

To	Groningen Seaports
From	Conship - RvdM
CC	
Date	11-07-2025
Ref.	A3052-0012-Rev01

A3052 Speed power - Havenschap2

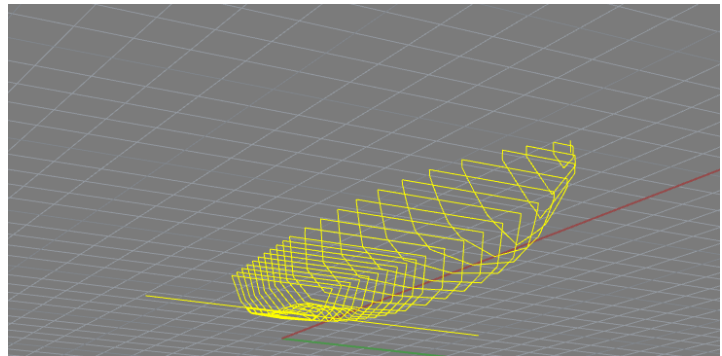
1 General particulars

A speed power prediction is performed for A3052.

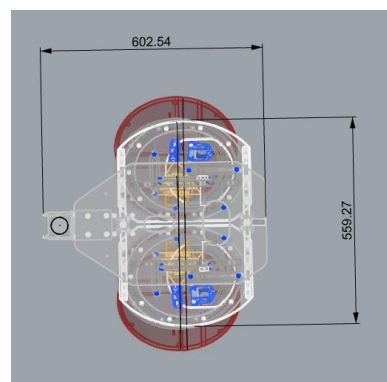
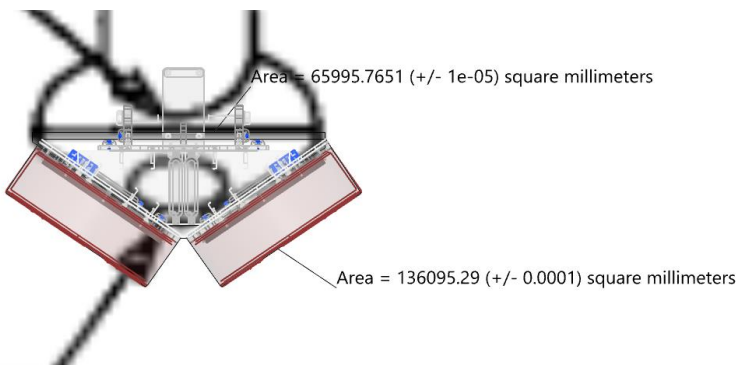
Multi chine hull as input:

Main particulars:

Name	[-]	A3052
<i>Lpp</i>	[m]	14.3
<i>Lwl</i>	[m]	14.5
<i>B</i>	[m]	4.6
<i>T mean</i>	[m]	0.85
<i>Trim</i>	[m]	0
<i>Displ. Vol</i>	[m ³]	29.41
<i>LCB</i>	[m]	7.157
<i>Diam. prop</i>	[m]	0.75



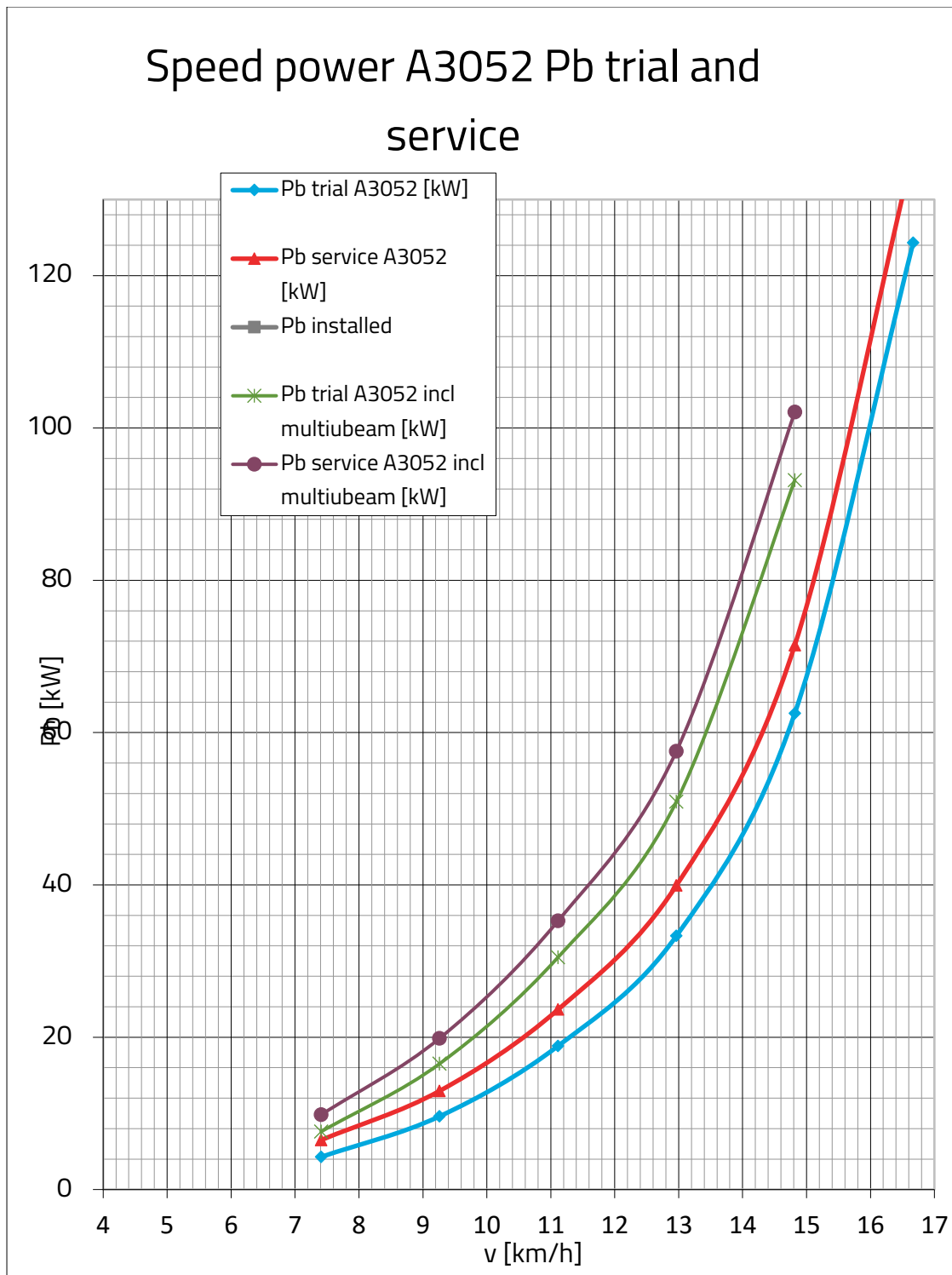
A multibeam unit of abt. 0.13 square meter frontal area is applied. The pipe holding the unit has a diameter of 46 mm. The resistance of the multibeam unit is scaled from measurements of a similar multibeam. The resistance incl. pipe is calculated to be abt. 900 N at 5 knots, which is abt. 40% addition to bare hull resistance. This value is advised to be further verified by measurements or CFD calculations.



For service margin a wind of abt. 8 m/s is applied, fouling of abt. 5% and abt. 4% of wave resistance.

For transmission losses a 3% gearbox conversion loss is taken into account.

2 Speed power results (km/h)



3 Speed power results (knots)

