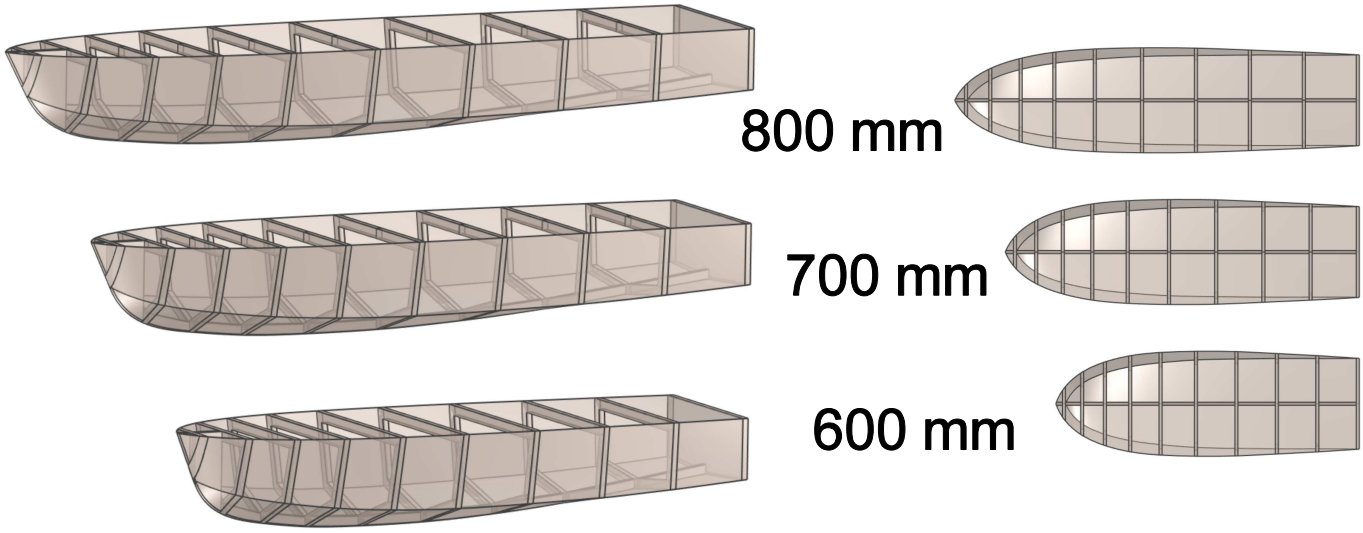
Der Universalrumpf

the universal hull

Konstruktion:
Hilmar Lange

Ein Spantensatz - drei Längen

One set of frames, three lengths



Die Rumpfbreite beträgt einheitlich 210 mm. Durch unterschiedliche Spantenabstände erhält man verschiedene Rumpflängen und -Proportionen. Weitere Rumpfbreiten können durch Skalieren des Bauplans erreicht werden.
Es können zudem beliebige Rumpflängen nach eigenen Wünschen hergestellt werden, indem die Spantenverteilung gemäß des Skalierungsfaktors neu berechnet wird.
Beispiel:
bei einer Wunschlänge von 730 mm beträgt der Umrechenfaktor in Bezug zum 600 mm Rumpf
730 / 600 mm = 1,217.
Somit ergeben sich die neuen Spantenpositionen:
Spant 1: 80 mm * 1,217 = 97,3 mm
Spant 2: 160 mm * 1,217 = 194,7 mm
usw.

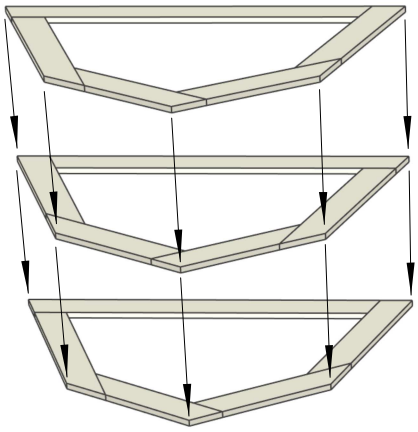
The fuselage width is uniformly 210 mm. Different frame spacings result in different fuselage lengths and proportions. Additional hull widths can be achieved by scaling the blueprint.
Any hull length can also be produced according to your own wishes by recalculating the frame distribution according to the desired factor.
Example:
With a desired length of 730 mm, the conversion factor in relation to the 600 mm hull is
730 / 600 mm = 1.217.
This results in the new frame positions:
*Frame 1: 80 mm * 1.217 = 97.3 mm*
*Frame 2: 160 mm * 1.217 = 194.7 mm*
etc.

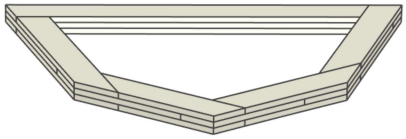
Aufgepasst beim Ausdrucken: stellen Sie im Druckmenü unter "Seiteneinstellungen" die Seitenanpassung auf "keine" bzw. "100%" !

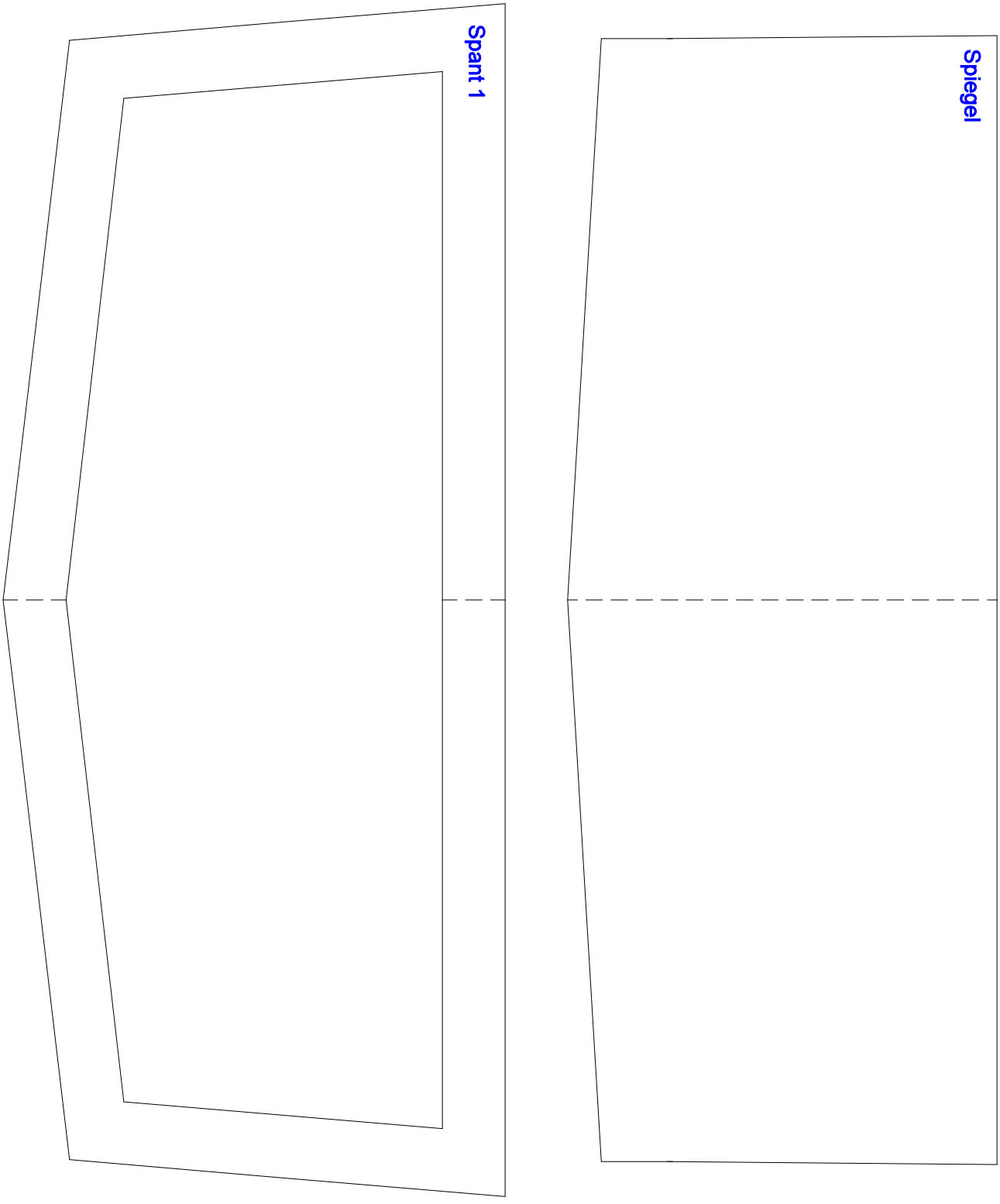
cm

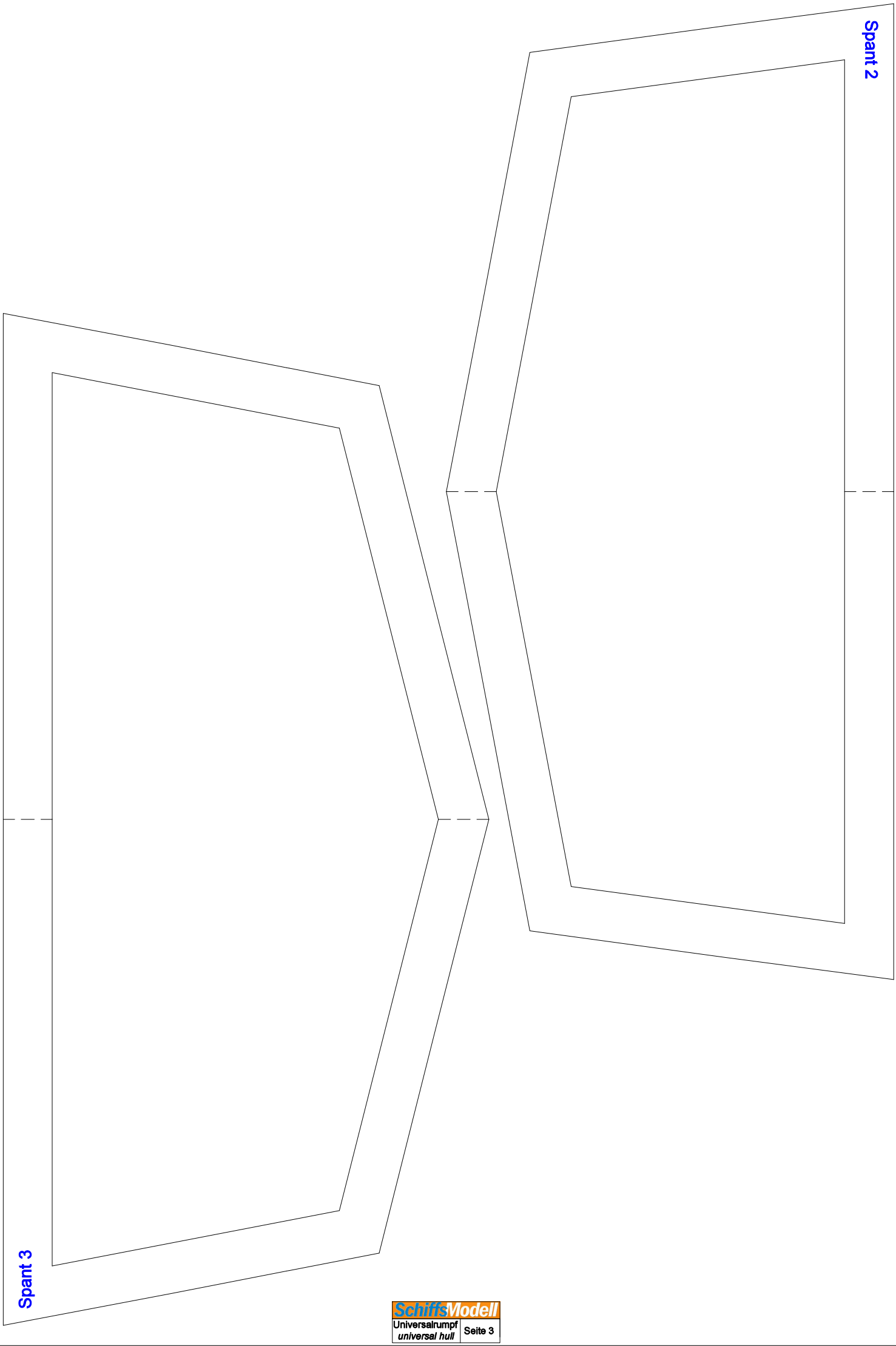
Nach einer Methode von Hinrik Schulte werden alle Spanten durch dreifache Überblattung von 10 x 2 mm Balsaholzleisten hergestellt und besitzen somit eine Stärke von 6 mm.

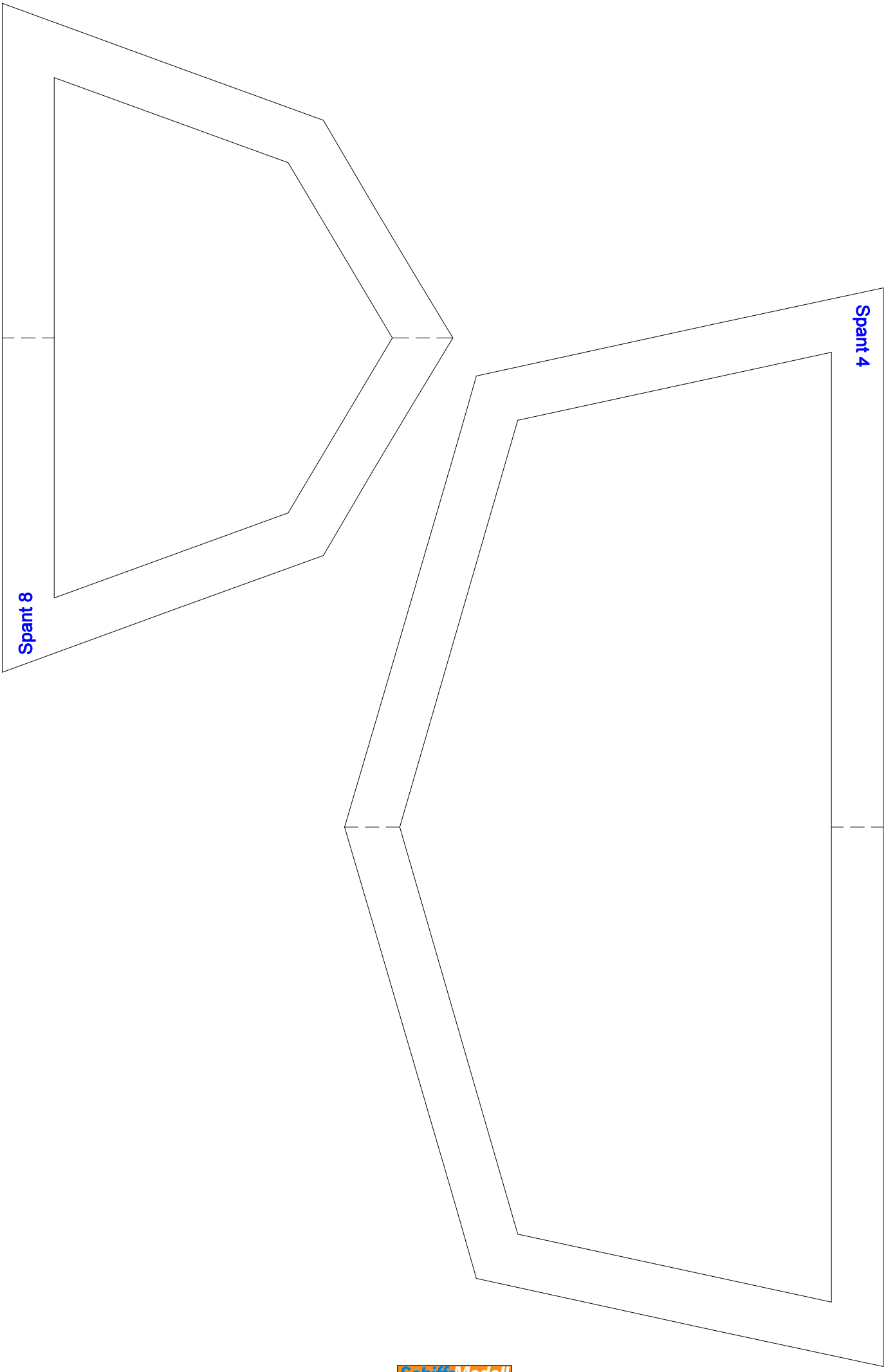
Using a method developed by Hinrik Schulte, all frames are made by overlapping 10 x 2 mm balsa wood strips three times and are therefore 6 mm thick.

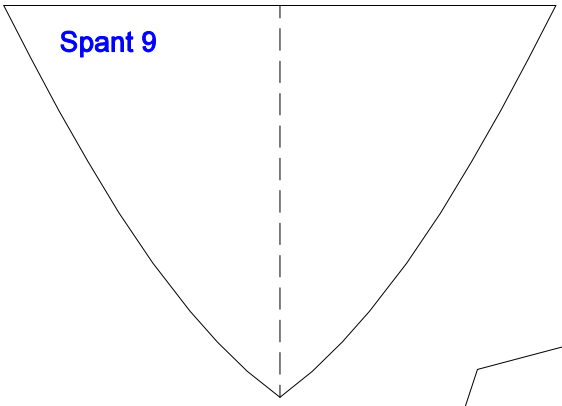


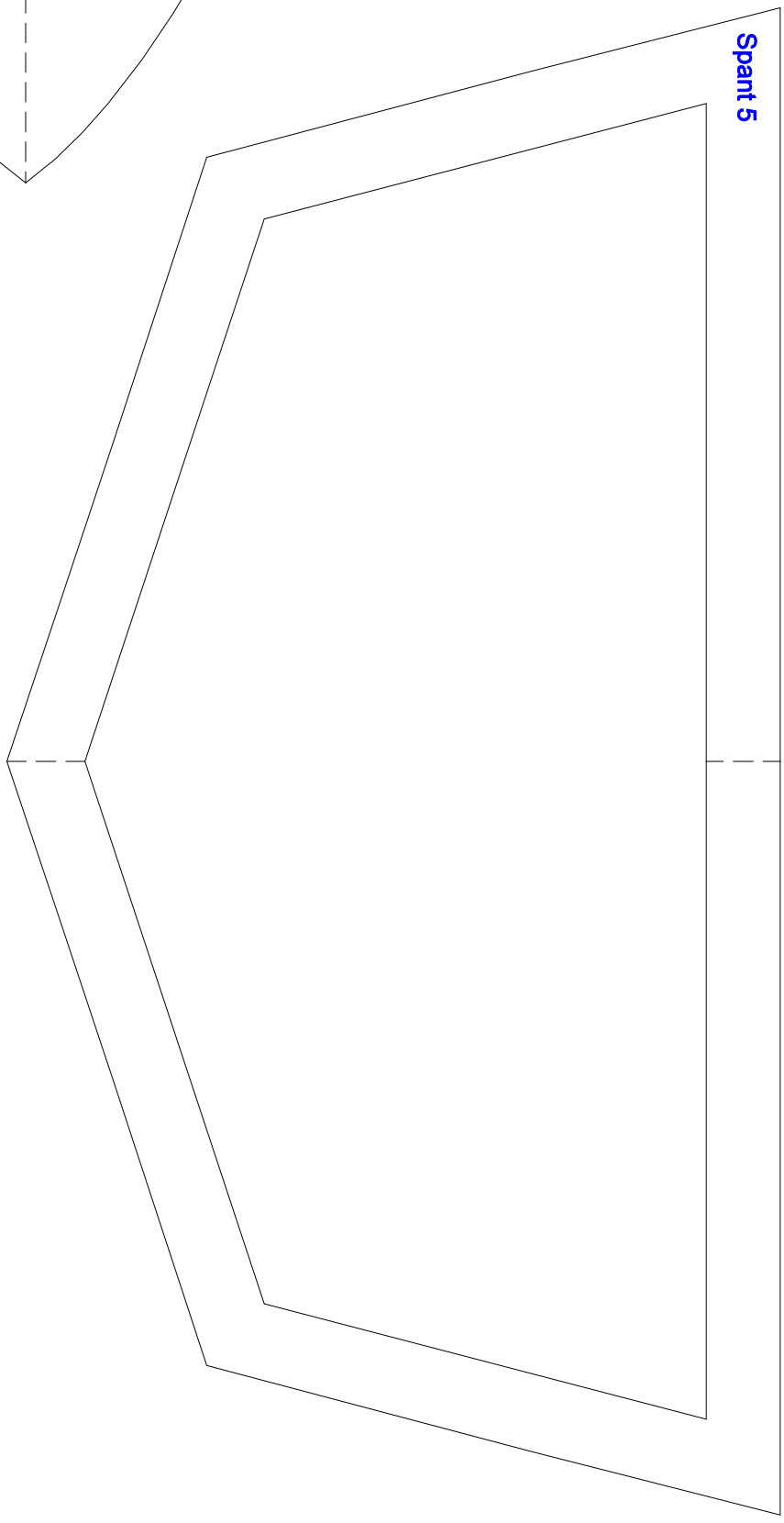


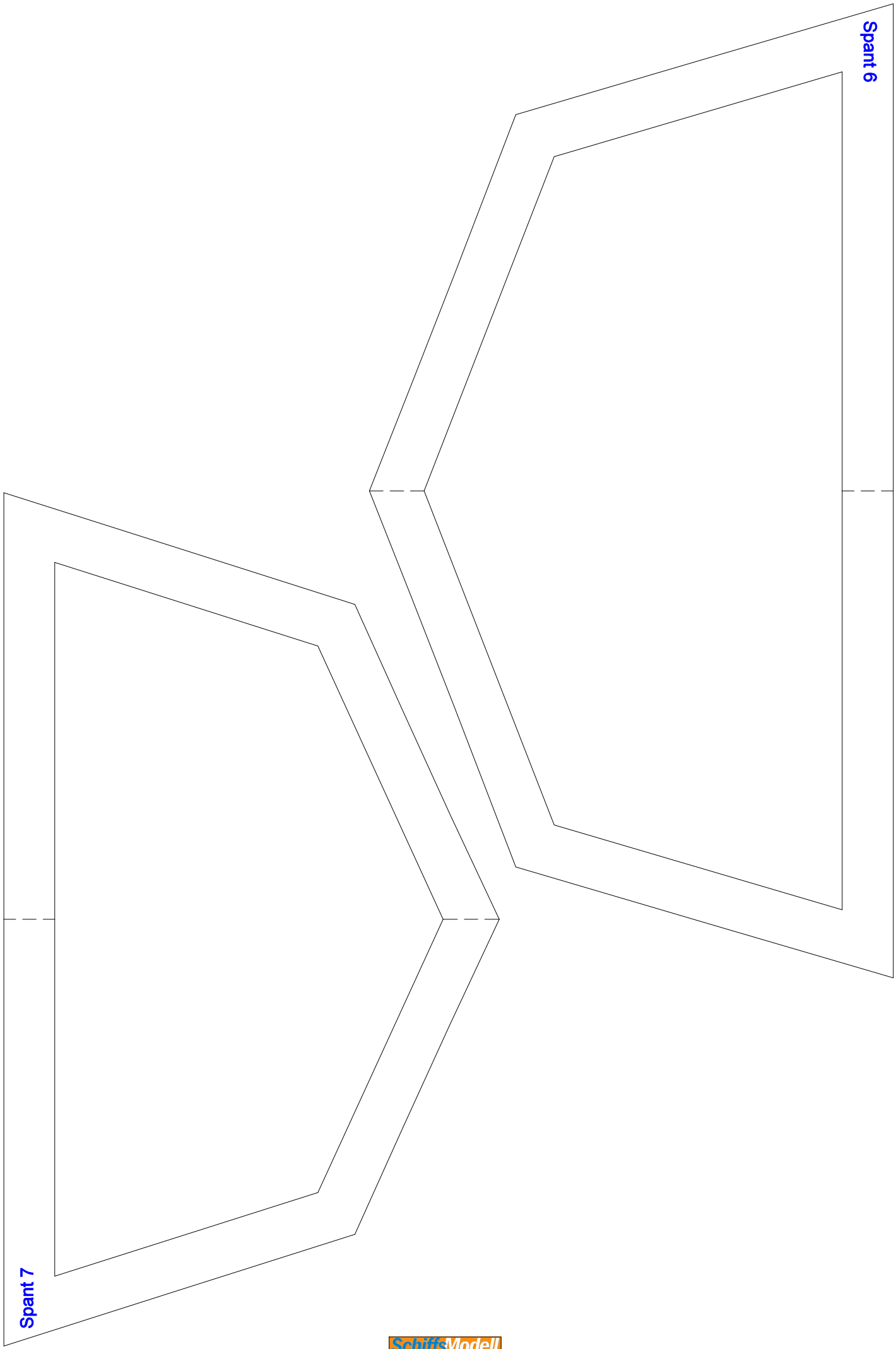


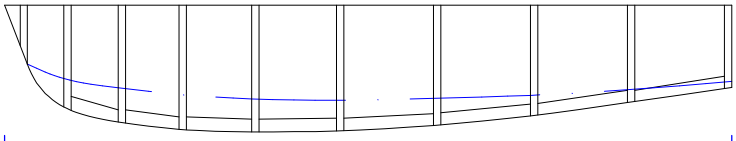

Spant 2
Spant 3


Spant 8
Spant 4

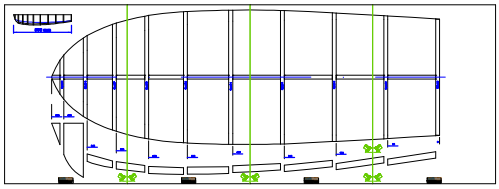

Spant 9

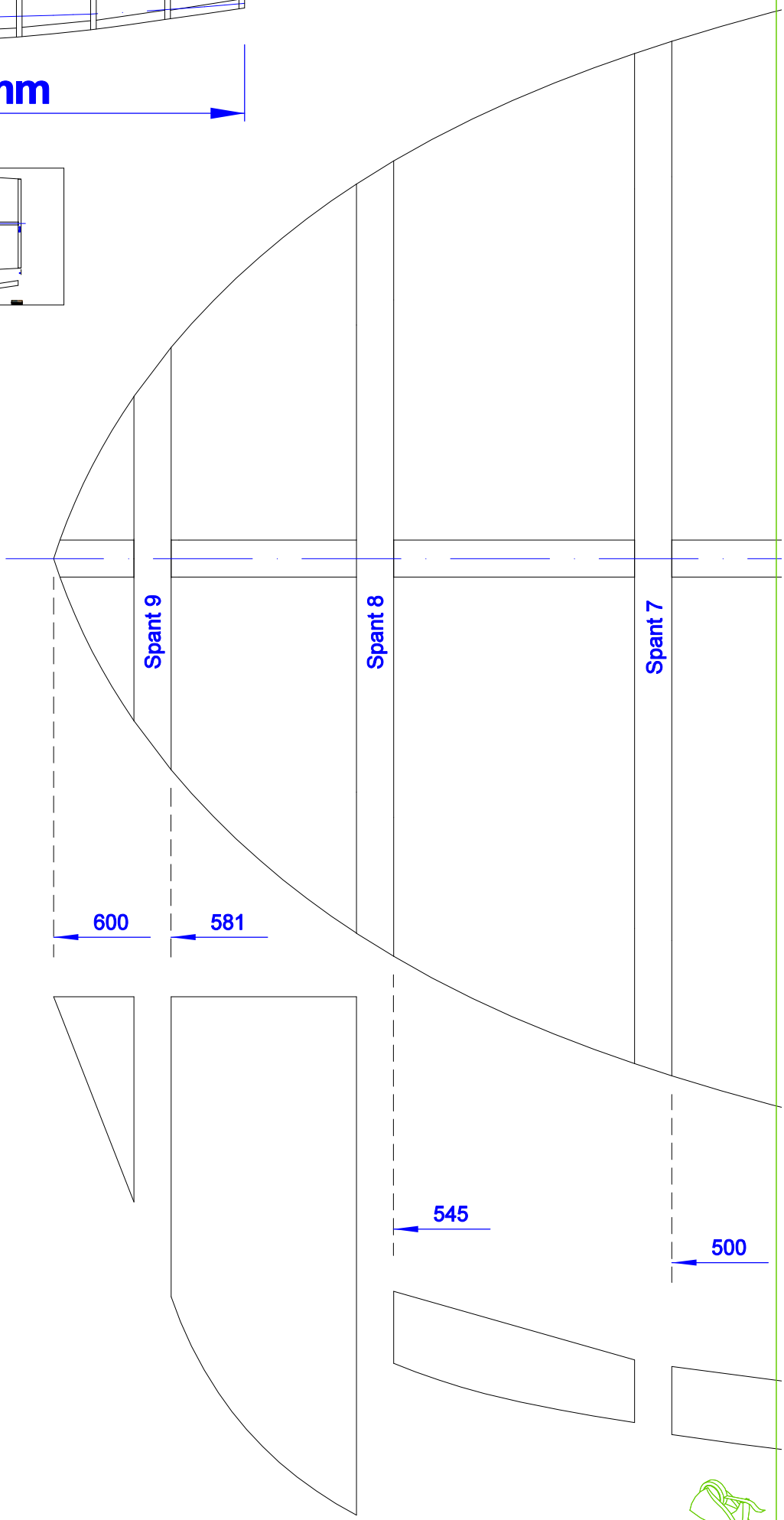

Spant 5

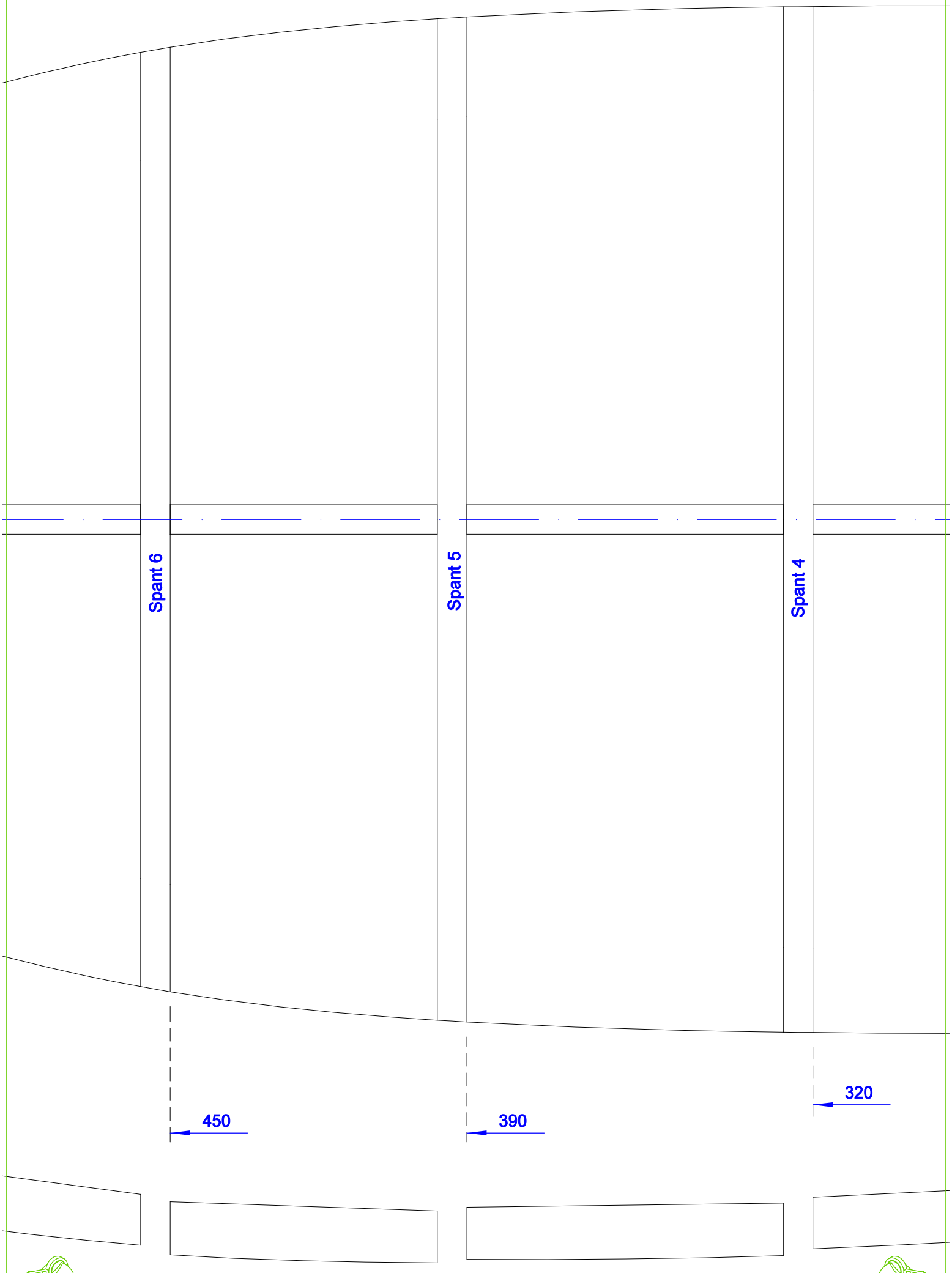

Spant 6
Spant 7



600 mm







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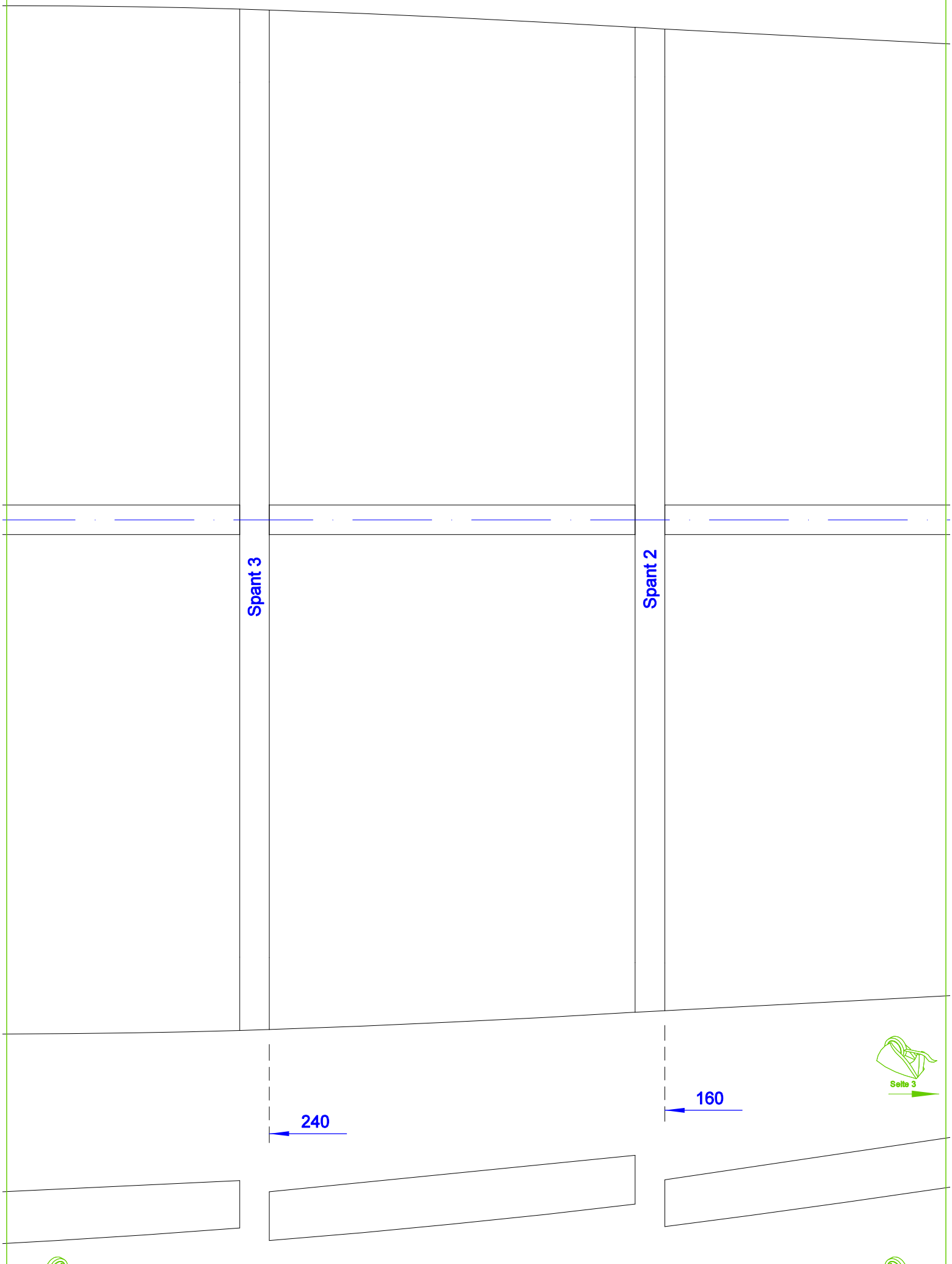
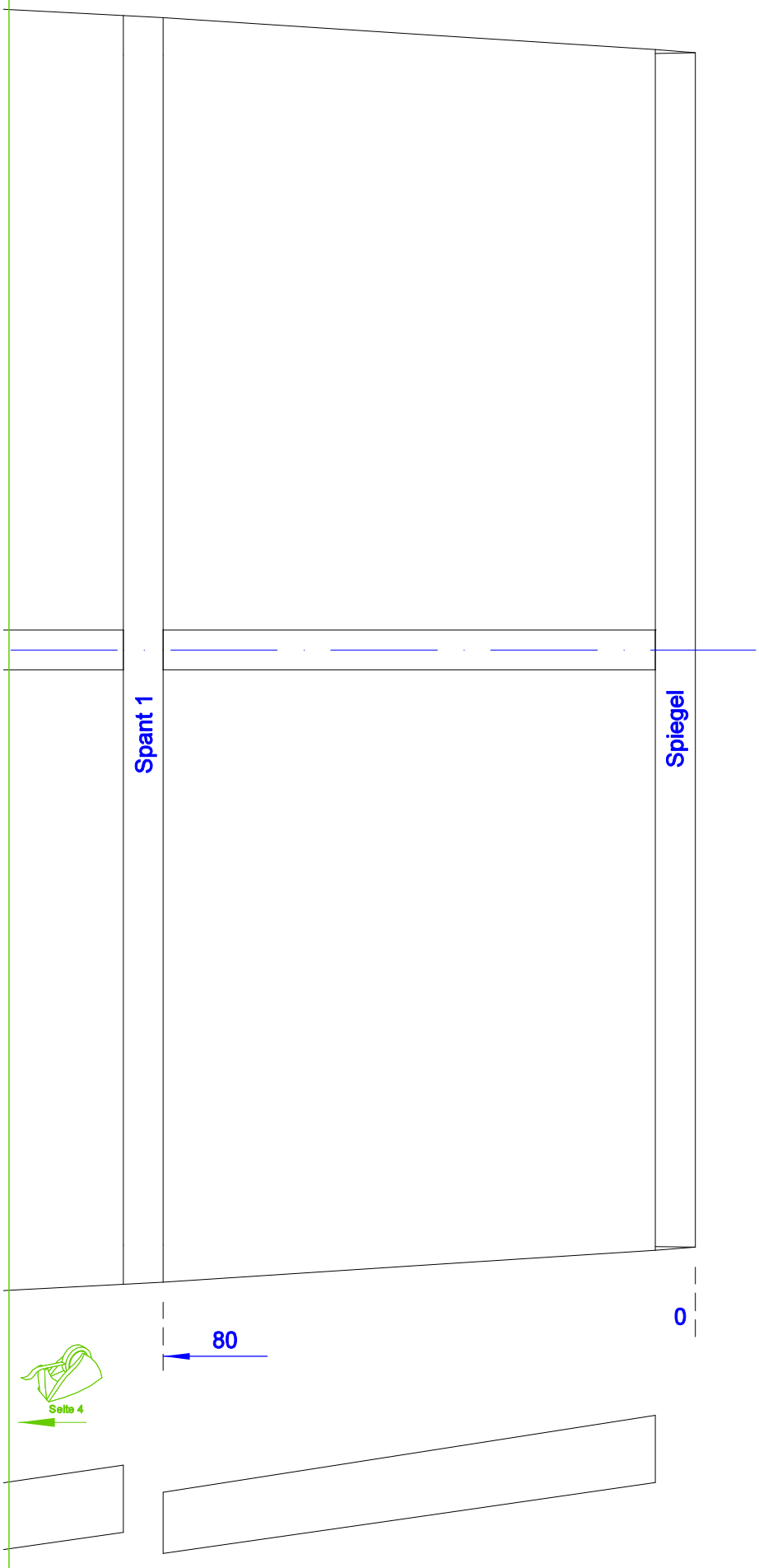


Seite 3
Seite 8
Seite 10



Seite 4

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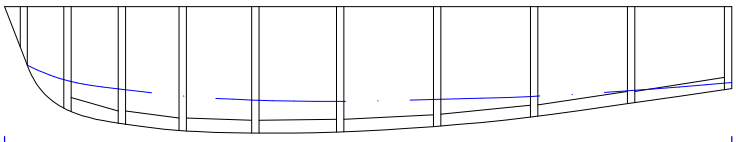
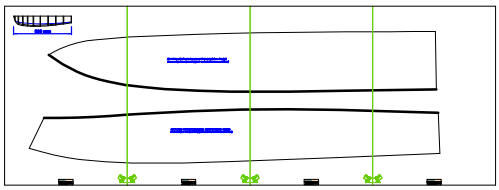
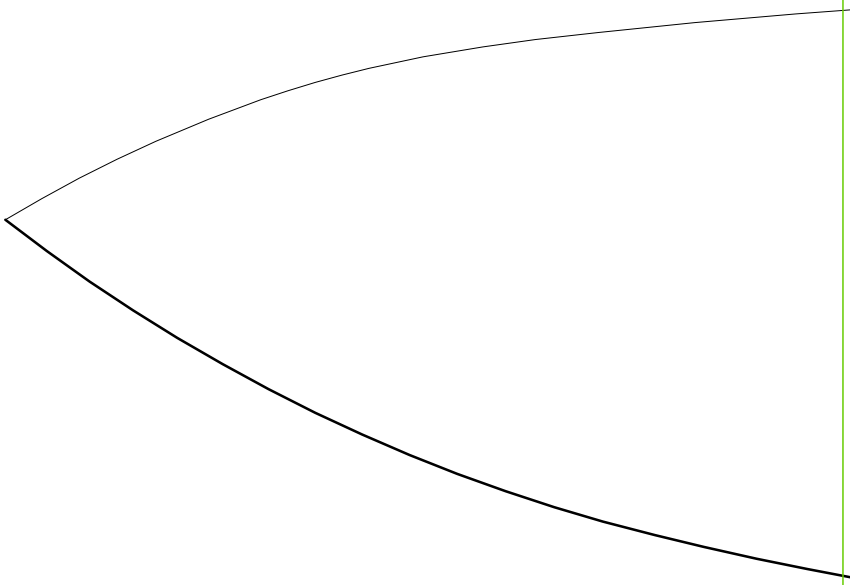
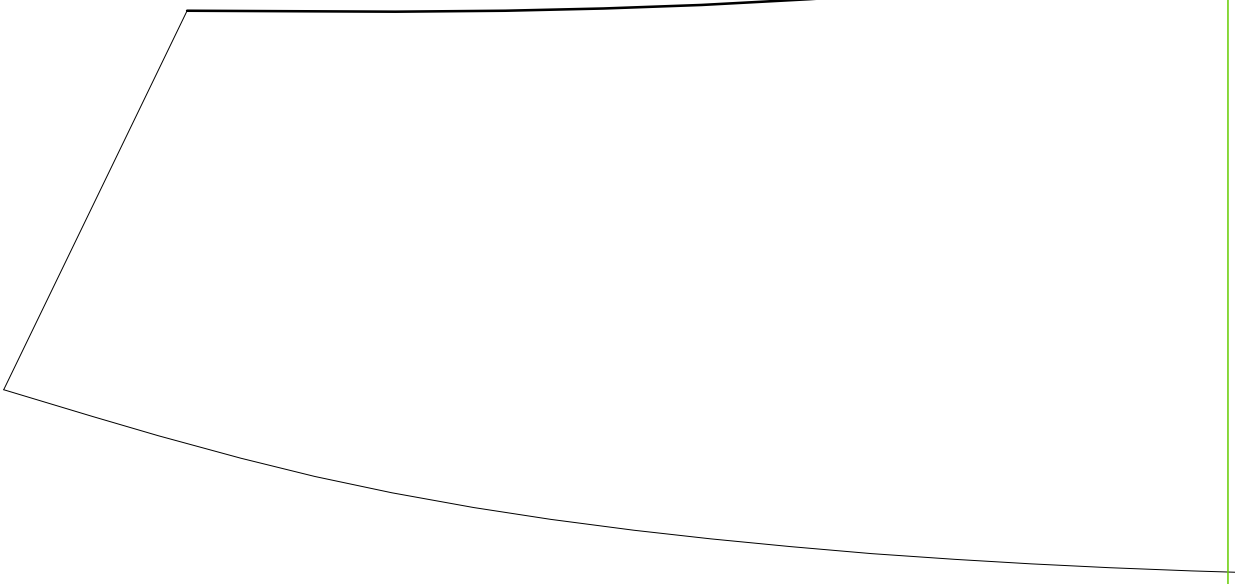


600 mm





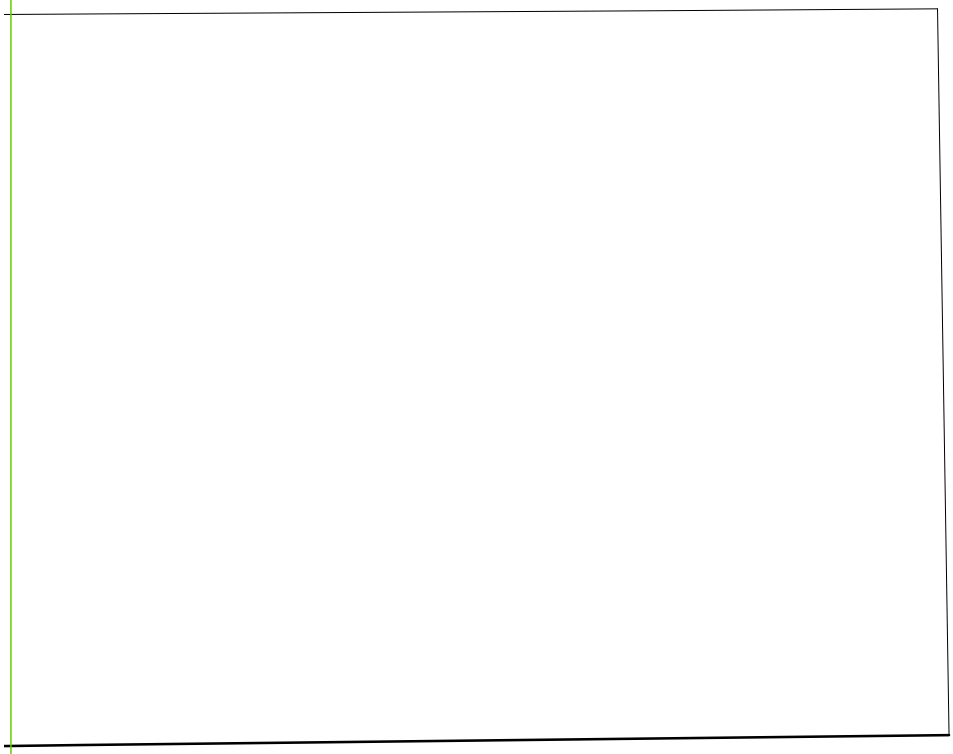


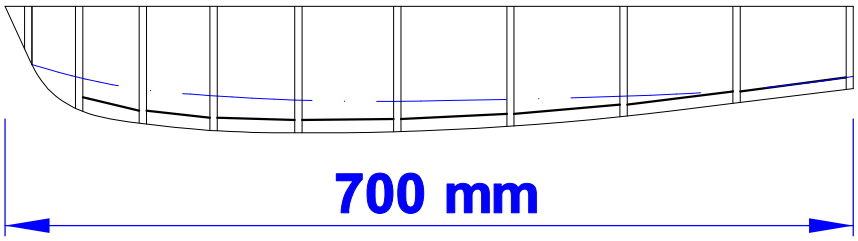
Abwicklung Rumpf-Seitenbeplankung
(zzgl. Materialstärken-Zugabe an den
zu verleimenden Kanten)
Sheet plywood of Hull side planking
(add the material thickness to the
edges where needed)

Abwicklung Kielbeplankung
(zzgl. Materialstärken-Zugabe an den
zu verleimenden Kanten)
Sheet plywood of keel planking
(add the material thickness to the
edges where needed)

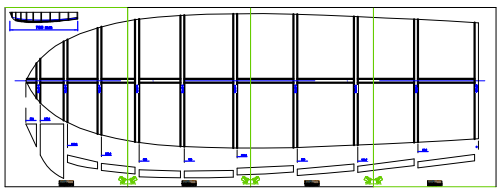
Seite 12

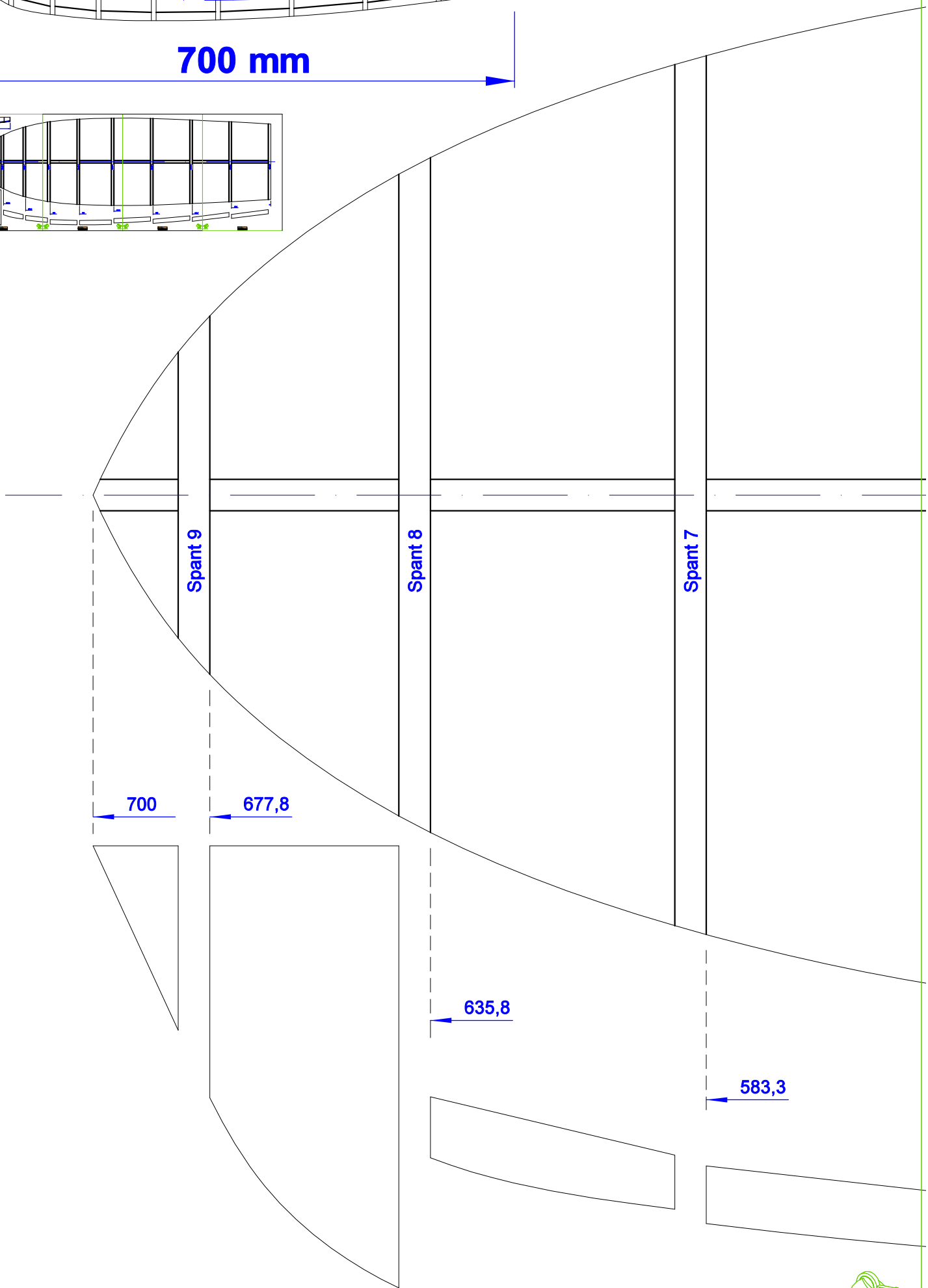
Seite 14

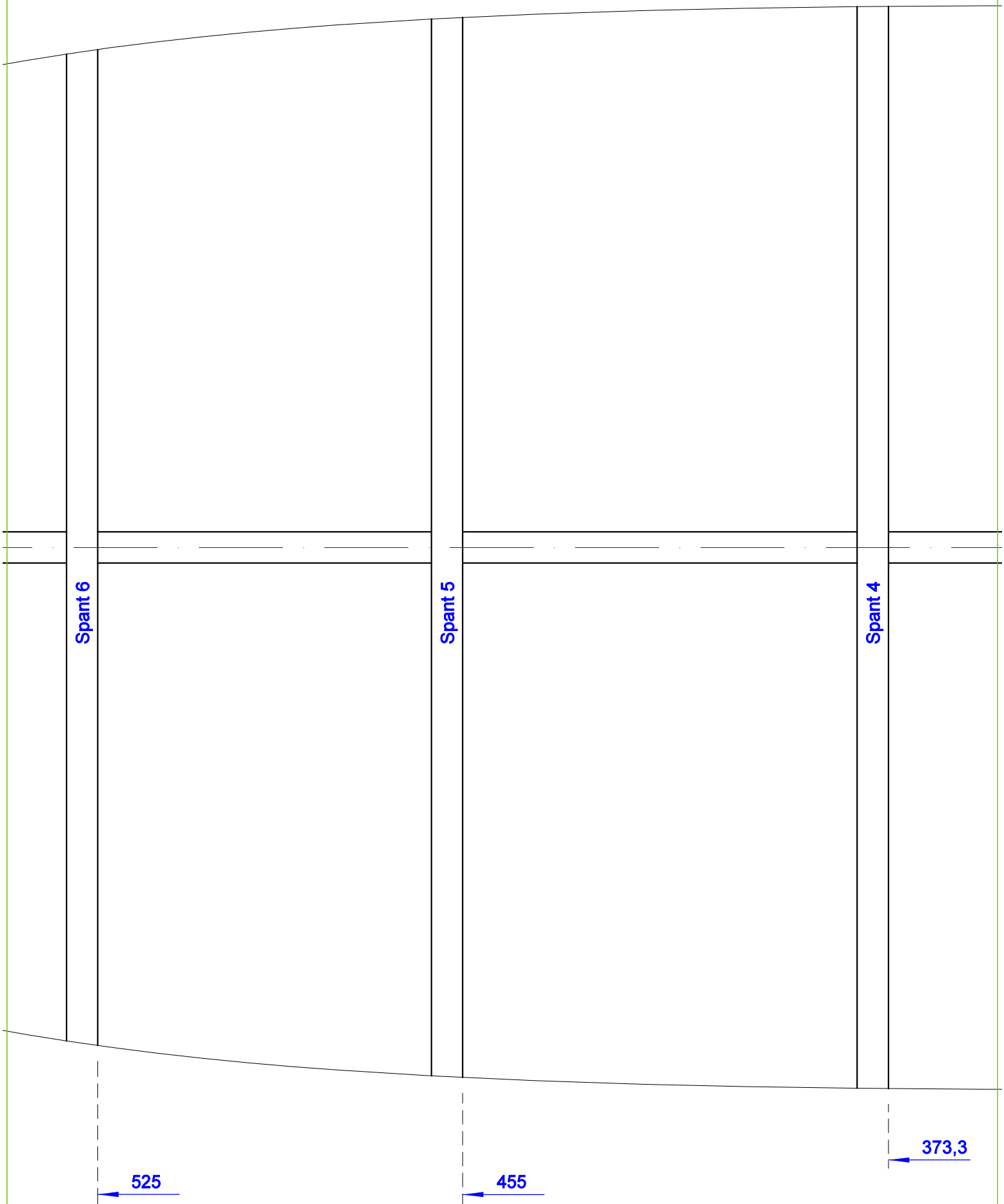




700 mm

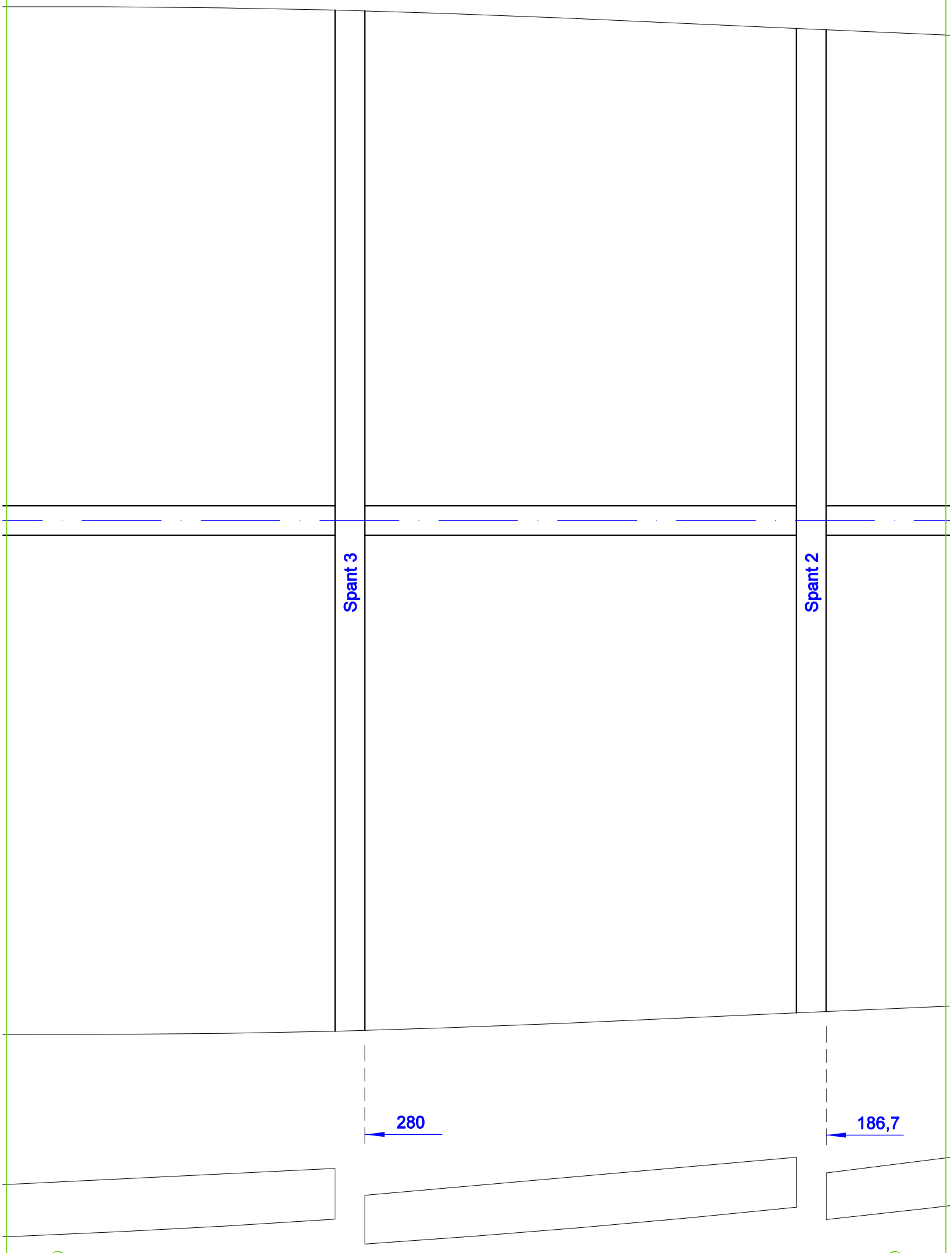






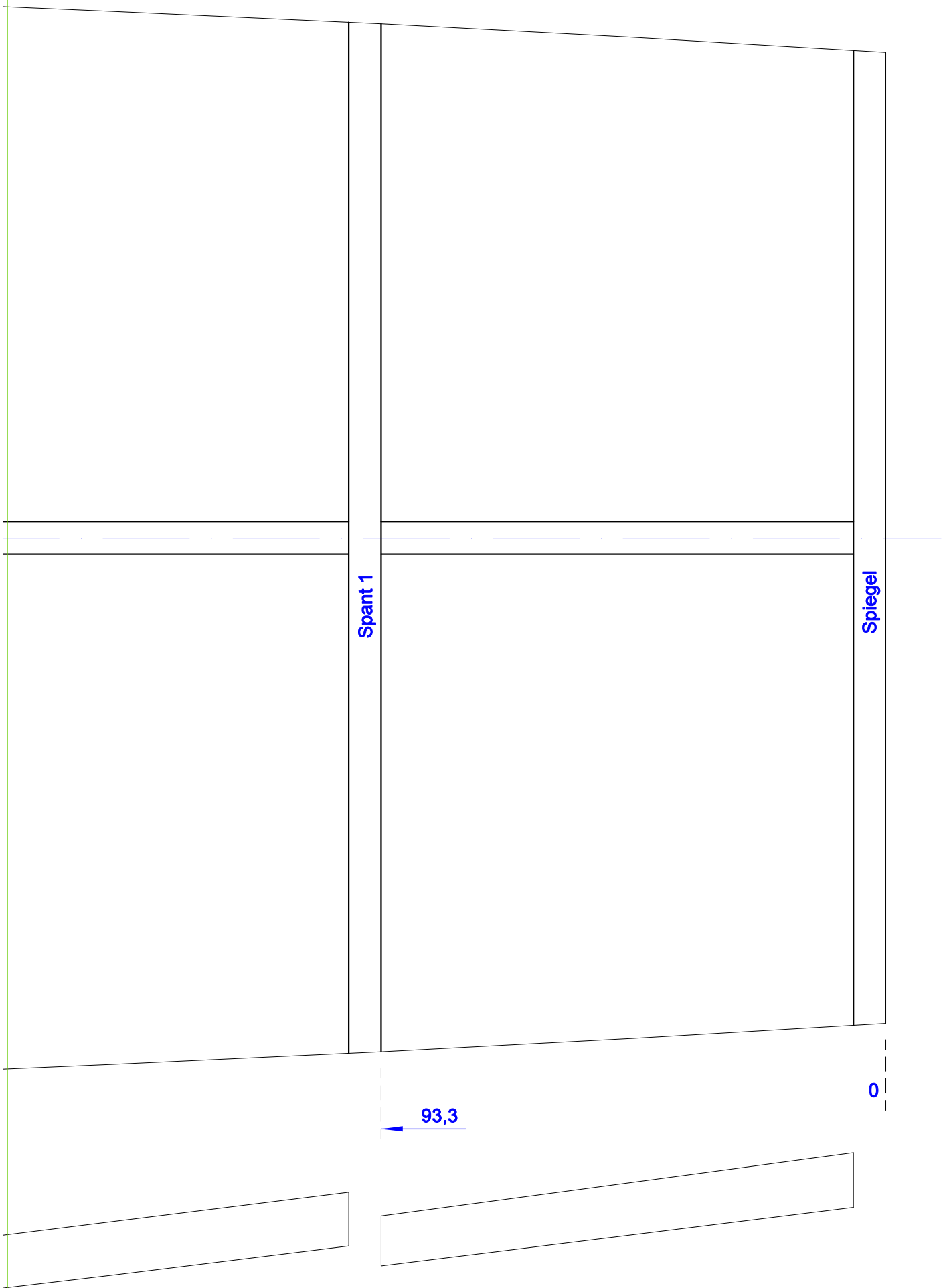
Seite 15

Seite 17



Seite 16

Seite 18



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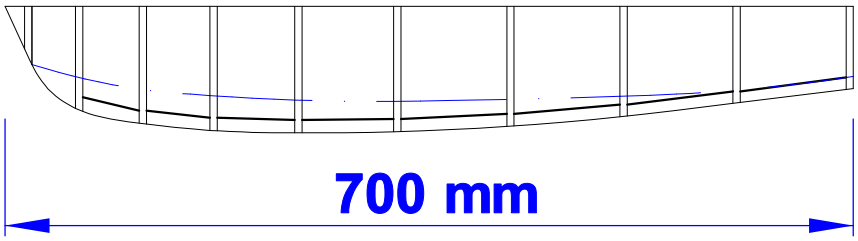
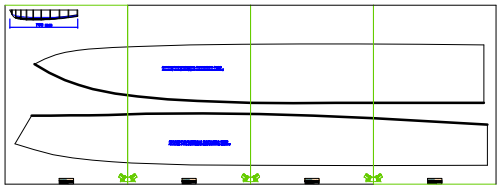
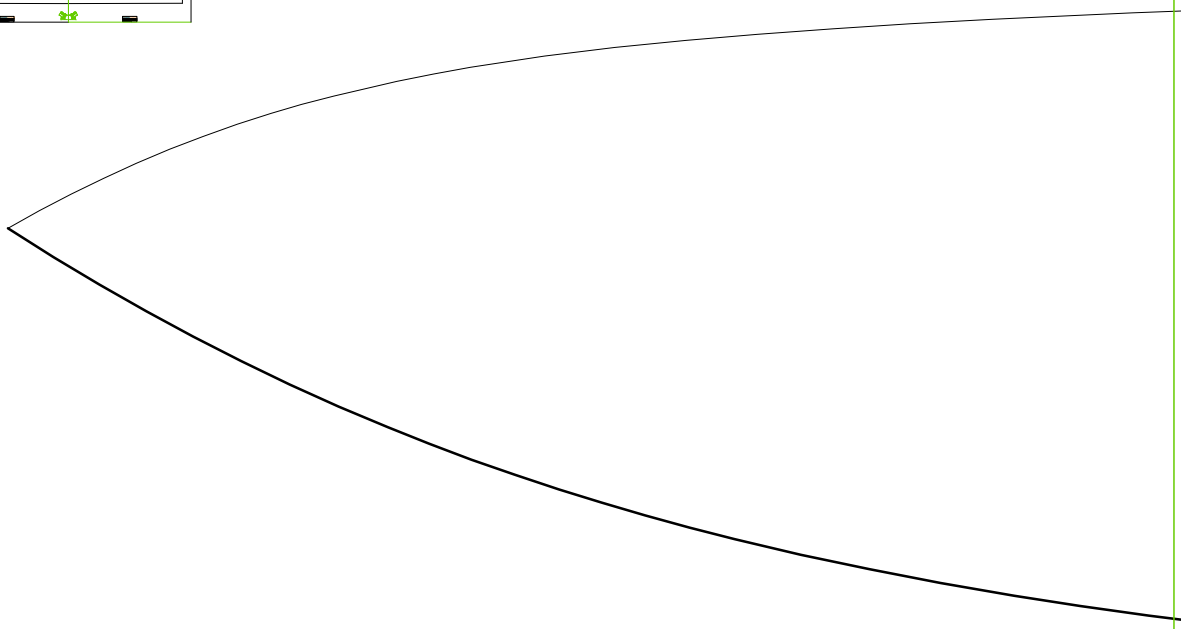
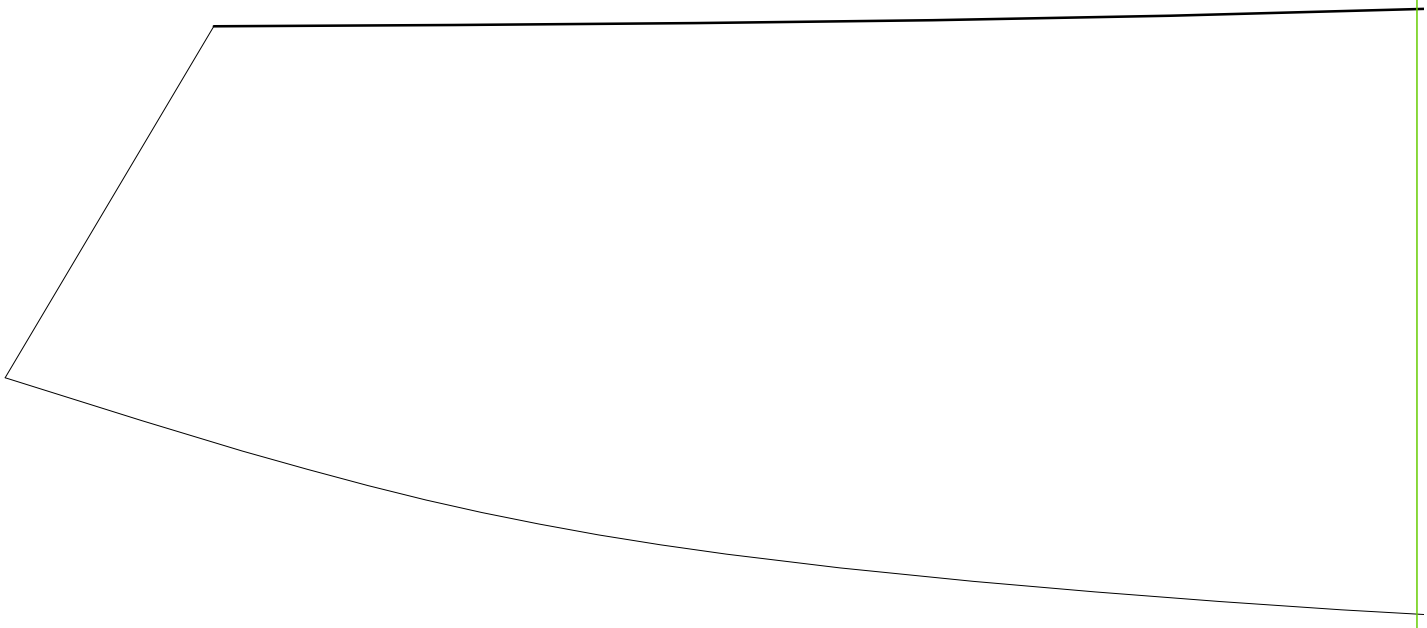


700 mm







Abwicklung Rumpf-Seitenbeplankung
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Abwicklung Kielbeplankung
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Sheet plywood of keel planking
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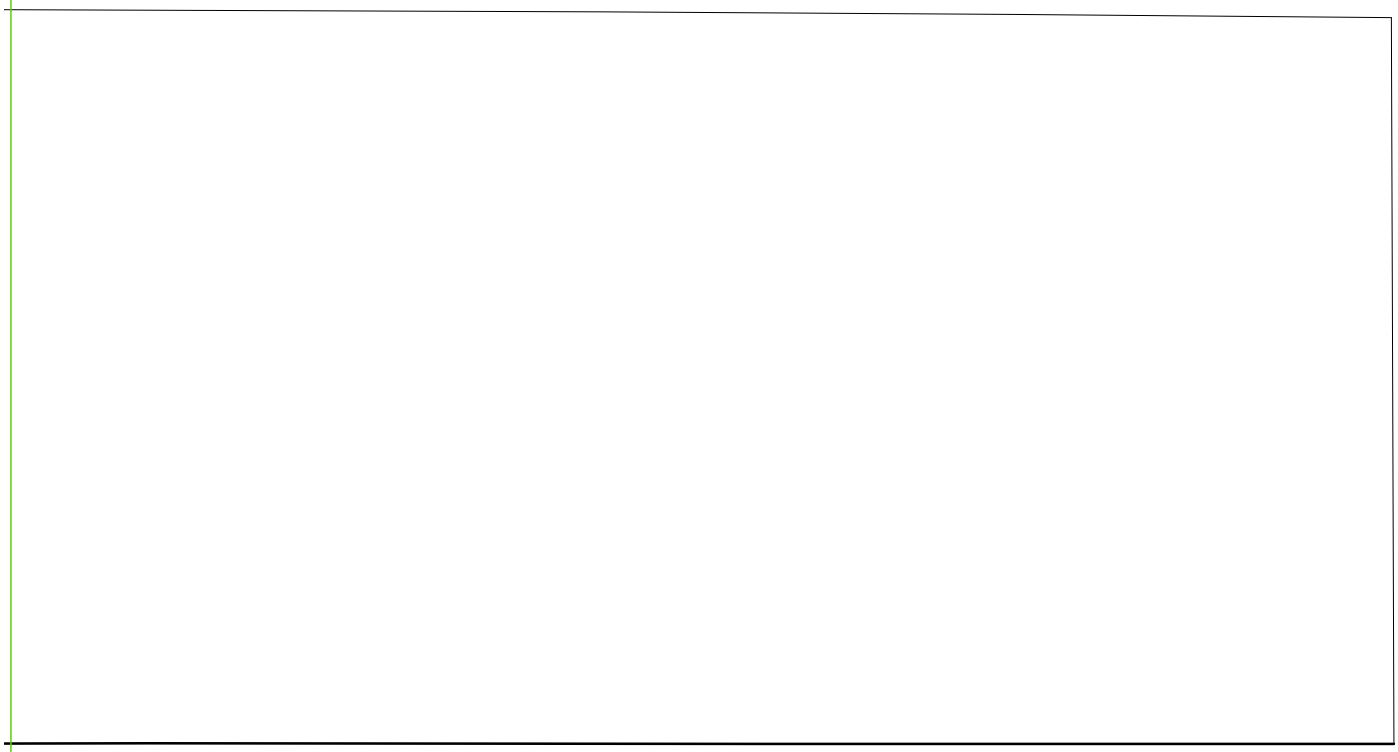
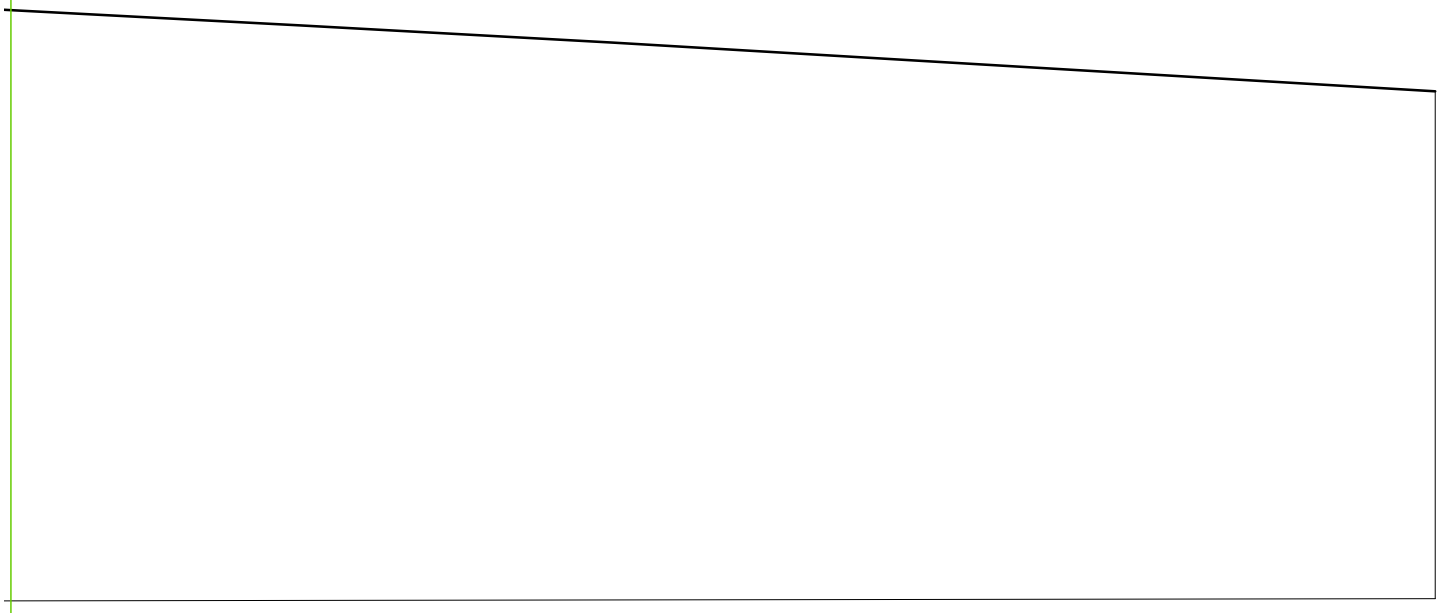
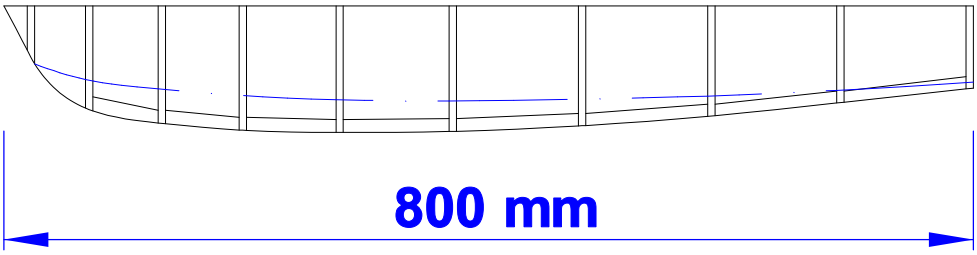
Seite 20

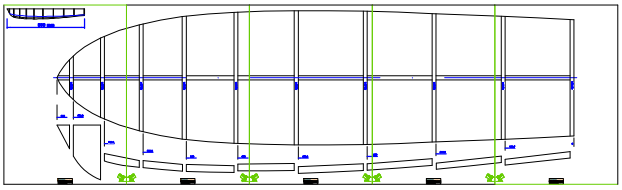
Seite 22

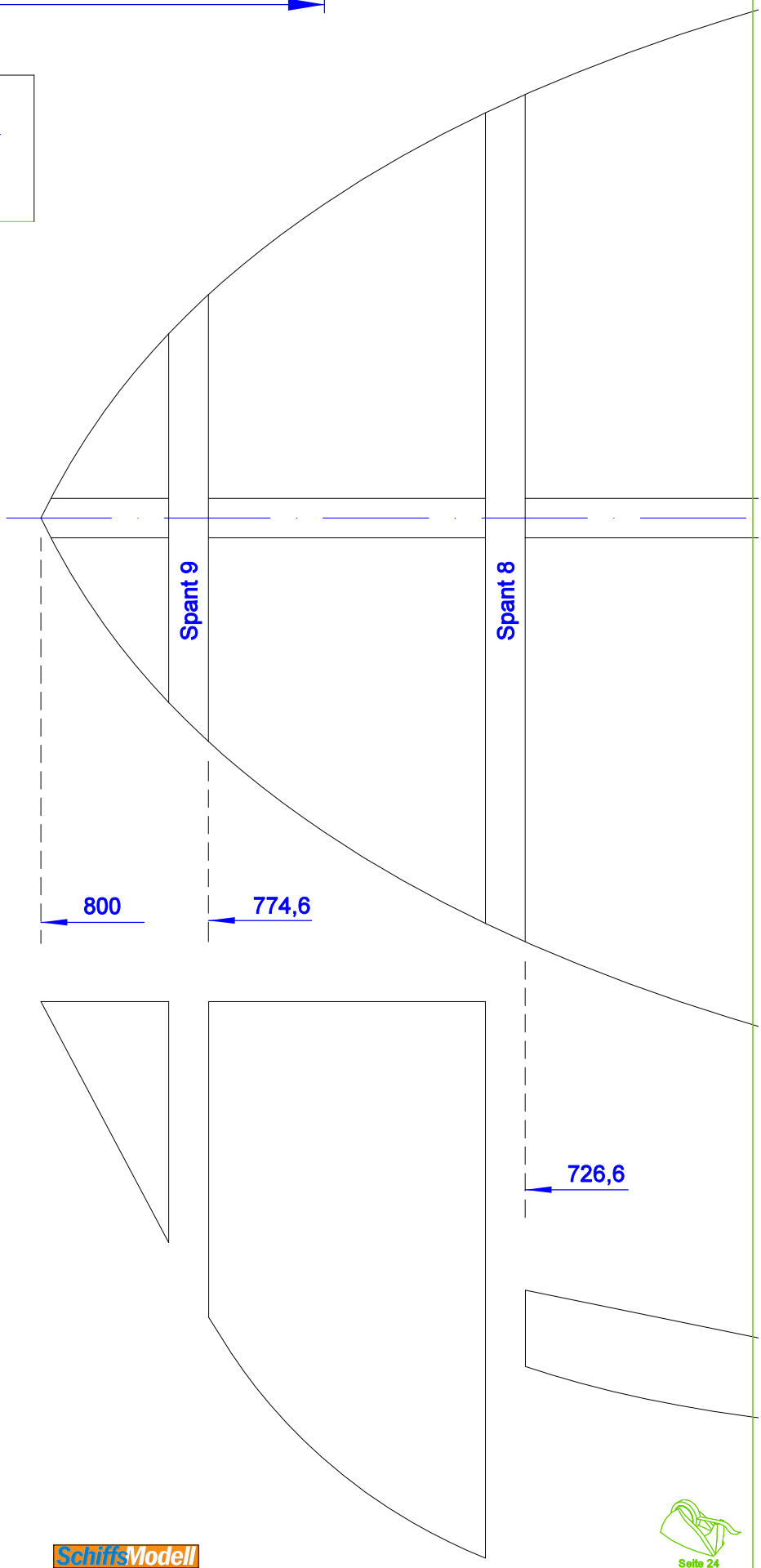


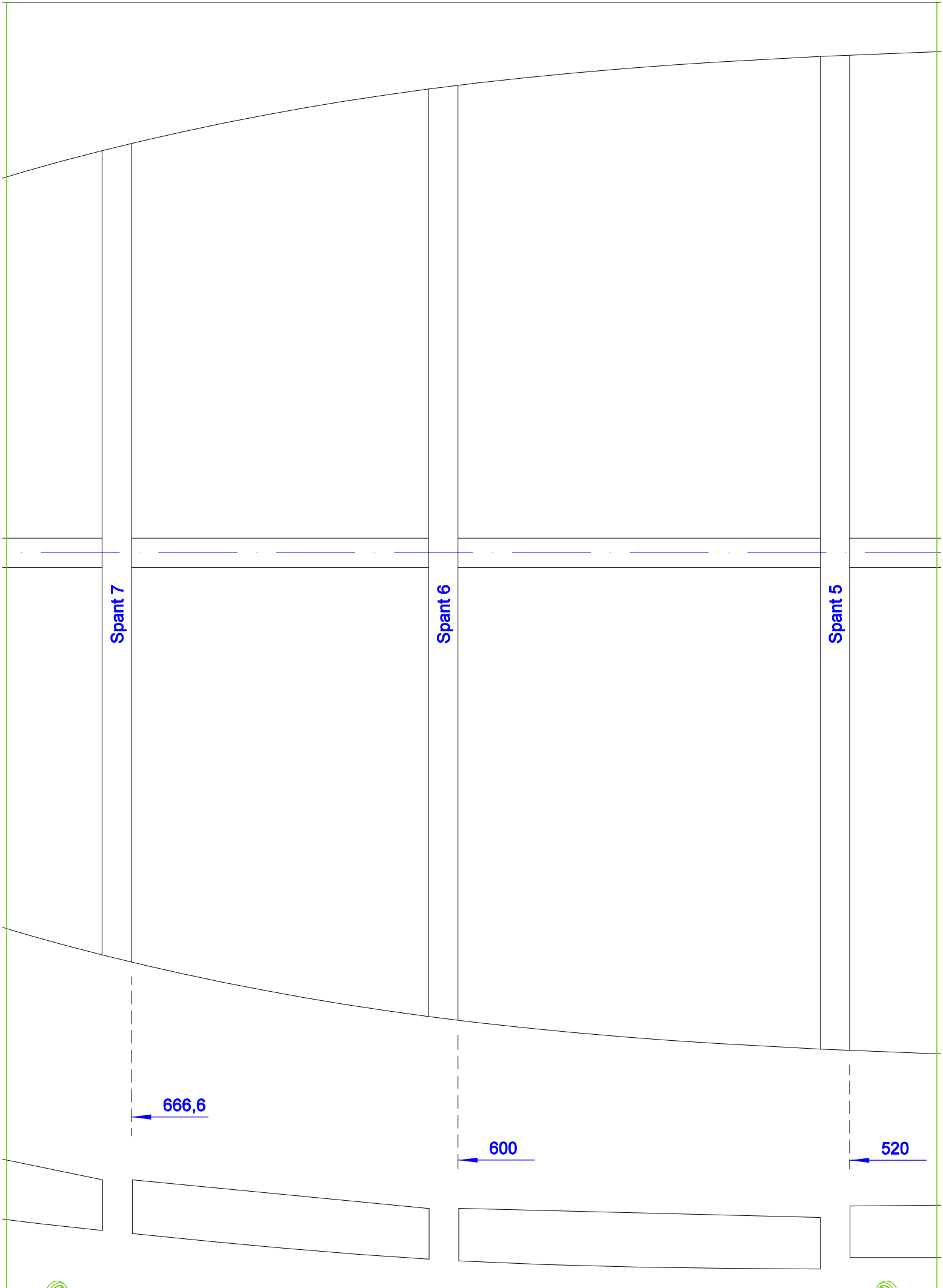




800 mm

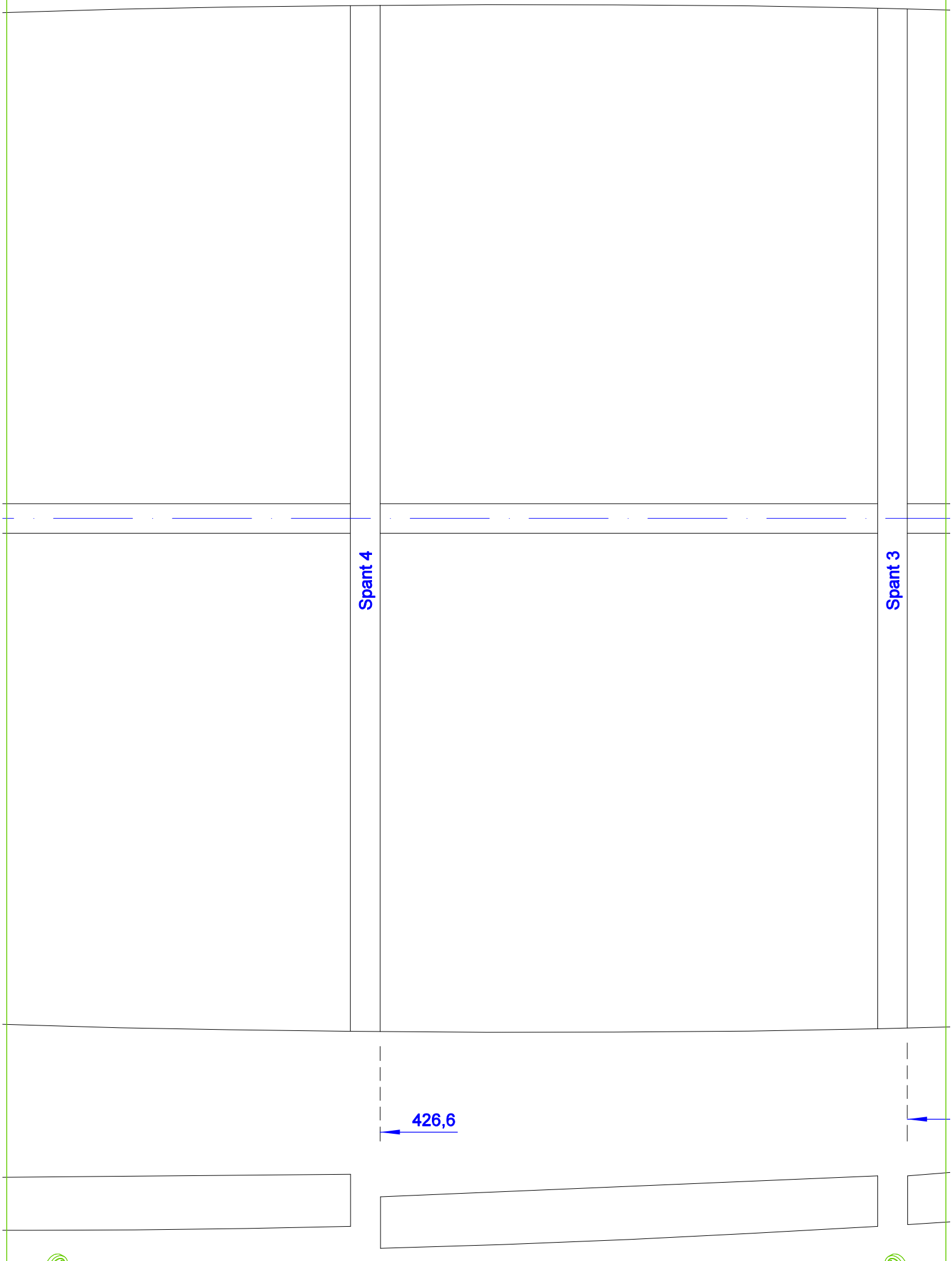






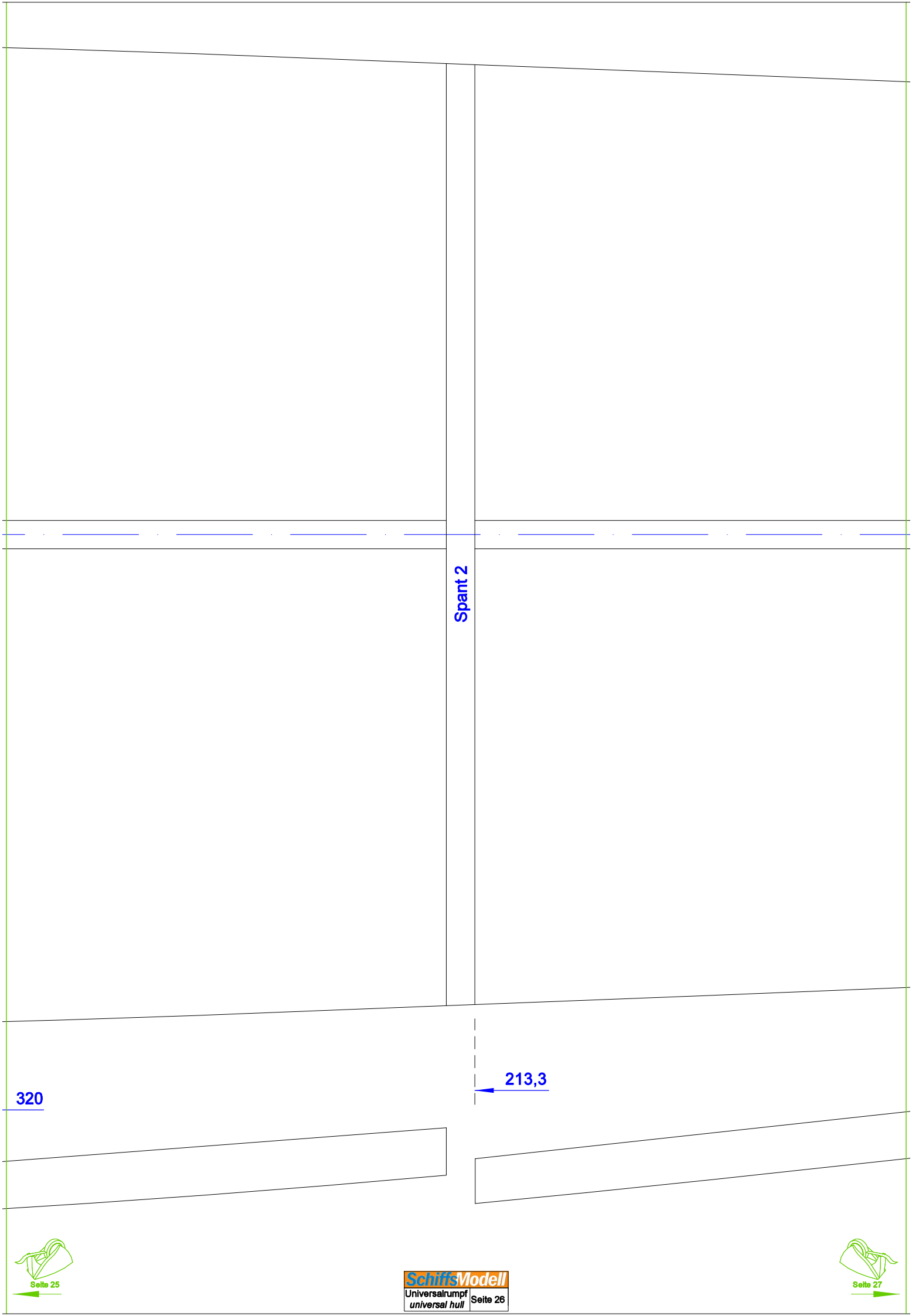
Seite 23

Seite 25



Seite 24

Seite 26



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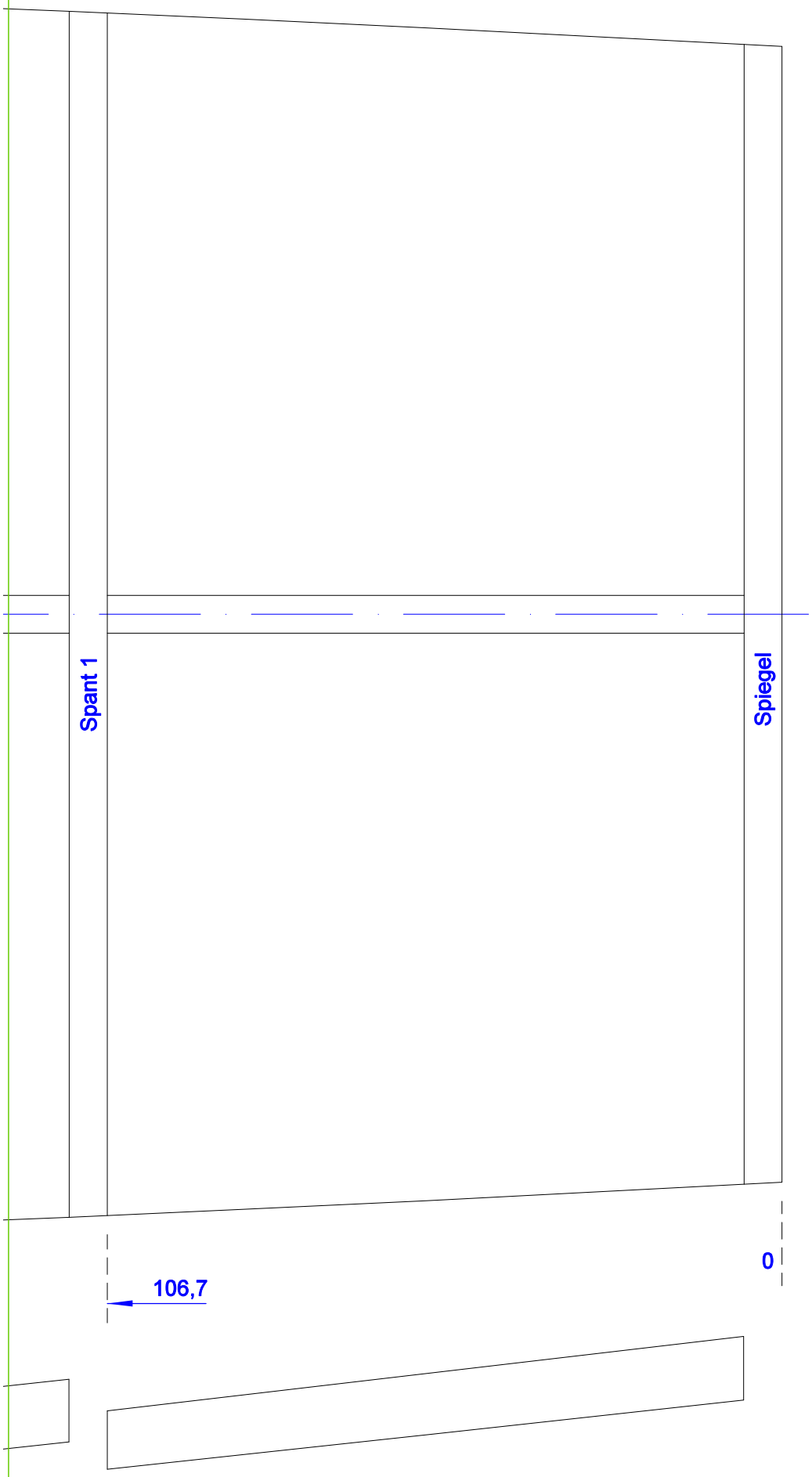

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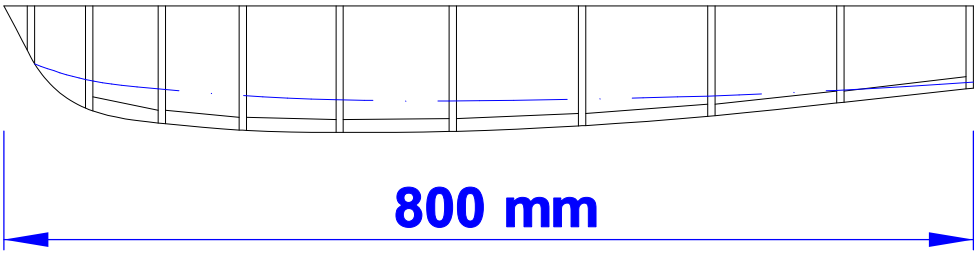
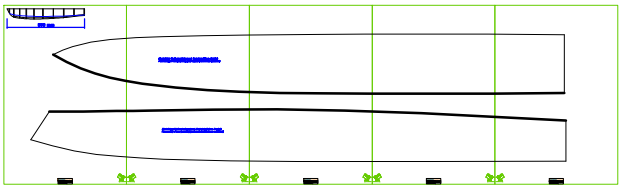


800 mm



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