



AMY BUCK
THERMAL PROTECTION EXPERT



1
00:00:00,000 --> 00:00:03,357
Hi I'm Amy Buck. I'm the lead
engineer for the thermal

2
00:00:03,357 --> 00:00:05,985
protection system on the Launch
Vehicle Stage Adapter

3
00:00:08,279 --> 00:00:11,449
■■■■■

4
00:00:11,449 --> 00:00:14,118
The thermal protection system
protects the rocket from the

5
00:00:14,118 --> 00:00:17,455
heat of launch as well as keeps
the fuel in the fuel tanks cold.

6
00:00:17,455 --> 00:00:20,291
■■■■■

7
00:00:20,291 --> 00:00:22,793
When we apply the foam
it looks like this.

8
00:00:22,793 --> 00:00:25,046
but when it sits out in the
sun it turns orange

9
00:00:25,046 --> 00:00:27,048
it gets a tan, kinda like
we do.

10
00:00:27,048 --> 00:00:30,551
■■■■■

11
00:00:30,551 --> 00:00:32,428
We're applying the thermal

protection to the Launch

12

00:00:32,428 --> 00:00:34,805

Vehicle Stage Adapter seen
behind me.

13

00:00:34,805 --> 00:00:38,225

This is the largest piece of SLS
being built here at Marshall.

14

00:00:38,225 --> 00:00:41,062

■■■■■

15

00:00:41,062 --> 00:00:43,105

The Launch Vehicle Stage
Adapter connects the core

16

00:00:43,105 --> 00:00:44,940

stage which holds the fuel
tanks to the upper part

17

00:00:44,940 --> 00:00:45,858

of the rocket.

18

00:00:45,858 --> 00:00:49,195

■■■■■

19

00:00:49,195 --> 00:00:51,155

We'll check the thickness
and then we'll test for

20

00:00:51,155 --> 00:00:53,074

adhesion to make sure
it's stuck on.

21

00:00:53,074 --> 00:00:55,409

This will ensure that the
thermal protection system