

**Air-Cooled Extruder Systems** 

# It's a Reality – Extreme Makeover for Extruders Is Finally Here! Take Advantage of It If You Are . . .

### Purchasing a New Extruder

Specify to your machine builder to install one of Tempco's exclusive high-efficiency Cool to the Touch heating and air cooling systems.

SMALL INVESTMENT

BIG RETURN

## Retrofitting

Outdated air cooled systems can be retrofitted with Tempco's efficient air cooled shroud designs without replacing your existing heaters.

Improve Your Bottom Line

Add Value to Your Extrusion Process

#### Rebuilding

An outdated, high maintenance, low efficiency liquid cooled system can be rebuilt with one of Tempco's turnkey Cool to the Touch heating and air cooling systems.

Designed for Durability and Trouble-Free Operating Performance

**Tempco's Finned Cast-In Heaters** with bolt clamping are exclusively designed to work with **Tempco's Cool to the Touch Shroud Systems**. They are manufactured with special high-efficiency fins and low overall mass cross-section for maximizing thermodynamics.



Unmatched Quality Shroud System & Finned Cast-In Heater

#### **Design Features**

- \* Reduced operating costs
- \* Quick, easy installation
- \* Greater Reliability
- \* Thermally efficient heating & cooling characteristics
- \* Reduces costly downtime
- \* Exceptional Cast-In Heater life
- \* Eliminates expensive closed loop liquid cooling systems
- \* Rugged, Durable & Appealing Design

# Liquid Cooling Cast-In Band Heaters vs. Cool to the Touch Air Cooling Shroud Systems

#### **Liquid Cooling**

Up to now Liquid Cooling Cast-In Band Heaters have been the predominant method of controlling the melt temperature of extrusion barrels. Although effective in removing heat from the extrusion process, there are a number of drawbacks that are primarily maintenance related.

Extruders using liquid cooled Cast-In Heaters can be subject to unpredictable and untimely failures of the cooling tube assemblies, resulting in extremely costly downtime to the processor. Inherent maintenance problems include stress corrosion cracks, linear thermal expansion of the heater body, and clogging of the tubes due to accumulation of mineral deposits. Additionally, Liquid Cooled Cast-In Heaters require an expensive cooling tower or heat exchange system, extensive plumbing systems and labor for installation.

#### A Change Is In The Air

Tempco-designed air cooled systems have evolved considerably and become more thermally efficient as a result of geometric changes and implementation of sophisticated shrouding and air flow techniques. Optimized direction and ducting of airflow, coupled with selection of the proper blower CFM, are important to ensuring that the air cooling technique removes the proper amount of heat from the extrusion barrel. Air Cooled Cast-In Heaters are virtually maintenance free and therefore, when properly installed and applied, have the capability to far outlast and perform their liquid cooled counterparts.

Consult Tempco With Your Requirements. We Welcome Your Inquiries.