

## Hook Tests for TRT

On April 21st and June 14th 2010 Clint, Frank, John, Ryan and Roger used the Dyna-Link MS17200 digital hook/line tester at POP to test the strength of a number of different hooks currently used in the Hawaii pelagic longline fishery for swordfish and tuna.

The "Fail" point was defined as the point where the hook had opened up enough for a fish or whale to escape.

Hook gape was the distance (mm) from the hook point to the hook shank opposite the point.

Hooks tested included:

	Initial Conditions		No. tested	Avg.	"Fail" Range
	Wire dimensions	Hook gape		"Fail" Strength	
3.6 Japanese ringed tuna hook by Japanese manufacturer	5.0mm dia.	23.0mm	3	564 lbs	512-600
3.6 Japanese ringed tuna hook by Korean manufacturer	4.8mm dia.	23.4mm	3	457	450-462
18/0 Korean SS circle hook with a welded SS ring (swordfish)	5.3mm dia.	23.3mm	6	383	364-400
15/0 Korean SS circle hook with an eye	3.7x 4.5mm	22.0mm	3	311	290-324
15/0 Korean SS circle hook with a welded SS ring; Hi-Fishing brand	4.5mm dia.	25.0mm	3	303	300-310
15/0 Korean forged SS circle hook with a welded SS ring; OPI brand	3.7 x 4.7mm	24.0mm	3	315	306-324
15/0 Korean SS circle hook; Hi-Fishing brand	4.2mm dia	24.5mm	4	269	258-270
15/0 Korean SS circle hook; OPI brand	4.2mm dia	24.0mm	4	232	222-252
15/0 Mustad galvanized steel hook with an eye	3.6mm dia.	18.0mm	3	188	176-196
2.1mm clear monofilament branch line	2.1mm dia.		4	406	374-448