# MEDD EXTRUDER  Medical Extruder Direct Drive

The MEDD extruder from Davis-Standard, LLC exemplifies processor demands with a small footprint and performance features for coextrusion and multi-layer applications. This extruder is available in sizes ranging from 3/4 inch (19mm) to 1 inch (25mm), utilizes a direct drive motor versus belts and sheaves, and has a smaller footprint for close proximity to the common die.

## AT A GLANCE

- Direct drive motor

- Linear machine movement

- Interchangeable 1-inch 24:1 — 3/4-inch 24:1 L/D barrel assemblies

- Replaceable feed section liner

- New Windows® 7 PLC control system

- Compact design

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## PERMANENT MAGNET SYNCHRONOUS DRIVE MOTOR

- Rated at 6.5 kW (8.7 HP)
- Water-cooled motor
- Encoder
- Integral thrust bearing with L-10 life of 100,000 hours at 5,000 PSI (344 bar) head pressure and 175 RPM screw speed
- Direct drive providing 175 screw RPM
- Bored-through shaft to allow for screw removal
- Motor mounted on linear rails for ease of alignment to the die

## QUICK CHANGE BARREL ASSEMBLY

- 3/4-inch 24:1 L/D to 1-inch 24:1 L/D
- Bimetallic lined bore (X-800)
- Replaceable feed section liner with bushing assembly
- Stainless steel round hopper assembly mounted directly to the barrel
- Water-cooled section at the hopper end
- Three electrically heated air-cooled barrel zones utilizing finned cast aluminum heaters for high temperature applications
- High-capacity low-profile cooling fans

## EXTRUDER DRIVE REGULATOR

- 8.7 HP (6.5 kW), AC drive control with 0.01 percent speed regulation via encoder, mounted in the control cabinet

## CONTROL CABINET

Davis-Standard's DS-eVUE is a PC-based, embedded Windows® 7 embedded, mid-level extrusion process control system, providing many of the features and flexibility of more advanced control systems in a compact, affordable package. Data and files may be linked with other popular Windows® programs and are readily accessible to a customer's host computer on the network or to a higher level MIS computer.

## STANDARD FEATURES

- Graphic overview
- Reports
- Trending
- Event log
- Data collection
- WEB interface (2 concurrent users)
- Email notifications
- FDA-21 Part 11 ready
- Electronic signatures

### Hardware

Computer/HMI: The minimum basic specifications include:
- Industrial fanless panel PC
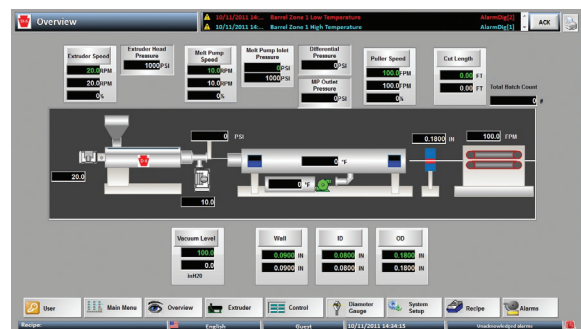- Integral 15.6-inch TFT LCD with resistive touchscreen

PLC:  Components and quantities are selected based upon the application and typically include:
- Allen-Bradley Control Logix PLC system

### Software

Operating Software: Microsoft Windows® 7 embedded main operating system with an anti-virus program, a zip program, and a PLC interface program as required

SCADA Foundation Software: InduSoft®, 1500 tag count, Run-Time software package



DS-eVUE Overview Screen