



SLS
SPACE LAUNCH SYSTEM

AMY BUCK
THERMAL PROTECTION EXPERT



1
00:00:00,000 --> 00:00:00,500
[Music]

2
00:00:00,520 --> 00:00:01,780
Hi I'm Amy Buck.

3
00:00:01,780 --> 00:00:02,920
I'm the lead engineer

4
00:00:02,920 --> 00:00:04,280
for the thermal protection system

5
00:00:04,420 --> 00:00:06,060
on the Launch Vehicle Stage Adapter

6
00:00:06,340 --> 00:00:08,320
and this is SLS in Sixty Seconds.

7
00:00:11,660 --> 00:00:12,660
The thermal protection system

8
00:00:12,660 --> 00:00:14,280
protects the rocket from the

9
00:00:14,280 --> 00:00:15,700
heat of launch as well as keeps

10
00:00:15,760 --> 00:00:17,660
the fuel in the fuel tanks cold.

11
00:00:20,320 --> 00:00:21,340
When we apply the foam

12
00:00:21,540 --> 00:00:22,900
it looks like this,

13
00:00:22,900 --> 00:00:24,840

but when it sits out in the sun it turns

14

00:00:24,880 --> 00:00:26,160

orange it gets a tan, kinda like we do.

15

00:00:30,020 --> 00:00:31,060

We're applying the

16

00:00:31,080 --> 00:00:32,320

thermal protection to the

17

00:00:32,340 --> 00:00:33,620

Launch Vehicle Stage Adapter

18

00:00:33,620 --> 00:00:35,340

Seen behind me. This is the

19

00:00:35,420 --> 00:00:37,080

largest piece of SLS being

20

00:00:37,280 --> 00:00:41,000

built here at Marshall.

21

00:00:41,000 --> 00:00:42,520

The Launch Vehicle Stage Adapter

22

00:00:42,520 --> 00:00:43,480

connects the core stage,

23

00:00:43,680 --> 00:00:44,400

which holds the fuel tanks

24

00:00:44,460 --> 00:00:45,800

to the upper part of the rocket.

25

00:00:49,200 --> 00:00:49,720

We'll check the thickness

26

00:00:49,760 --> 00:00:51,100

and then we'll test

27

00:00:51,305 --> 00:00:52,338

for adhesion to make sure

28

00:00:52,540 --> 00:00:53,420

it's stuck on.

29

00:00:53,420 --> 00:00:54,540

This will ensure that the

30

00:00:54,580 --> 00:00:55,560

thermal protection system

31

00:00:55,580 --> 00:00:57,040

is ready for launch