



## Mobil DTE™ 20 Series

### Hydraulic Oils

#### Product Description

Mobil DTE™ 20 Series oils are supreme performance anti-wear hydraulic oils designed to satisfy a wide range of hydraulic equipment requirements. They provide long oil/filter life and optimum equipment protection reducing both maintenance costs and product disposal costs. They were developed in conjunction with the major builders to meet the stringent requirements of severe hydraulic systems using high pressure, high output pumps as well as handling the critical requirements of other hydraulic system components such as close clearance servo-valves and the high accuracy numerically controlled (NC) machine tools. These products meet the most rigorous performance requirements of a wide range of hydraulic system and component manufacturers using various multi-metallurgy designs allowing a single product with outstanding performance characteristics.

The DTE 20 Series oils are formulated with high quality base oils and a super-stabilised additive system that neutralises the formation of corrosive materials. They are designed to work with systems operating under severe conditions where high levels of antiwear and film strength protection are needed, yet they are formulated to work where non-antiwear hydraulic oils are generally recommended.

#### Features and Benefits

The Mobil DTE 20 Series hydraulic oils provide outstanding oxidation resistance allowing extension of oil and filter change intervals. Their high level of anti-wear properties and excellent film strength characteristics result in exceptional equipment performance that not only results in fewer breakdowns but helps improve production capacity. Their detergency and keep clean properties offer service over a wide range of system cleanlinesses while their controlled demulsibility permits the oils to work well in systems contaminated with small amounts of water yet readily separate large amounts of water.

Features	Advantages and Potential Benefits
Anti-wear	Helps reduce wear Protects systems using various metallurgy
Quality Reserve	Maintains performance features even under severe service conditions and extended drain intervals Helps improve system cleanliness
Oxidation Stability	Provides long oil and equipment life Helps extend filter life
Corrosion Protection	Prevents internal hydraulic system corrosion Helps reduce the negative effects of moisture in systems Provides corrosion protection of multi-metallurgy component designs
Meets a Wide Range of equipment requirements	One product can replace several products, minimizing inventory requirements Helps reduce potential for product misapplication
Air Separation Characteristics	Reduces foaming potential and it's negative effects
Water Separation	Protects systems where small quantities of moisture are present Readily separates larger quantities of water
Keep Clean Properties	Helps reduce system deposits and sludging helping to reduce maintenance costs Protects critical components such as servo-valves helping to extend equipment life

## Applications

- Hydraulic systems critical to deposit build-up such as sophisticated Numerically Controlled (NC) machines, particularly where close clearance servo-valves are used
- Where small amounts of water are unavoidable
- Applications where sludges and deposits form with conventional products
- In systems containing gears and bearings
- Systems requiring a high degree of load-carrying capability and anti-wear protection
- Applications where thin oil-film corrosion protection is an asset such as systems where small amounts of water are unavoidable
- Machines employing a wide range of components using various metallurgy

## Specifications and Approvals

Mobil DTE 20 Series meets or exceeds the requirements of:	21	22	24	25	26	27	28
DIN 51524-2 2006-09		X	X	X	X		

Mobil DTE 20 Series has the following builder approvals	21	22	24	25	26	27	28
Vickers I-286-S			X	X	X		
Vickers M-2950-S			X	X	X		
Denison HF-0			X	X	X		
Husky HS 207				X			

## Typical Properties

Mobil DTE 20 Series	21	22	24	25	26	27	28
ISO Grade	10	22	32	46	68	100	150
Viscosity, ASTM D 445							
cSt @ 40° C	10.0	21.0	31.5	44.2	71.2	95.3	142.8
cSt @ 100° C	2.74	4.5	5.29	6.65	8.53	10.9	14.28
Viscosity Index, ASTM D 2270	98	98	98	98	98	98	98
Specific Gravity @ 15.6° C/15.6° C, ASTM D 1298	0.845	0.860	0.871	0.876	0.881	0.887	0.895
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100° C	1B	1B	1B	1B	1B	1B	1B
Rust Characteristics Proc B, ASTM D 665	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Pour Point, °C, ASTM D 97	-30	-30	-27	-27	-21	-21	-15
Flash Point, °C, ASTM D 92	174	200	220	232	236	248	276
FZG 4-Square Load Support, DIN 51354, Fail Stage	-	-	12	12	12	12	12
Foam Sequence I, II, III, ASTM D 892	20/0	20/0	20/0	20/0	20/0	20/0	20/0

## Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Exxon Mobil Corporation  
3225 Gallows Road  
Fairfax, VA 22037

1-800-ASK MOBIL (275-6624)

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