

13K급 Product Tanker Alternative Fuel 추진엔진 관련 검토

2022. 12. 29

친환경선박설계기술사업단/의장설계팀
황영석 책임

선박
해양플랜트
연구소

CONTENTS

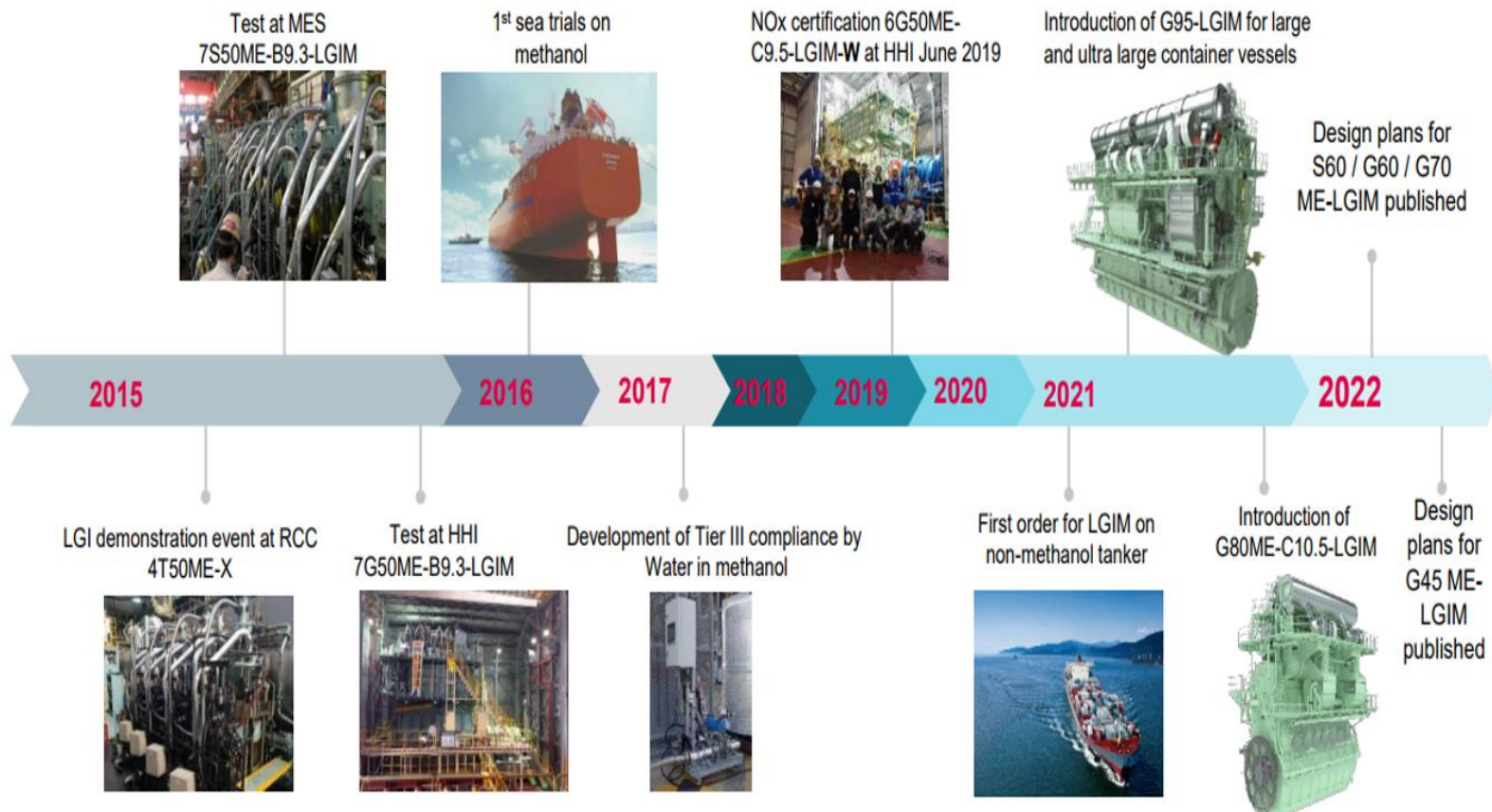
선박
해양플랜트
연구소

- 1. 2-Stroke Methanol Engine 현황
- 2. 2-Stroke Ammonia Engine Development 현황
- 3. Summary

1. 2-Stroke Methanol Engine 현황

[MAN-ES] 13K급 엔진(35 bore급) 개발 계획 없음

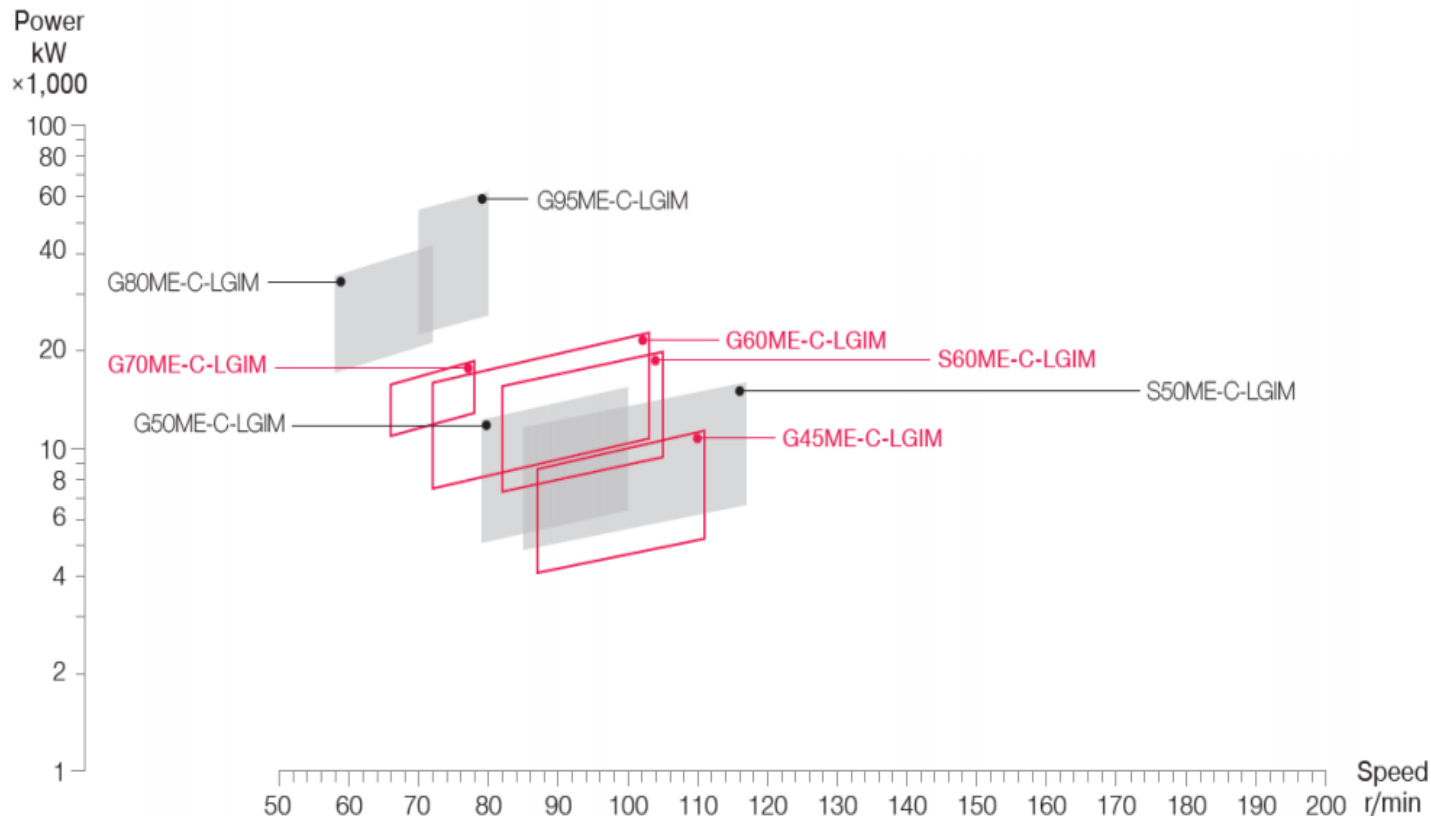
Methanol Engine Development Milestones : MAN-ES



1. 2-Stroke Methanol Engine 현황

Methanol Engine : MAN-ES

Existing S50, G50, G80 and G95-LGIM engines, alongside new G45, S/G60 and G70 LGIM engines of which design plans have been published.



1. 2-Stroke Methanol Engine 현황

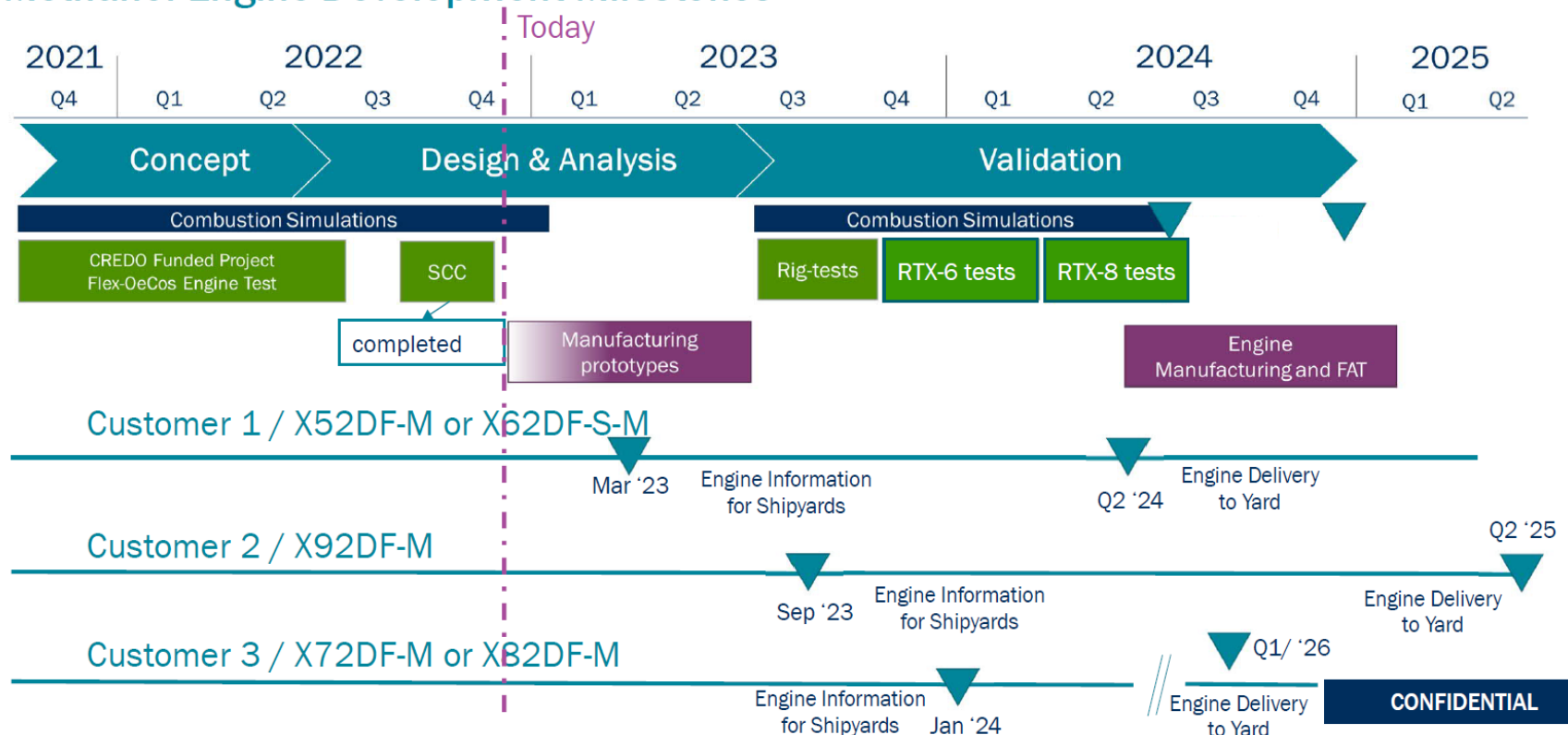
[WinGD] 13K급 엔진(35 bore급) 개발 계획 없음

Safe Path Towards Pilot Application

Timing

Legend:
SCC = Spray Combustion Chamber
SCE = Single Cylinder Engines
MCE = Multicylinder Engine
FAT = Factory Acceptance Test

Methanol Engine Development Milestones

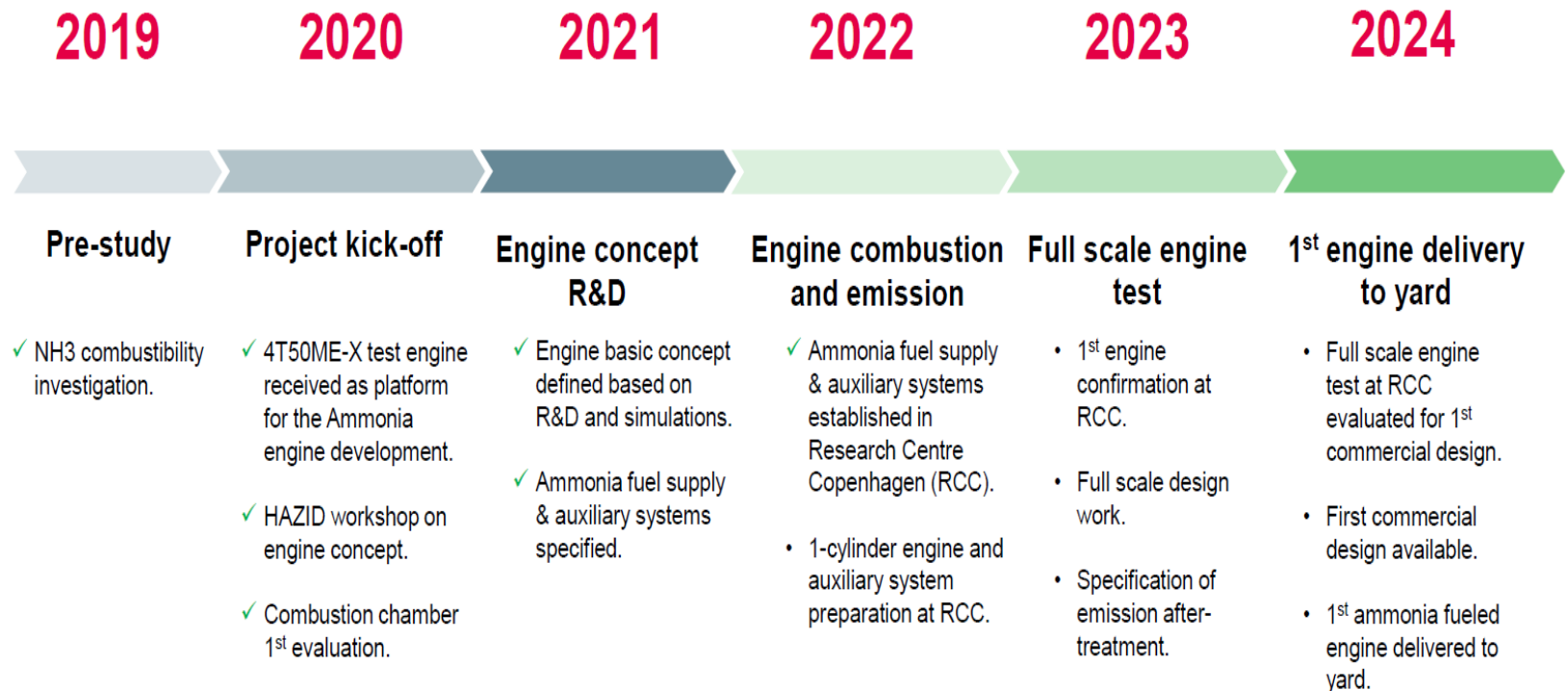


2. 2-Stroke Ammonia Engine Development 현황

Korea Research Institute of
Ships & Ocean Engineering

6

[MAN-ES] 2024 7S60 Engine 개발 후 2nd 모델 Announcing 예정

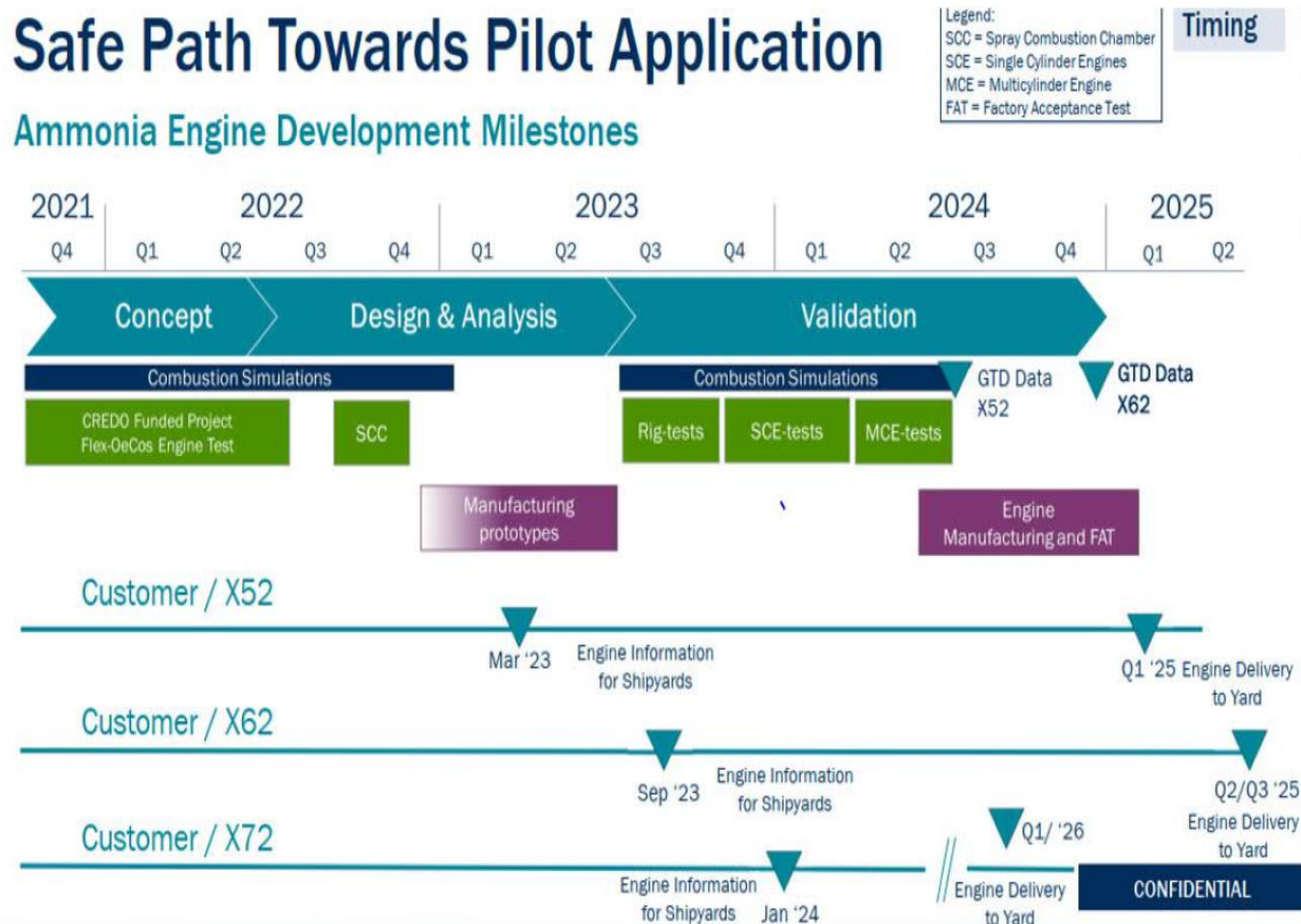


2. 2-Stroke Ammonia Engine Development 현황

[WinGD] 13K급 엔진(35 bore급) 개발 계획 없음

Safe Path Towards Pilot Application

Ammonia Engine Development Milestones



- Project name : 46k LPGC
- Engine type : 6X52DF-A-1.0
- PTO application
- Engine delivery : Dec. 2024

3. Summary

❖ Emerging Alternative Fuel 2-Stroke Engine Status

	MAN-ES	WinGD	비고
Methanol Engine	✓ 개발 완료 -4개 모델 적용 완료 -추가 4개 모델 설계 완료	✓ 5개 모델 개발 진행 중 -'24.2Q 1st 엔진 Delivery	13K급 모델 개발 계획 없음
Ammonia Engine	✓ 개발 진행 중 -'24 1 st 엔진(7S60) Delivery -이후 2nd bore Announcing	✓ 3개 모델 개발 진행 중 -'24.12 1st 엔진 Delivery (6X52DF-A-1.0)	13K급 모델 개발 계획 ?