

#### CONCLUSION

The technical and economic advantages of pure hydrostatic extrusion over conventional methods appear to be quite significant for many potential product applications. The Hydrofilm technique offers the real possibility of extending the process capabilities even further for selected applications.

Of particular significance is the potential of achieving production rates comparable to those obtained by conventional extrusion while still enjoying many of the important benefits of plain hydrostatic extrusion. In addition, both mechanical and hydraulic presses may be used effectively with the minimum of design modification. Equally important from the standpoint of commercial implementation, this new approach renders the hydrostatic process about as operationally routine as conventional cold or hot extrusion and thus would be virtually ready for in-plant production operations.

#### REFERENCES

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- (3) Alexander, J. M. and Thiruvarudchelvan, S., "The Billet-Augmented Hydrostatic Extrusion of Copper", Annals of CIRP, Vol. XIX, No. 1, pp. 39-52, April 1971.

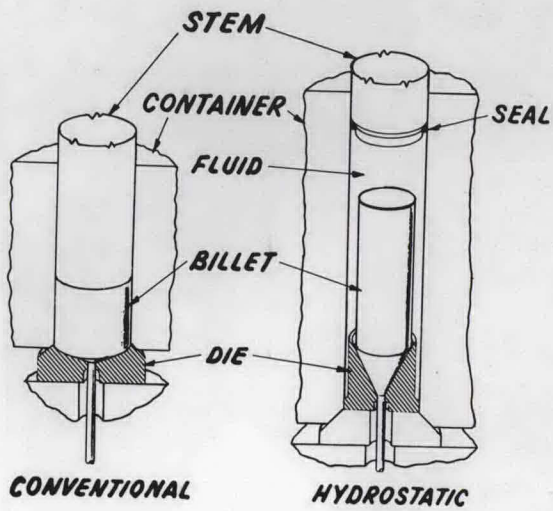


FIGURE 1. SCHEMATIC DIAGRAM OF CONVENTIONAL EXTRUSION AND HYDROSTATIC EXTRUSION PROCESSES

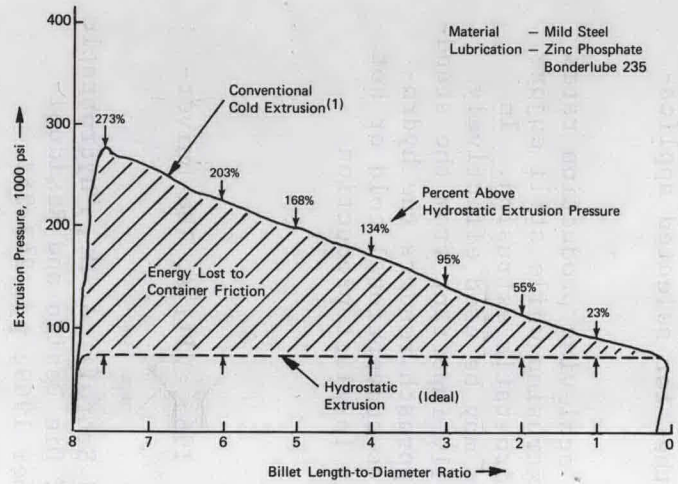


FIGURE 2. EFFECT OF BILLET LENGTH ON PRESSURES FOR CONVENTIONAL AND HYDROSTATIC COLD EXTRUSION OF MILD STEEL BAR

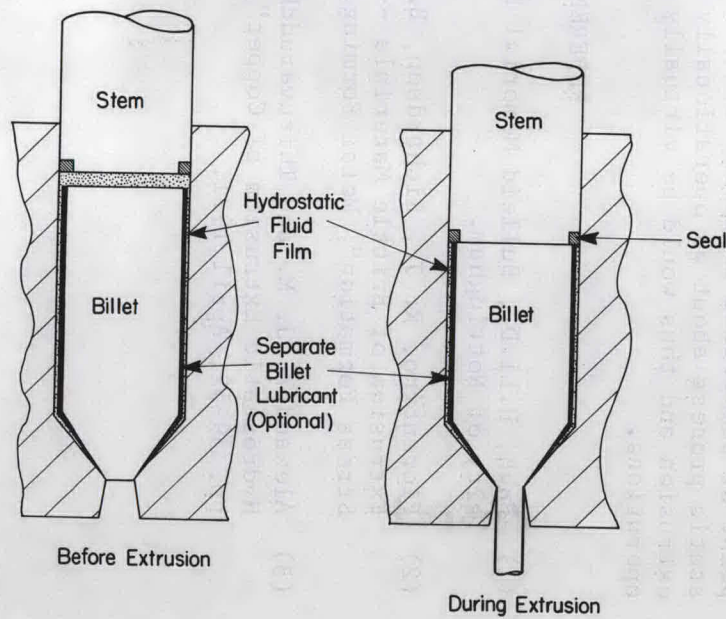


FIGURE 3. A SCHEMATIC OF HYDRAFILM EXTRUSION PROCESS