# FORNEY

## "T" Oil Gun

Forney's "T" Oil Gun Assemblies deliver optimal atomization of liquid fuels for a wide range of load carrying burners.





www.forneycorp.com

## **PRODUCT OVERVIEW**

Forney "T" Oil Gun Assemblies are used to deliver atomized liquid fuels to load carrying burners. Atomization can be performed in several methods; Mechanical (MA), Wide-Range Mechanical (WRMA), Outside Mix (OM and OM Assist) or Inside Mix (IM). Atomization media can be compressed air, steam or natural gas. The Forney "T" Oil Gun is available in both "Rigid" and "Flexible" designs. The "Rigid" is for use in wall fired boilers, while the "Flexible" design is used in tilting tangential boilers.

The Forney "T" Oil Gun assembly typically consists of a guide tube, retraction assembly, oil gun and quick disconnect coupling. The guide tube supports the oil gun and provides both a cooling air connection and a gland for the gun to slide in and out of the firing position. The guide tube also retains the gun retraction assembly and the oil position limit switches. The oil gun is a concentric tube arrangement with a separate removable tip. The selection of the tip design is job specific and will vary depending on the gun capacity, type of atomization and atomization media. The gun is attached to the coupling assembly by a yoke and copper-ring gaskets. When the gun is fastened in place, a gun-coupled limit switch is actuated indicating a safe firing condition.

Options for the "T" Gun include an air swirler for fuel and combustion air mixing and aspirator for pressurized furnace applications. An electrical terminal box and IDD flame detectors are also optional depending on site requirements.

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## **FEATURES & BENEFITS**

#### Wide Application

The "T" Oil Gun can be applied to most all wall fired (Rigid design) and tilting tangential burners (Flexible design).

• Broad Range of Capacities Inputs available from 65-400 MBTU/hr.

#### • Easy Maintenance Oil gun is easy to remove, allowing access to the stainless steel tip for cleaning purposes.

### Multiple Methods of Atomization

Five types of atomization are available to meet the specific project requirements.

#### Firing Rate Controls

MA - Mechanical Atomization - High-pressure oil to the gun controls firing rate.

WRMA - Wide-Range Mechanical Atomization- Return oil pressure controls the firing rate.

**OM Assist** - Outside Mix (or Y-Jet) with Assist - Atomizing media pressure remains constant. Fuel oil pressure to the gun controls the firing rate.

**OM - Outside Mix** - Atomizing media pressure is maintained at a constant differential above the fuel oil pressure, usually 25 psig. Fuel oil pressure to the gun controls the firing rate.

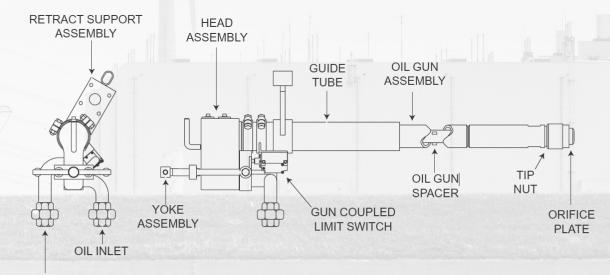
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IM - Inside Mix - Same as OM.



#### **Specifications:**

	MA	WRMA	OM Assist	ОМ	IM
Maximum Capacity (MBTU/hr):					
Rigid	400	400	300	175	150
Flexible	-	75	125	75	45
Oil Pressure (nominal, psig):					
Rigid	1000	1000	250	150	150
Flexible	-	550	250	125	125
Oil Viscosity (SSU):					
Rigid	100	130-150	130-150	130-150	130-150
Flexible	-	130-150	130-150	130-150	130-150
Atomizing Media Pressure (psig):					
Rigid	None	None	150	175	175
Flexible	-	None	150	150	150
Cooling Air (SCFM):					
Rigid	50	50	50	50	50
Flexible	-	50	50	50	50



ATOMIZING MEDIUM INLET

(RIGID DESIGN SHOWN WITHOUT RETRACT ASSEMBLY)

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