

JUNK MILL

Drillstar Junk Mills are designed for heavy-duty milling jobs. The fruit of over 20 years of experience in design and hardfacing, they are available in five standard designs covering a wide range of milling applications:

Conventional Junk Mill

Designed for cement, general junk, tubing milling or packer removal.



Integral Bladed Junk Mill

This uncompromising mill is ideal for cement milling jobs, plug removal or general milling jobs. Tool integrity is ensured by integral blades machined out of the body, which can be fitted with TOPMILL cutting inserts for improved ROP.



Flat Bottom Junk Mill

With more hardfacing for a longer tool life



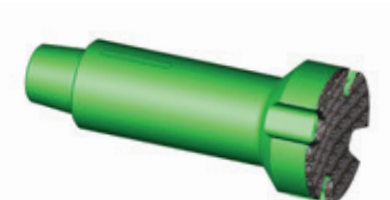
Super Junk Mill

Designed for intensive use, such as drill collar milling. Its wide blades allow for maximum weight to be put on the mill.



Conebuster Junk Mill

Its concave shape is ideal for milling bit cones and other objects by keeping them centered under the mill.



All Drillstar mills feature integral AISI4145H body and can be used in both cased and open hole. They are available in a variety of standard and custom sizes, with or without stabilizing blades.



JUNK MILL

Standard dimensions

Dressed OD	Top Pin Connection API Reg.	Overall Length	Fishing Neck		Weight (lbs)
			Length	OD	
3 1/2 - 4 1/2"	2 3/8"	20"	12"	3 1/8"	45
4 1/2 - 5 1/2"	2 7/8"	21"	12"	3 3/4"	62
5 1/2 - 5 5/8"	3 1/2"	23"	12"	4 1/4"	95
5 3/4 - 7 1/2"	3 1/2"	23"	12"	4 3/4"	105
7 1/2 - 9"	4 1/2"	27"	12"	5 3/4"	180
9 1/2 - 12 1/4"	6 5/8"	29"	12"	7 3/4"	350
13 - 15"	6 5/8", 7 5/8"	30"	12"	7 3/4", 9 1/2"	500
17 - 17 1/2"	7 5/8", 7 5/8"	33"	12"	8 3/4", 9 1/2"	625
18 1/2 - 26"	8 5/8", 7 5/8"	37"	18"	9 3/4", 9 1/2"	1200

Hardfacing

All mills can be hardfaced using TOPLOY S. Integral Bladed Mills and Super Junk Mills can be hardfaced using tungsten carbide inserts backed by TOPLOY S. Inserts enable better ROP and tool life, while TOPLOY backing significantly improves the hardfacing resistance to downhole shocks. Two standard types of inserts are available : TOPMILL square inserts, or SWORDFISH® shaped inserts. Custom inserts are available on request.



TOPLOY

*Copper alloy hardness : 120 to 130 Hv
Calibrated tungsten carbide grains.
Hardness: 1400 to 1700 Hv*

- Mills (TOPLOY S) : excellent behaviour thanks to its matrix specially designed to release worn grains.

Cutting inserts

Drillstar cutting inserts are made of premium cutting grade tungsten carbide, and can replace TOPLOY on most milling tools. They enable you to mill faster and longer, while reducing the necessary weight on bit.

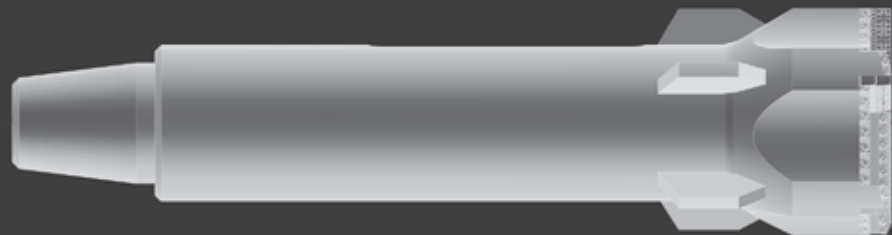
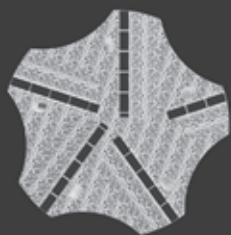
TOPMILL

these large, square-shaped tungsten carbide inserts are widely used today for all milling applications.



SWORDFISH®

These innovative inserts combine the advantages of both square and round-shaped models. (exclusivity from Cutting & Wear)



Downhole Innovations, Made in France