

# The Ultimate Protection Against Metal-To-Metal Wear



DRILL & TAP SHIELD™



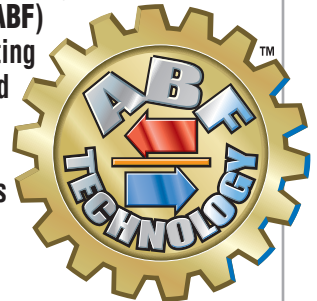
## ATTRIBUTES

- Extends Cutting, Drilling, Tapping & Machine Tool Life
- Reduces Tool Head & Metal Surface Temperatures
- Increases Cutting Speeds
- Increases Cutting Feed Rates
- Increases Production Rates
- Produces Smoother & Finer Metal Surfaces
- Provides More Metal Extraction Per Cut



## Setting The Standards In Anti-Wear & Extreme Pressure Through ABF Technology

DRILL & TAP SHIELD™ is the ultimate protection for metal working tools. Utilizing the most Advanced Boundary Film (ABF) Technology, it protects cutting tools from heat, friction and wear. It works by the application of multiple metal working technologies that include ionic bonding agents, metal film strength reducers and lubricity enhancement agents. This, along with unique extreme-pressure additives and the addition of ABF (Advanced Boundary Film) Technology, produces proven results that surpass all other products in the marketplace.





Steel Shield Technologies' mechanism of operation is based upon advanced methods of Tribology that improve lubricity and load carrying capacity. This, in turn, improves surface characteristics while simultaneously creating a stable chemical Advanced Boundary Film on the contacting metal surfaces of whatever equipment in which it is added. The process of Advanced Boundary Film formation is achieved through a unique combination of long-chain halogenated hydrocarbons and other proprietary additives that are highly stable and non-corrosive to the equipment's metal parts, and pose no threat to the environment or waste oil recovery systems. Steel Shield reacts chemically, under thermal conditions with the contacting metal surfaces, to form a complex surface-attaching film of protection. Steel Shield's characteristics are "electro-negative", which causes it to seek out and affix itself to the metallic surface areas. During this process, surface smoothing is accomplished, resulting in improved spread characteristics of the surfaces themselves. The final state of the opposing metal surfaces increases the fluid film strength even more, resulting in greatly reduced wear while imparting extreme pressure (EP) properties to the opposing metal surfaces. The result is a virtual elimination of frictional wear and significant cooling of the entire lubricated area yielding higher energy savings and reduced metallic debris and acids in the oil. This is extensively proven through elemental oil analysis and Ferrography of the used oil, before and after the use of Steel Shield's Advanced Boundary Film Technology.

## MSDS DATA

- Flash Point : 226°C
- Non-Hazardous
- Non-Flammable
- Synthetic Hydrocarbons

## PHYSICAL DATA

- Boiling Point : 238°C
- Evaporation Rate : < 0.01
- Specific Gravity : 1.07
- Insoluble In Water
- Vapor Pressure : <1@25°C
- Medium To Dark Amber

## RECOMMENDED USES

- Direct Cutting Lube/Coolant
- Additive To Improve Performance Of Insoluble Oils
- Drilling
- Tapping
- Machining
- Cutting
- Milling
- CNC
- Broaching
- Sharpening
- Wet Grinding

## DIRECTIONS

Drill & Tap Shield™ can be used as a direct replacement for currently used cutting fluids and lubrication/coolants in a 100% undiluted application. **NOTE:** Drill & Tap Shield™ is not compatible with water glycol compounds or triphenol butylated phosphate oils. Contains no volatiles or solvents. Contains synthetic hydrocarbons and advanced chemical additive technology. Non-toxic and environmentally friendly.

ITEM NUMBER	ITEM UPC#	ITEM DESCRIPTION	CASE PACK	CASE DIMENSIONS	CASE CUBE	CASE WEIGHT	TI/HI
DTS-1	8-94630-00171-7	Drill & Tap Shield Metal Treatment - 1 oz.	24	6.875" w x 4.625" d x 3.875" h	.07	2.5	48/12
DTS-4	8-94630-00172-4	Drill & Tap Shield Metal Treatment - 4 oz.	12	5.5" w x 7.125" d x 7.0" h	.16	3.8	40/8
DTS-16	8-94630-00173-1	Drill & Tap Shield Metal Treatment - 16 oz.	12	10.75" w x 8.0" d x 10.75" h	.54	15.0	20/5
DTS-128	8-94630-00174-8	Drill & Tap Shield Metal Treatment - 1 Gallon	4	9.25" w x 14.5" d x 12.5" h	.97	34.0	12/4
DTS-5G	8-94630-00175-5	Drill & Tap Shield Metal Treatment - 5 Gallon	1			42	
DTS-15G	8-94630-00176-2	Drill & Tap Shield Metal Treatment - 15 Gallon	1			125	
DTS-55G	8-94630-00177-9	Drill & Tap Shield Metal Treatment - 55 Gallon	1			455	



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