1
00:00:05,210 --> 00:00:02,750
is my quest of metabolic or going to

2
00:00:10,700 --> 00:00:05,220
marry an experiment of aluminum versus

3
00:00:12,970 --> 00:00:10,710
steel I've got some sheet steel here 28

4
00:00:16,790 --> 00:00:12,980
gauge and she knows then but is

5
00:00:20,840 --> 00:00:16,800
reasonably strong and I've got this

6
00:00:24,140 --> 00:00:20,850
aluminum bar which is half an inch in

7
00:00:28,189 --> 00:00:24,150
diameter and 36 inches long and the

8
00:00:29,929 --> 00:00:28,199
sheet is attached with steel nails to

9
00:00:33,490 --> 00:00:29,939
this one frame is held in place so what

10
00:00:35,959 --> 00:00:33,500
I'm going to try to do is take this

11
00:00:38,330 --> 00:00:35,969
aluminum rod and hit this as hard as

12
00:00:40,819 --> 00:00:38,340
possible and see see what damage it does

13
00:00:54,939 --> 00:00:40,829

sell set up the slow-motion camera and

14
00:00:59,450 --> 00:00:54,949
we'll see well the result there was that

15
00:01:02,479 --> 00:00:59,460
he got quite nice dead in here didn't go

16
00:01:04,520 --> 00:01:02,489
through that and my aluminum rod has

17
00:01:10,899 --> 00:01:04,530
developed a nice Bend so what I'm going

18
00:01:15,289 --> 00:01:10,909
to try doing here I have this steel wire

19
00:01:18,770 --> 00:01:15,299
still steel but it's a mesh structure

20
00:01:20,149 --> 00:01:18,780
welded together at individual points so

21
00:01:22,760 --> 00:01:20,159
I'm going to hit that really hard with

22
00:01:35,330 --> 00:01:22,770
my slightly bent aluminum bar and see

23
00:01:42,570 --> 00:01:38,960
so this time it actually went through

24
00:01:44,970 --> 00:01:42,580
kind of what you would expect but you

25
00:01:51,030 --> 00:01:44,980
can see that the steel is in fact being

26
00:01:52,830 --> 00:01:51,040
ripped apart at various places and the

27
00:01:55,680 --> 00:01:52,840
aluminum bar did not get any more bent

28
00:01:56,820 --> 00:01:55,690
it just kind of went through how they

29
00:01:59,280 --> 00:01:56,830
took any damage at all

30
00:02:01,950 --> 00:01:59,290
so here's the actual damage from the

31
00:02:03,750 --> 00:02:01,960
other side on the metal plate is quite a

32
00:02:07,190 --> 00:02:03,760
significant dent and you can see that

33
00:02:10,470 --> 00:02:07,200
the goes down along where the pub the

34
00:02:12,090 --> 00:02:10,480
rod hit what I'm going to do now is I'm

35
00:02:13,380 --> 00:02:12,100
going to try a little bit more weight

36
00:02:15,810 --> 00:02:13,390
behind it I'm going to take the aluminum

37
00:02:19,440 --> 00:02:15,820
rod which I've straightened out and I'm

38
00:02:20,790 --> 00:02:19,450

going to put this 16 pounds post driver

39
00:02:24,120 --> 00:02:20,800
on the end of it I'm just going to

40
00:02:27,240 --> 00:02:24,130
basically bang it straight down onto

41
00:02:29,610 --> 00:02:27,250
this this sheet steel and let's see what

42
00:02:29,620 --> 00:02:43,230
you

43
00:02:50,060 --> 00:02:46,650
well looks like that bench my alumina

44
00:02:54,630 --> 00:02:50,070
tried again however also punched a hole

45
00:02:59,490 --> 00:02:54,640
through the steel sheet and continued

46
00:03:07,080 --> 00:02:59,500
through the wire mesh and perhaps an

47
00:03:11,130 --> 00:03:07,090
inch into this wooden block so say if