

TABLE 1. COMMERCIAL STANDARD FUEL OIL SPECIFICATIONS

A. Detailed Requirements for Domestic Fuel Oils

GRADE OF OIL	APPROX. B.T.U. PER GAL.	FLASH POINT, MIN. MAX.	WATER AND SEDIMENT, MAXIMUM	^a POUR POINT, MAXIMUM	DISTILLATION TEST		VISCOSITY MAXIMUM
No. 1 Light Domestic Fuel Oil A light distillate oil for use in burners requiring a high grade fuel.	139,000	110°F 165°F or legal	0.05%	15°F	10% point, maximum 420°F	End point, maximum 600°F	
No. 2 Medium Domestic Fuel Oil A medium distillate oil for use in burners requiring a high grade fuel.	141,000	125°F 190°F or legal	0.05%	15°F	10% point, maximum 440°F	90% point, maximum 620°F	
No. 3 Heavy Domestic Fuel Oil A distillate fuel oil for use in burners where a low viscosity oil is required.	143,400	150°F 200°F or legal	0.1%	15°F	10% point, maximum 460°F	90% point, maximum 675°F	Saybolt Universal at 100°F 55 seconds

^aLower or higher pour points may be specified whenever required by conditions of storage and use. However, these specifications shall not require a pour point less than 0 deg. Fahr. under any conditions.

B. Detailed Requirements for Industrial Fuel Oils

GRADE OF OIL	APPROX. B.T.U. PER GAL.	FLASH POINT, MIN. MAX.	WATER AND SEDIMENT, MAXIMUM	POUR POINT, MAXIMUM	VISCOSITY, MAXIMUM
No. 4. Light Industrial Fuel Oil An oil known to the trade as a light fuel oil for use in burners where a low viscosity industrial fuel oil is required.	144,500	150°F. See Note b	1.0%	See Note c	Saybolt Universal at 100°F 125 seconds
No. 5 Medium Industrial Fuel Oil Same as Federal Specifications Board Specification for Bunker Oil "B" for burners adapted to the use of industrial fuel oil of medium viscosity.	146,000	150°F	1.0%		Saybolt Furoil at 122°F 100 seconds
No. 6 Heavy Industrial Fuel Oil Same as Federal Specifications Board Specification for Bunker Oil "C" for burners adapted to oil of high viscosity.	150,000	150°F	Water sediment 1.75% 0.25%		Saybolt Furoil at 122°F 300 seconds

^bWhenever required, as for example in burners with automatic ignition, a maximum flash point may be specified. However, these specifications shall not require a flash point less than 250 deg. Fahr. under any conditions.

^cPour point may be specified whenever required by conditions of storage and use. However, these specifications shall not require a pour point less than 15 deg. Fahr. under any conditions.

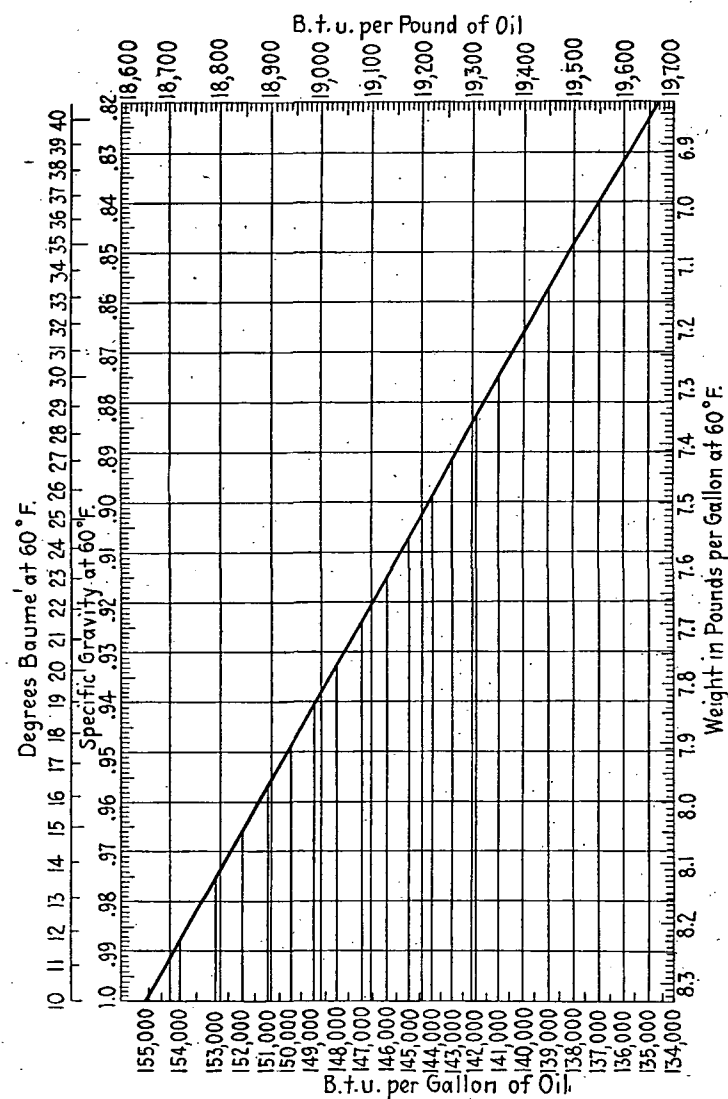


FIG. 1. HEAT CONTENT OF VARIOUS QUALITY OILS

will depend entirely upon the individual installation, but it is reasonable to assume an increase in efficiency of 10 to 15 per cent over coal.

The chart (Fig. 2) can be used for estimating the cost per 1,000,000 B.t.u. for various heat contents per gallon (see Fig. 1), and costs per gallon and is based on an overall efficiency of 60 per cent. The cost in