

# DWT 13K 급 Product/Chemical Tanker

## Fin Design

2023. 03. 23

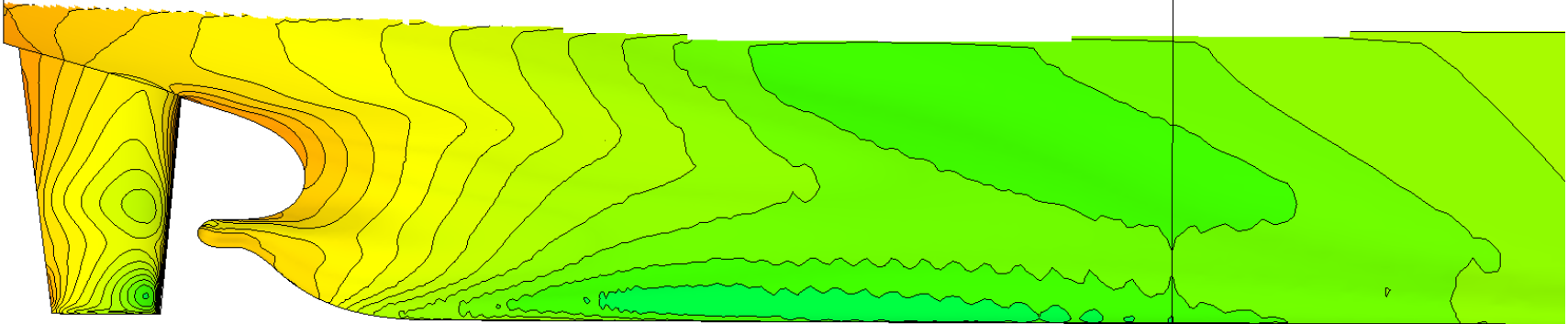
유체설계팀

선박  
해양플랜트  
연구소

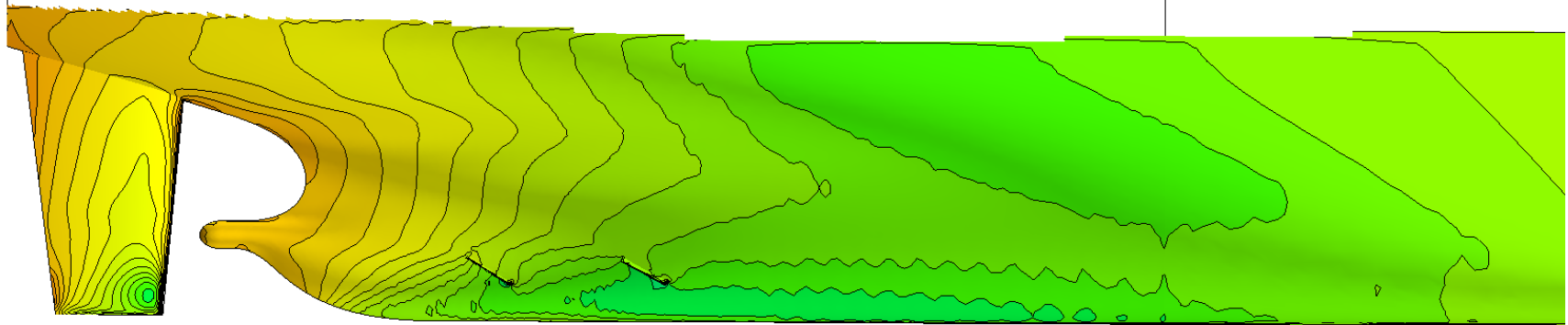
## 2. Hull Form Design

### ❖ Pressure Distribution

Compare Hull



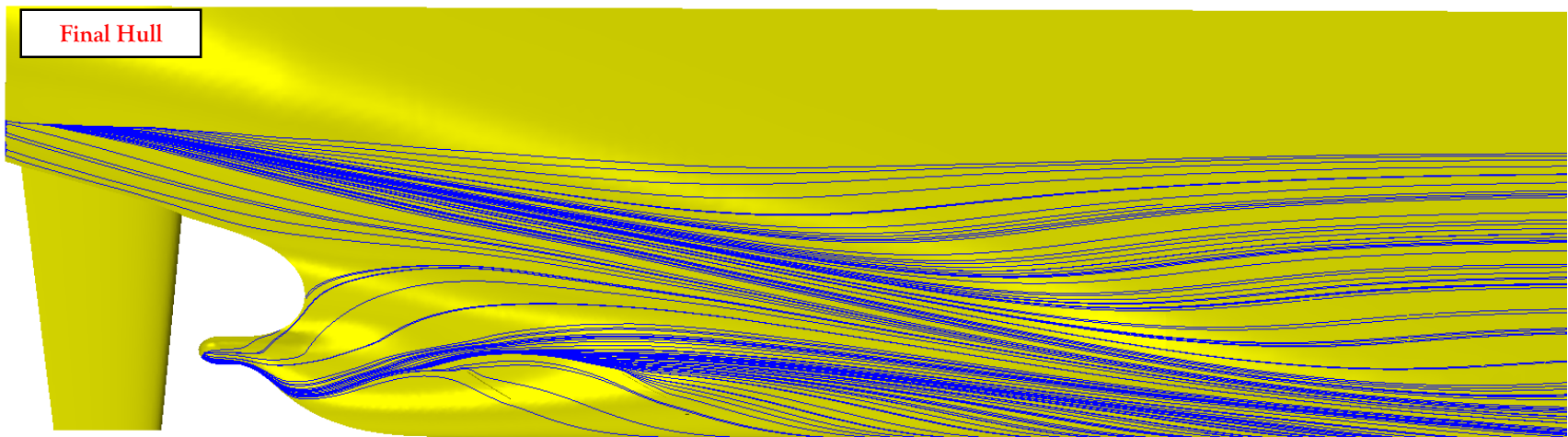
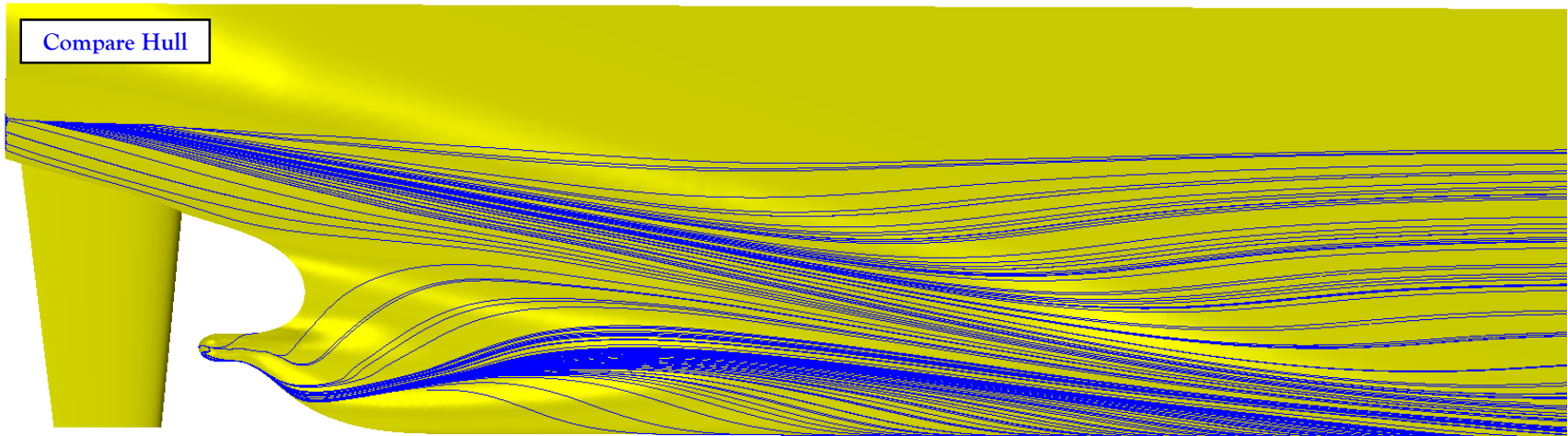
Final Hull



## 2. Hull Form Design

### ❖ Performance Evaluation by CFD (STAR-CCM+)

- Streamline

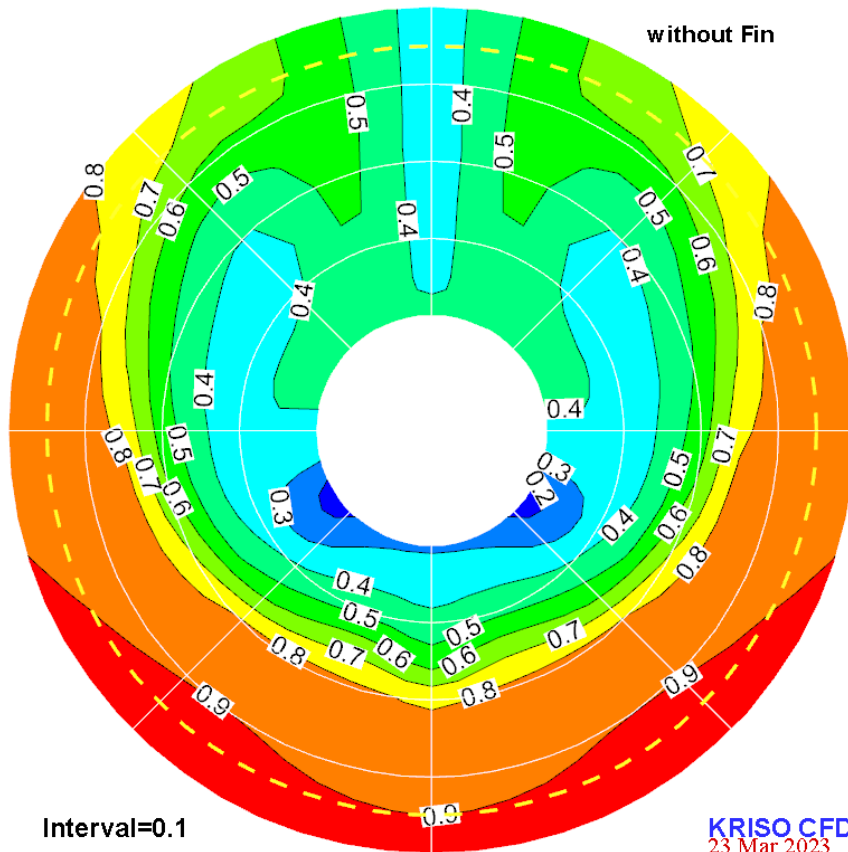


## 2. Hull Form Design

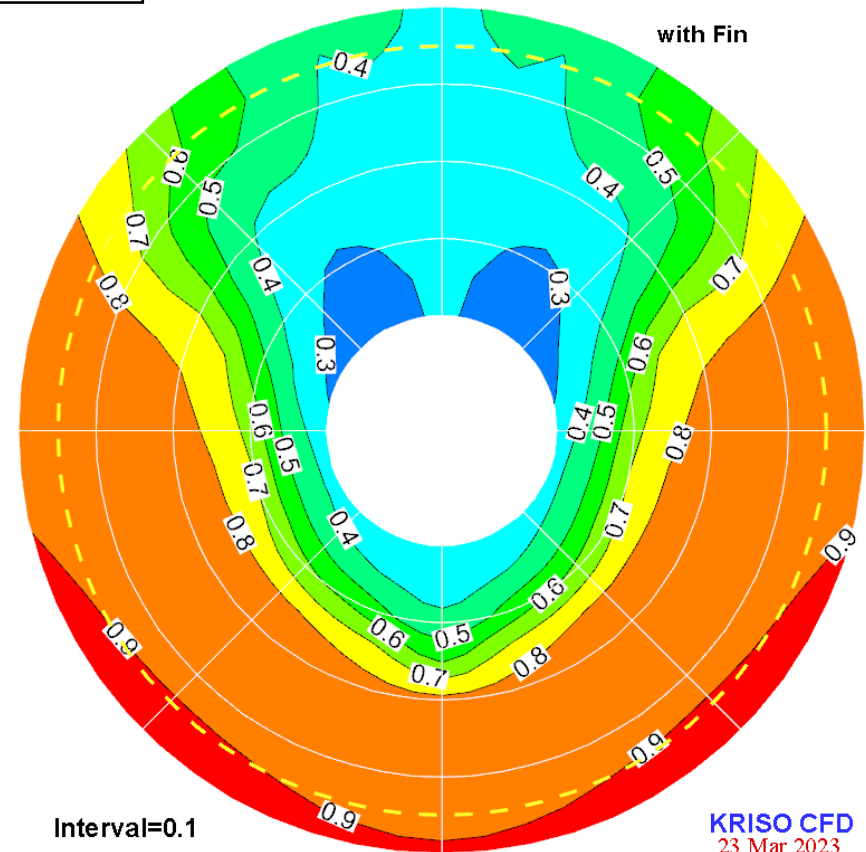
### ❖ Performance Evaluation by CFD (STAR-CCM+)

#### ▪ Wake Distribution

Compare Hull



Final Hull



# 3. Summary

## ❖ Speed-Power

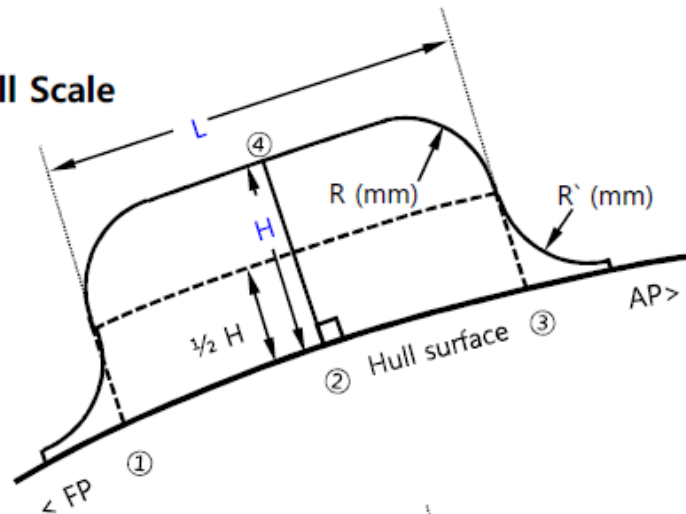
	EHP (kW)		
Speed (knots)	W/O Fin	W/ Fin	Deviation (%)
11.0	727	710	2.33
12.0	956	932	2.53
13.0	1238	1205	2.68
13.5	1596	1559	2.36
14.0	2165	2114	2.36
15.0	3159	3103	1.78

\* Free Surface 해석 수행

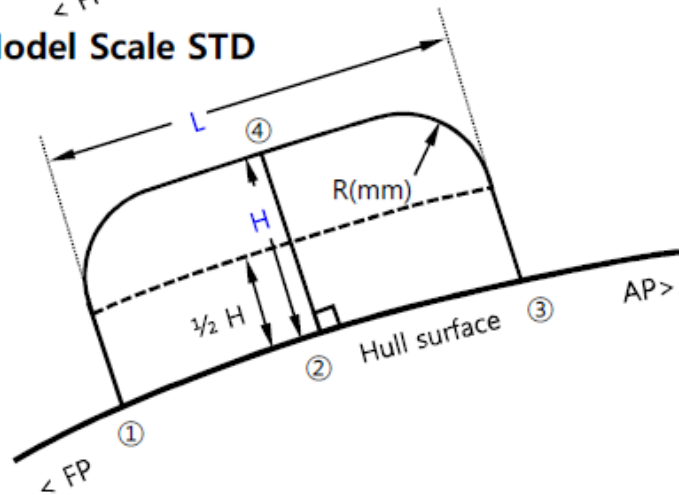
# 3. Summary

## ※ WED Definition

### ☒ Full Scale



### ☒ Model Scale STD



Location	ST	WL	Size(LxH)	R*(mm)
No.1 Device	2.5	1.5	1.50x0.20	80
No.2 Device	1.75	1.5	1.50x0.20	80

R\* : 모형시험 값

### ☒ No. 1 Device

Point	X(m)	Y(m)	Z(m)
1	14.5967	3.4521	1.8688
2	15.2500	3.4760	1.5000
3	15.9204	3.4479	1.1632
4	14.5967	3.6400	1.7534

### ☒ No. 2 Device

Point	X(m)	Y(m)	Z(m)
1	10.0544	1.9724	1.9055
2	10.6750	2.0960	1.5000
3	11.3225	2.1222	1.1184
4	9.9901	2.2057	1.8483