

**ARPRO®**



**visibly safe**



1

weight vs. safety

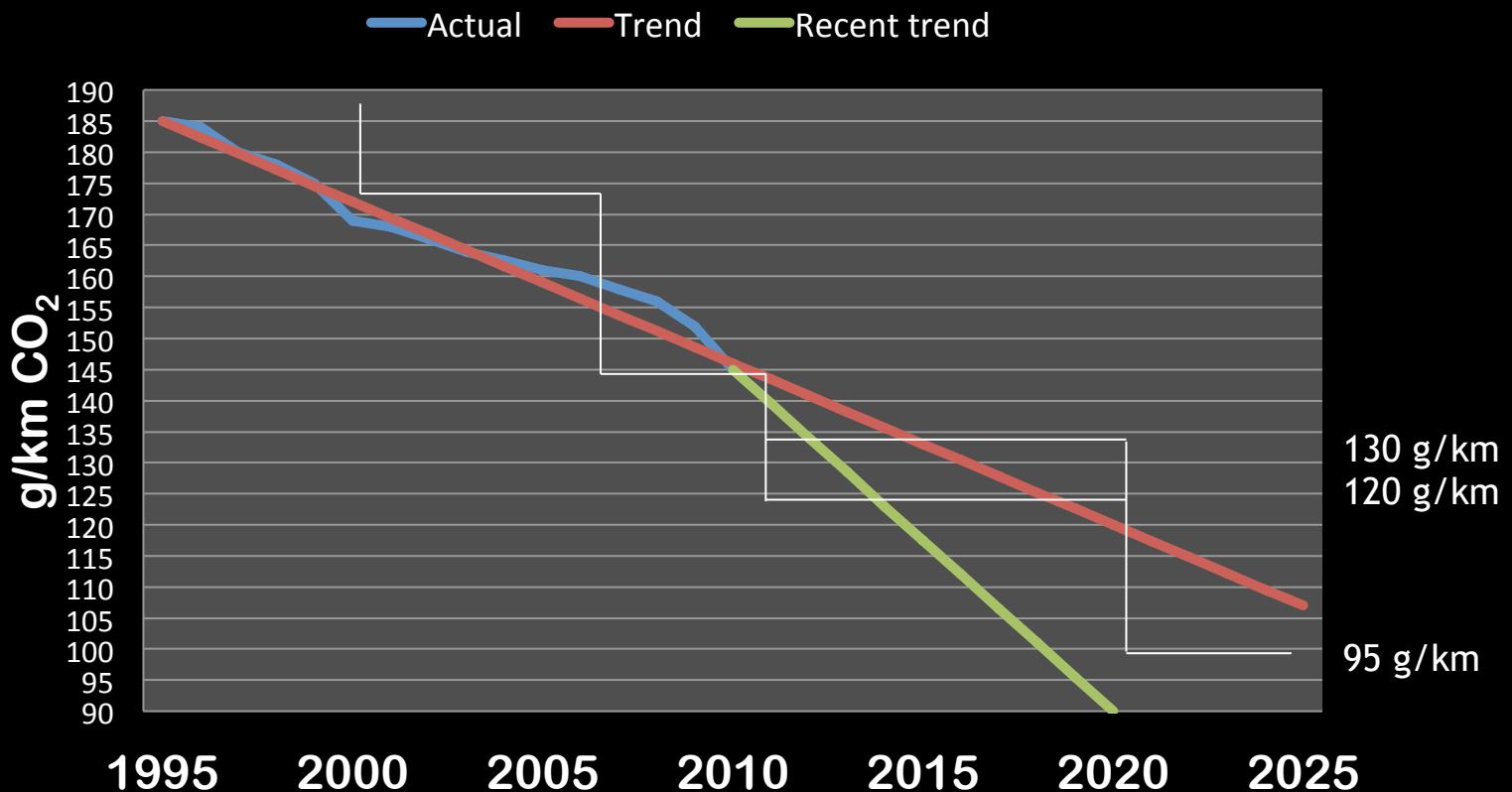






-100 kg ≈ -10 g/km CO<sub>2</sub>

## EU CO<sub>2</sub> emissions targets



**thinking clearly?**



-1 kg ≈ + 3km





2

strongest vs. fittest

energy absorption → metal fits



A large pile of bright pink feathers, likely from a bird, is shown against a white background. The feathers are densely packed and vary in length, with some being long and others shorter. They have a soft, fuzzy texture and a vibrant pink color.

low weight

**large 3D shapes**



**low cost tooling**

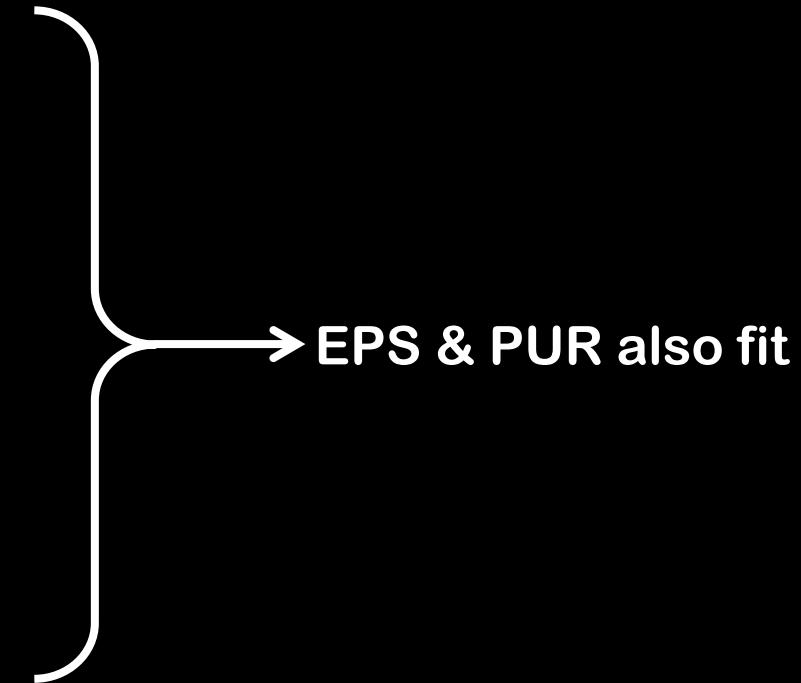


**energy absorption**

**low weight**

**large 3D shapes**

**low cost tooling**



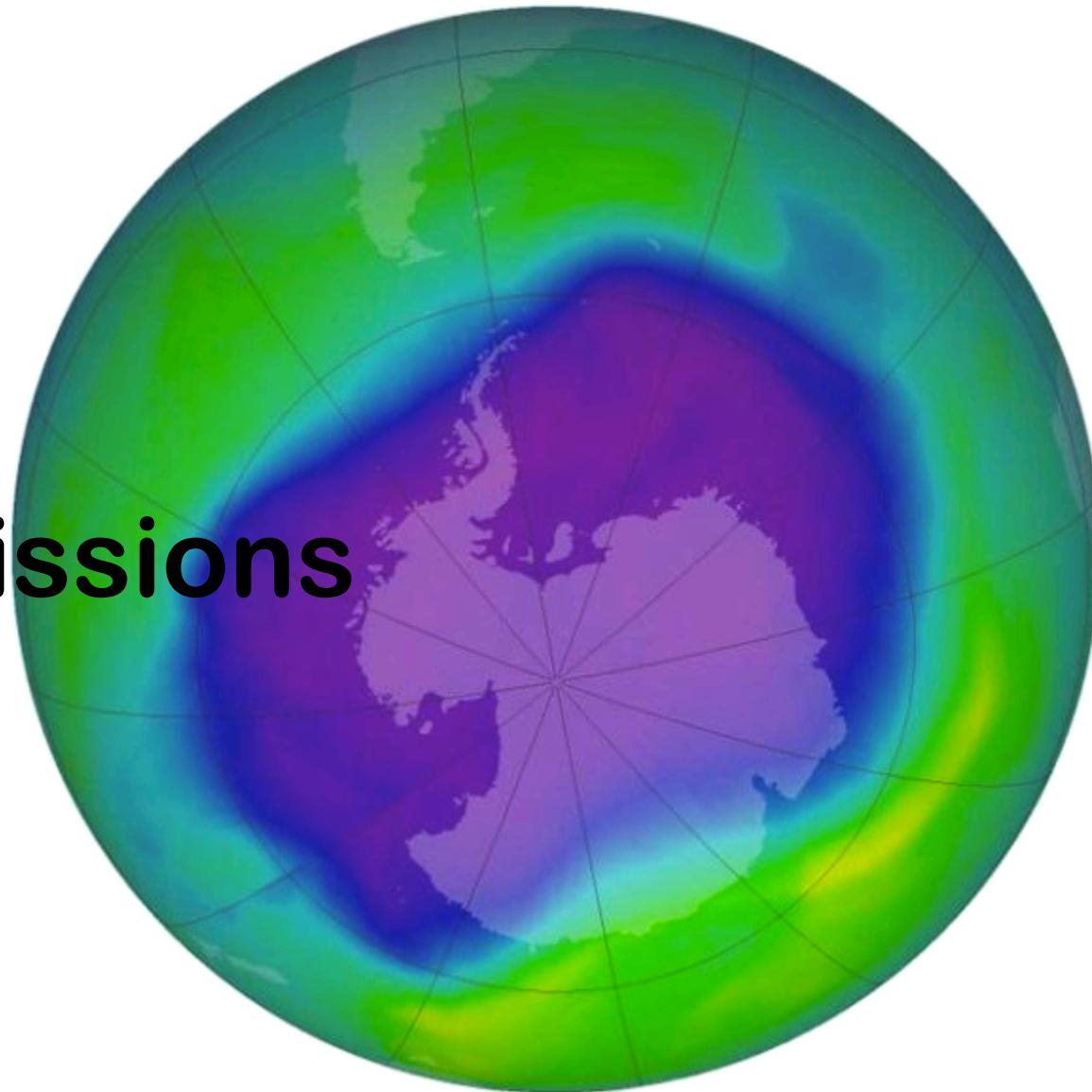
A close-up photograph of a large, tangled ball of colorful rubber bands. The bands are woven together in a complex, overlapping pattern. The colors include various shades of blue, green, yellow, red, and pink. In the center-left area of the ball, the word "resilience" is written in a white, sans-serif font.

resilience

A woman with dark hair tied back is sitting in a sauna, leaning against a wooden wall. She is wearing a white towel around her waist. The sauna has wooden walls and a wooden floor. The lighting is warm and orange.

temperature resistance

**emissions**



energy absorption

low weight

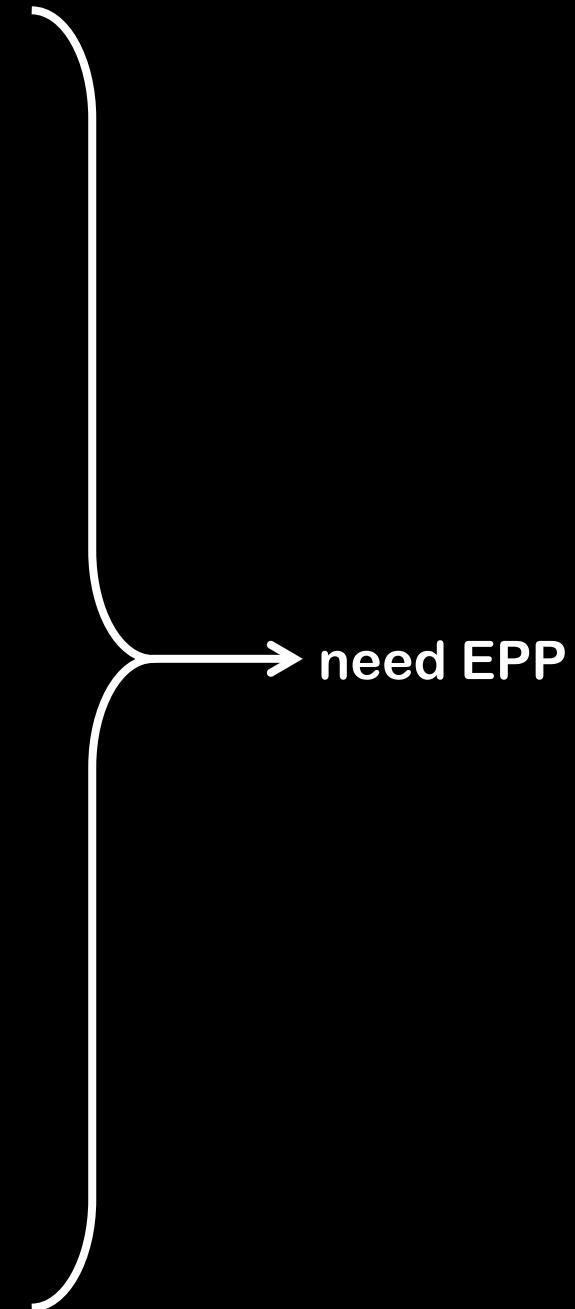
large 3D shapes

low cost tooling

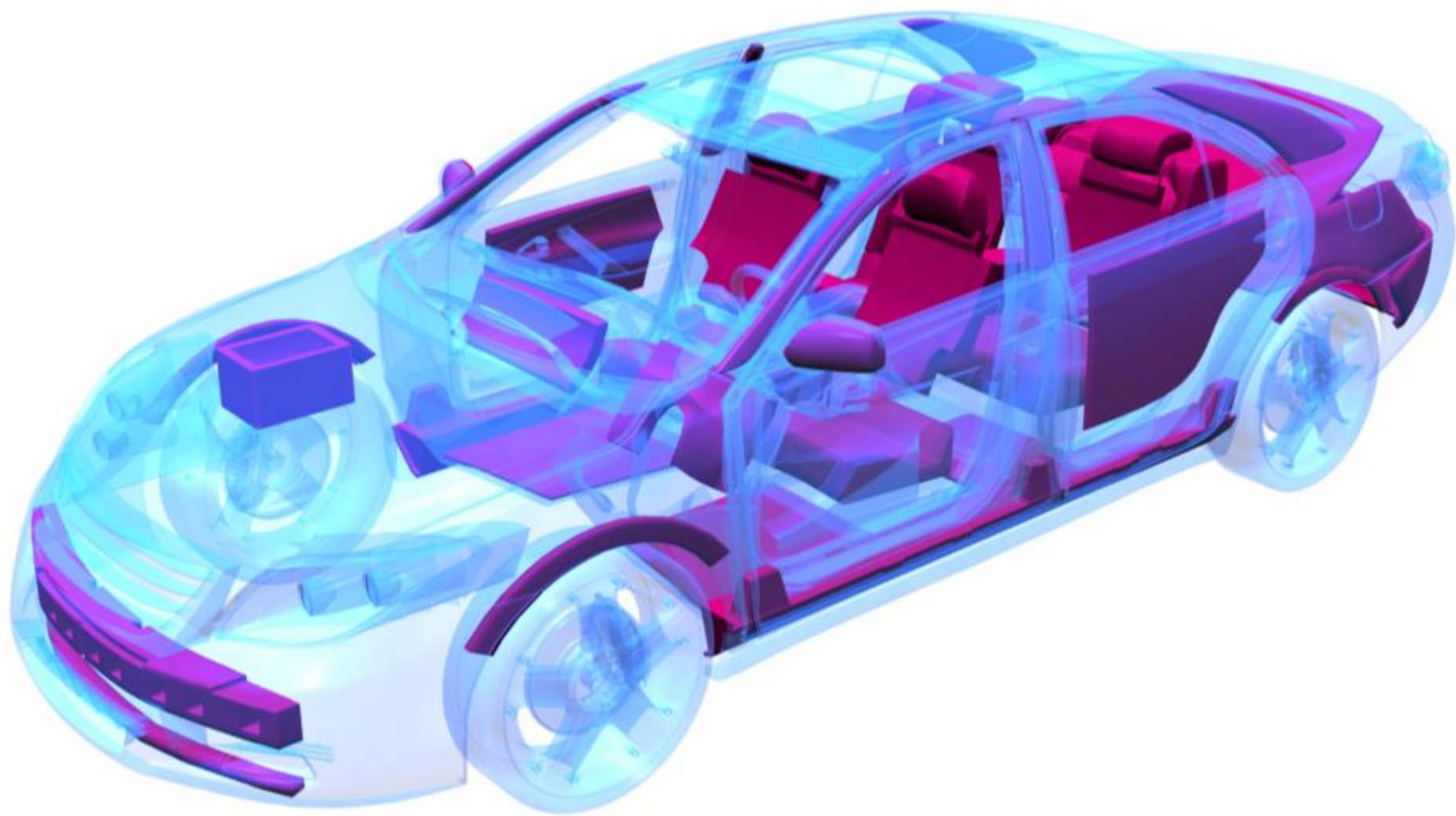
temperature resistance

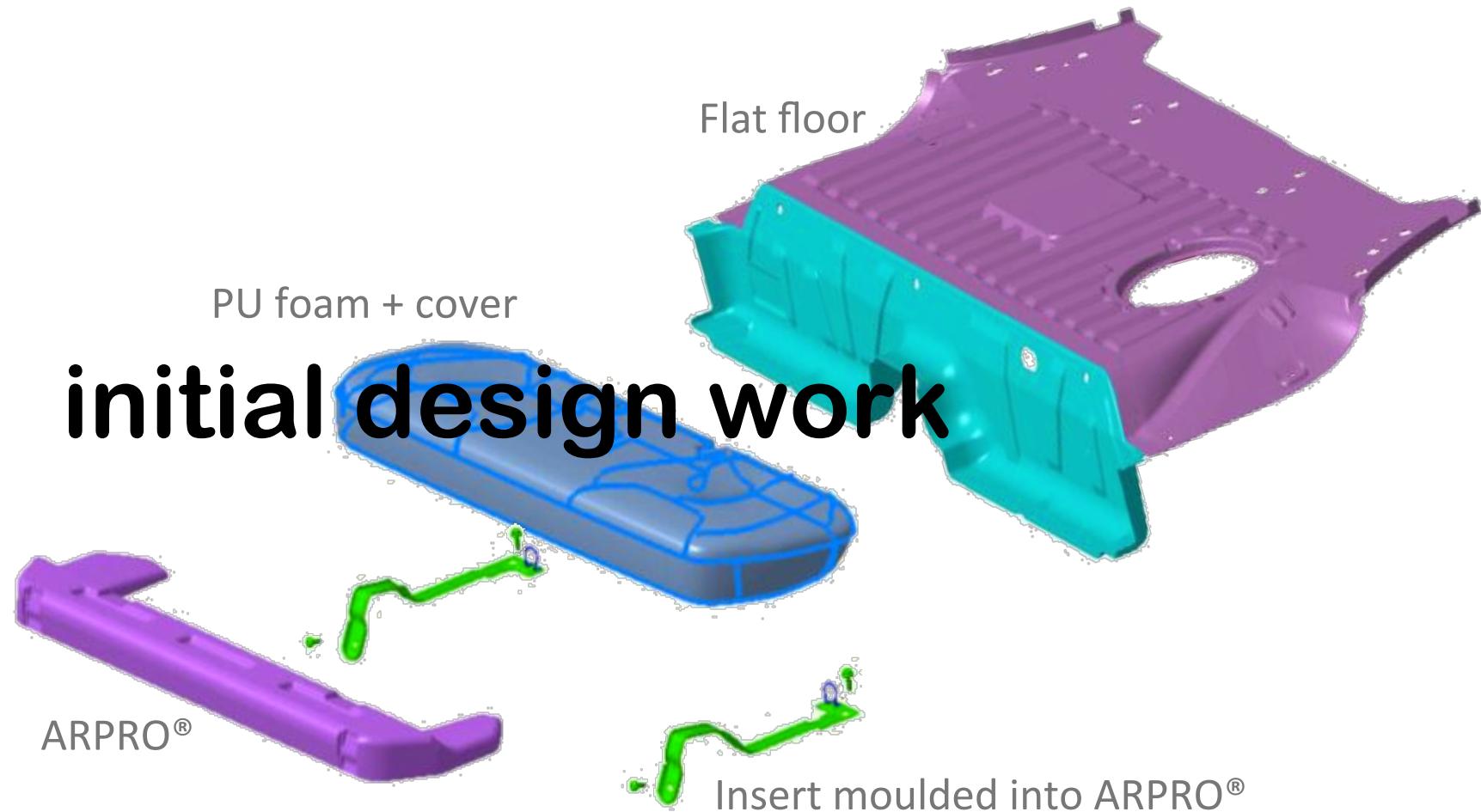
resilience

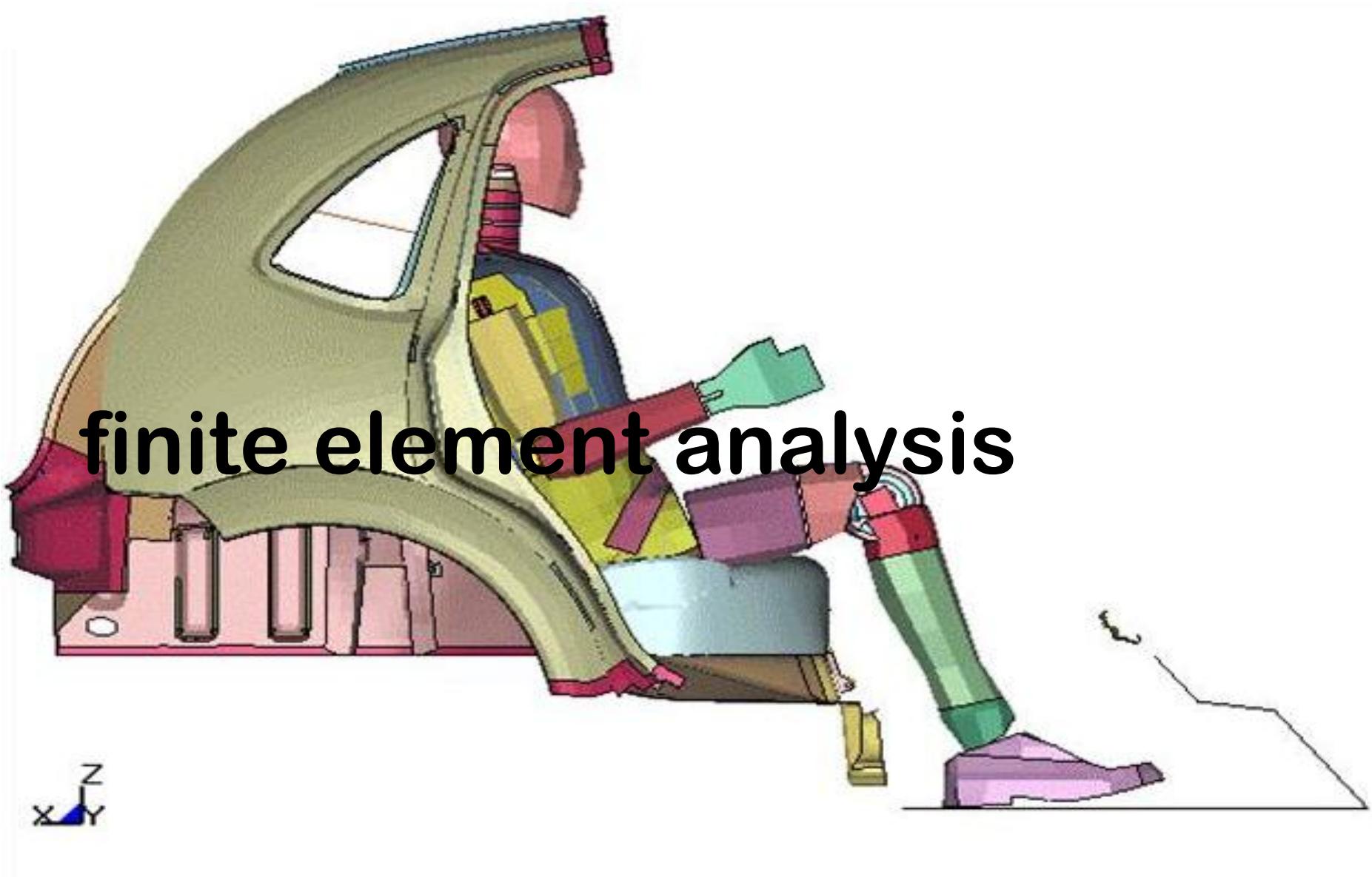
emissions



need EPP







finite element analysis



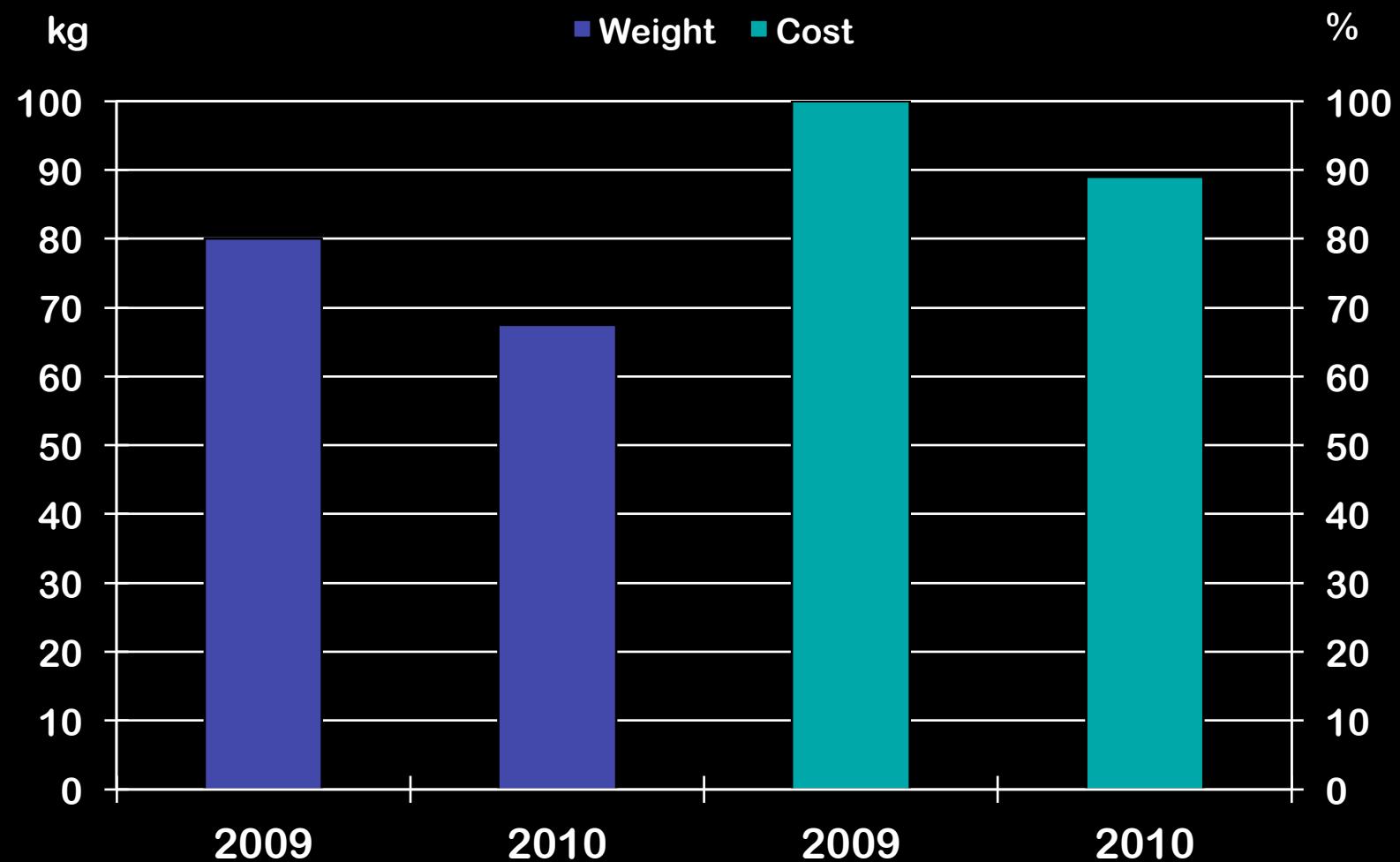
**prototypes**



crash testing



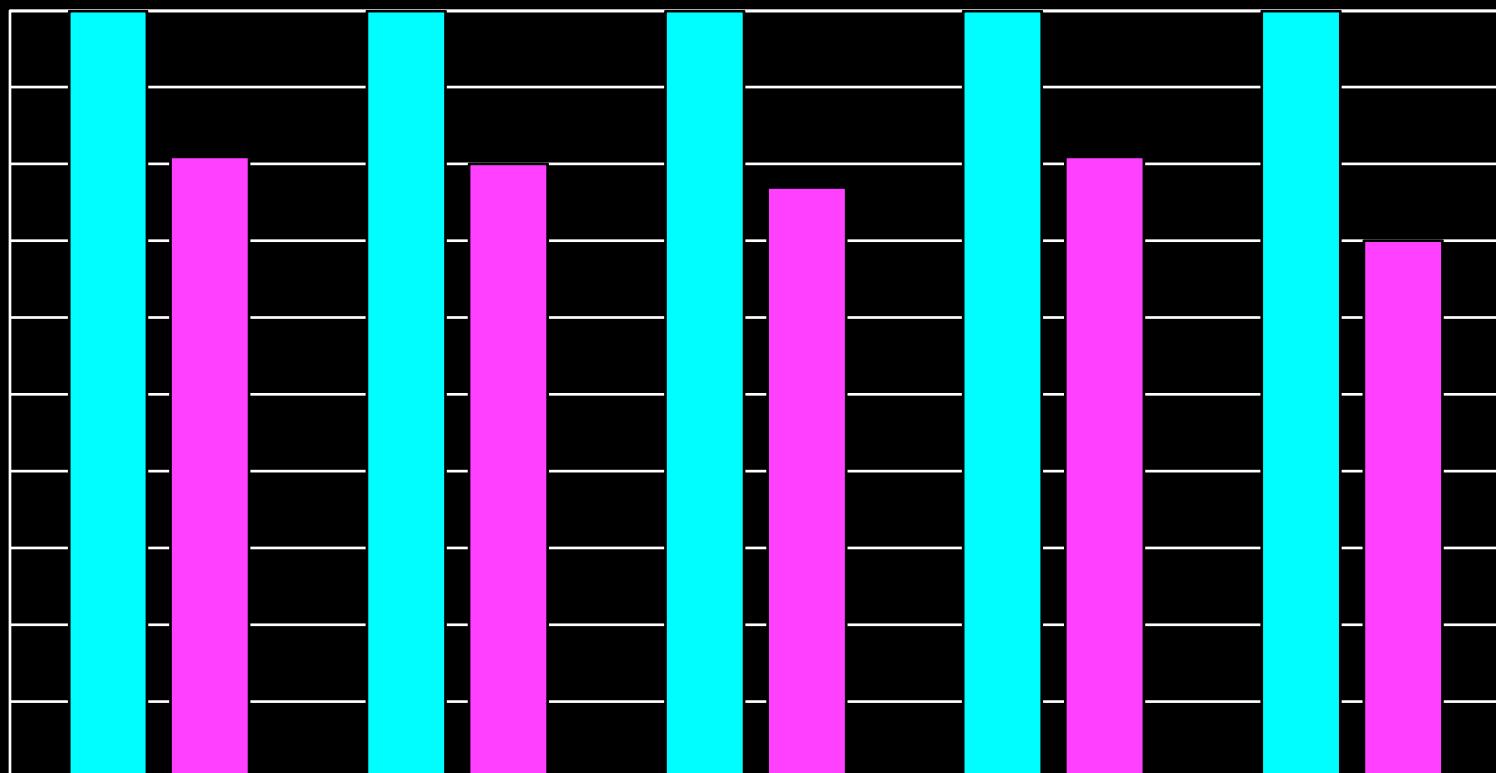
# Weight and Cost Saving BMW 5 Series

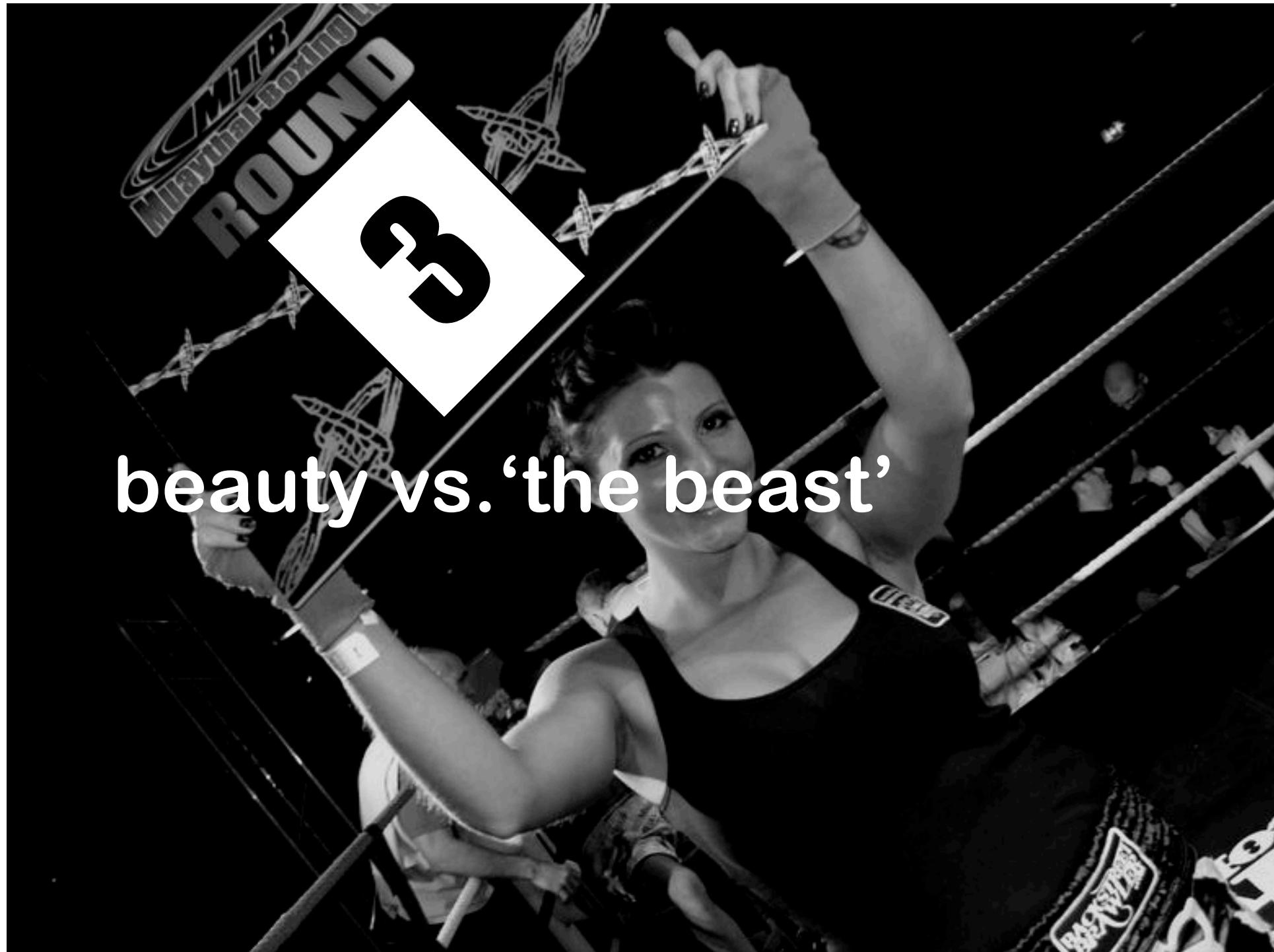


# Life Cycle Analysis Comparison

%

Steel/GM-PUR ARPRO





3

beauty vs. 'the beast'



hide/manage

Bead  
Gaps  
Seal  
Vents  
Mottle

INNOVATIONS





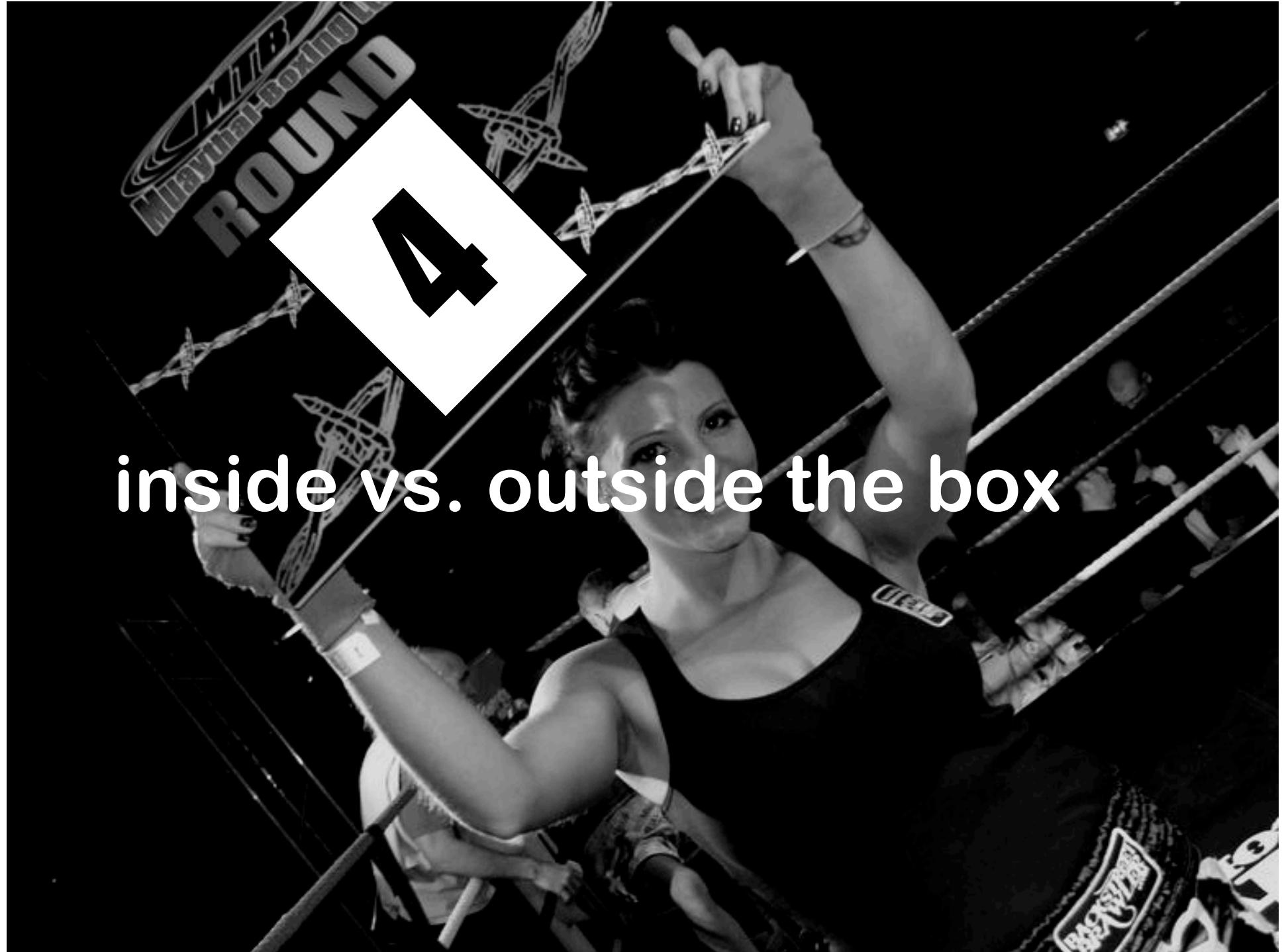
eureka!







closed-  
surface  
impermeable  
puncture &  
abrasion  
proof  
warm-feel  
3d  
grain



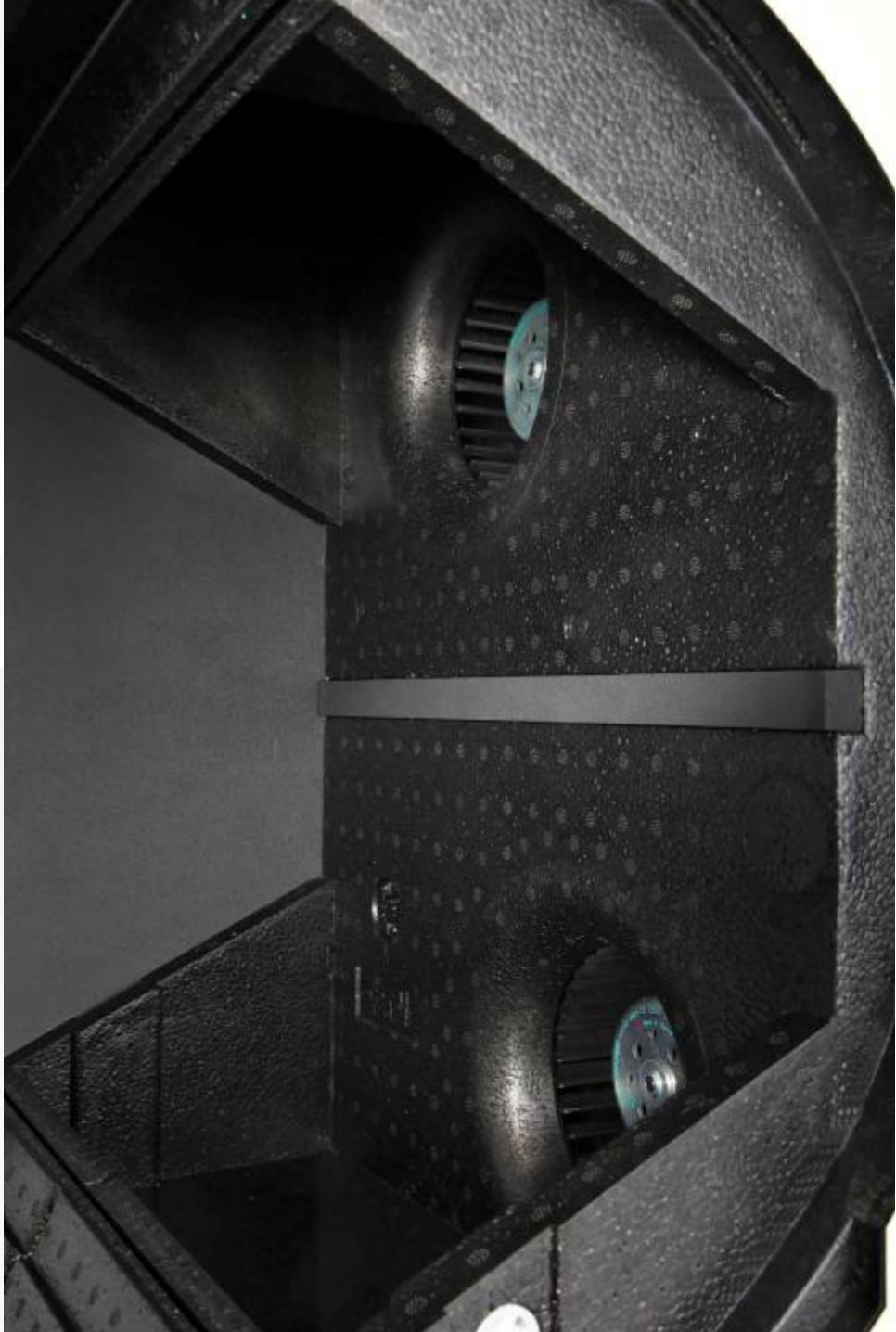
4

inside vs. outside the box



consumer



















ROUND

Muay Thai Boxing

5

you vs. innovation





