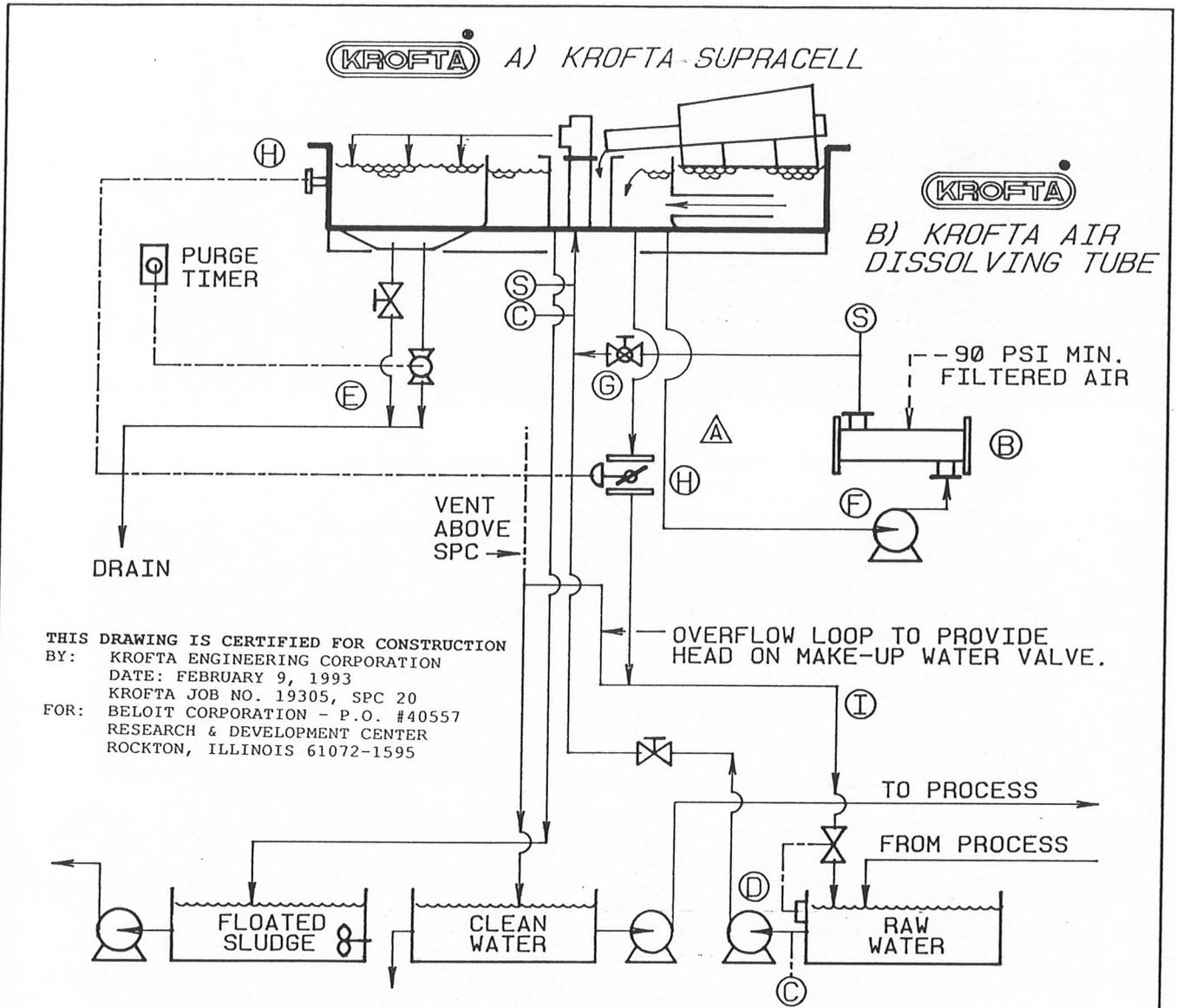
- A) CYCLE TIMER.
- B) PRESSURE REGULATOR WITH GAUGE. (SET FOR 40 - 50 PSIG.)
- C) SAFETY VALVE: 80 PSIG (OPTIONAL).
- D) 3-WAY SOLENOID VALVE.
- E) PINCH VALVE, RUBBER SLEEVED.

**THIS DRAWING IS CERTIFIED FOR CONSTRUCTION**  
 BY: KROFTA ENGINEERING CORPORATION  
 DATE: FEBRUARY 9, 1993  
 KROFTA JOB NO. 19305, SPC 20  
 FOR: BELOIT CORPORATION - P.O. #40557  
 RESEARCH & DEVELOPMENT CENTER  
 ROCKTON, ILLINOIS 61072-1595



**KROFTA SUPRACELL  
 AUTOMATIC BOTTOM  
 PURGE SCHEMATIC**

DRN. PLN	
JUNE 19/92	SCALE DNS
DWG.	
U4-SPC-1198	



THIS DRAWING IS CERTIFIED FOR CONSTRUCTION  
 BY: KROFTA ENGINEERING CORPORATION  
 DATE: FEBRUARY 9, 1993  
 KROFTA JOB NO. 19305, SPC 20  
 FOR: BELOIT CORPORATION - P.O. #40557  
 RESEARCH & DEVELOPMENT CENTER  
 ROCKTON, ILLINOIS 61072-1595

- A) KROFTA SUPRACELL, SPC 20.
- B) KROFTA AIR DISSOLVING TUBE, TYPE 1000.
- C) CHEMICAL FEED POINT.
- D) INFLUENT FEED; 600 GPM AT 8 FT/HD MIN. ABOVE SPC BASE LEVEL.
- E) AUTOMATIC BOTTOM PURGE VALVE; 4" VALVE WITH TIMER AND SOLENOID.
- F) PRESSURE PUMP; 250 GPM AT 180 FT/HD AT ADT INLET FLANGE.
- G) PRESSURE RELEASE GLOBE VALVE, 4" MINIMUM DIA. LOCATE WITHIN TWO FEET OF SPC INLET FLANGE.
- H) 6" LEVEL CONTROL BITTERFLY VALVE WITH LEVEL SENSOR AND CONTROLLER
- I) AUTOMATIC CLARIFIED WATER MAKE-UP.
- S) SAMPLE POINT.

RECYCLE FLOW - SINGLE ROTARY JOINT



**KROFTA SUPRACELL  
 TYPE SPC 20  
 FLOW SCHEMATIC**

BY: G.A. ROSE

DATE: DEC. 7, 1992

DWG: U4-SPC-1332

REV. A, FEB. 08/93