Great Designs In Steel

Brad Davey, Executive Vice President

May 2024

AGENDA

1. ArcelorMittal overview
2. G.D.I.S. = G.D.I.A(utomotive)
3. ArcelorMittal Steel Solutions

ArcelorMittal at a glance

Scale

Steel manufacturing in 15 countries, customers in 140 countries

58 million metric tons of steel produced, 8.7 in North America

127,000 people worldwide, 14,000+ in North America

Strength

$7.6bn EBITDA

Low net debt of $2.9bn

$2.9bn Free cash flow

All our activities are aligned with our four key values:

safety, sustainability, quality and leadership.

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ArcelorMittal at a glance

Sustainability

Group-wide target of Net Zero carbon emissions by 2050

H&S our company's number 1 priority since our formation in 2006

2030 target to double women in management to 25%

Innovation

More than 100 R&D programs in progress

More than 200 trademarked products in 2023

38 new products and solutions launched in 2023

GROUP TARGET

25% reduction in carbon emissions intensity by 2030

EUROPEAN TARGET

35% reduction in carbon emissions intensity by 2030

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We’re a leading steelmaker in North America, serving a broad manufacturing base in Canada, the United States and Mexico.

14,000+ full-time employees
Steel Shipments of 10.6 MT (2023)

AM/NS Calvert

ArcelorMittal Dofasco

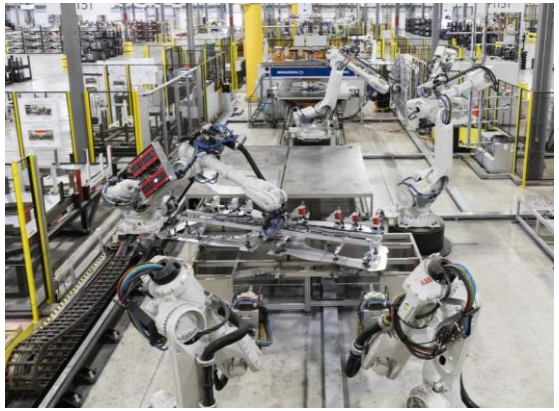
ArcelorMittal Mexico

ArcelorMittal Long Products

ArcelorMittal Mining / Infrastructure

ArcelorMittal Texas

ArcelorMittal Tailored Blanks



ArcelorMittal Tubular Products

G.D.I.S. = G.D.I.A.
Steel has remained the material of choice in automotive

Beliefs:

1950s	Future is plastic, aluminum, fibre glass	X
1980/90s	Ultralight steel auto body will be aluminum	X
2012	All pick-ups & large SUV's will be aluminum	X
2017	BEV's & hybrids will be aluminum, carbon fibre, reduction -30%++ weight	X
2022	High pressure die cast aluminum	? → X

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What’s a car made of?

Steel has met all competitive challenges and remained the material of choice

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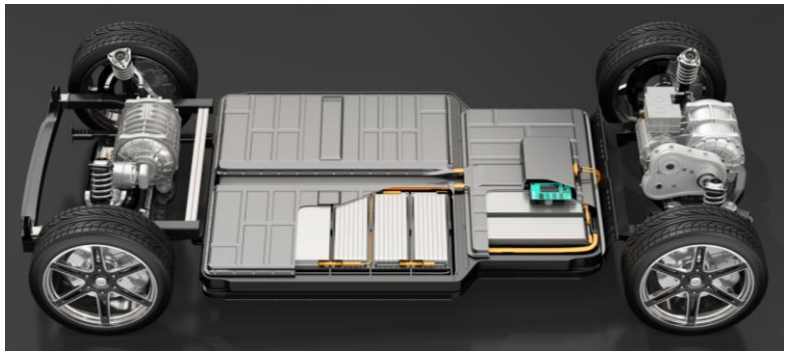
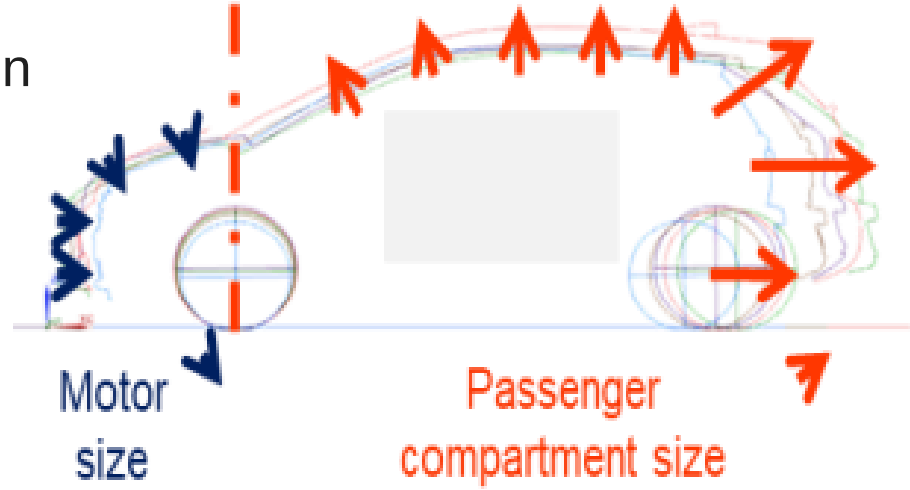
The transition to BEV's brings new challenges and opportunities

- Strong impact of increased mass on the vehicle structure
  - ✓ Center of gravity is lower
  - ✓ Front and rear mass is rebalanced
  - ✓ Increased energy in crash
  - ✓ Chassis need to be reinforced
  - ✓ Potential for manufacturing simplification
- Limited influence of mass on range, acceleration, max speed
- No CO2 emission whatever the mass
- Range wars



Battery: 579 kg (410 km)

Distribution of spaces



Management of noise a vibrations

Safety, Quality, Features and COST!

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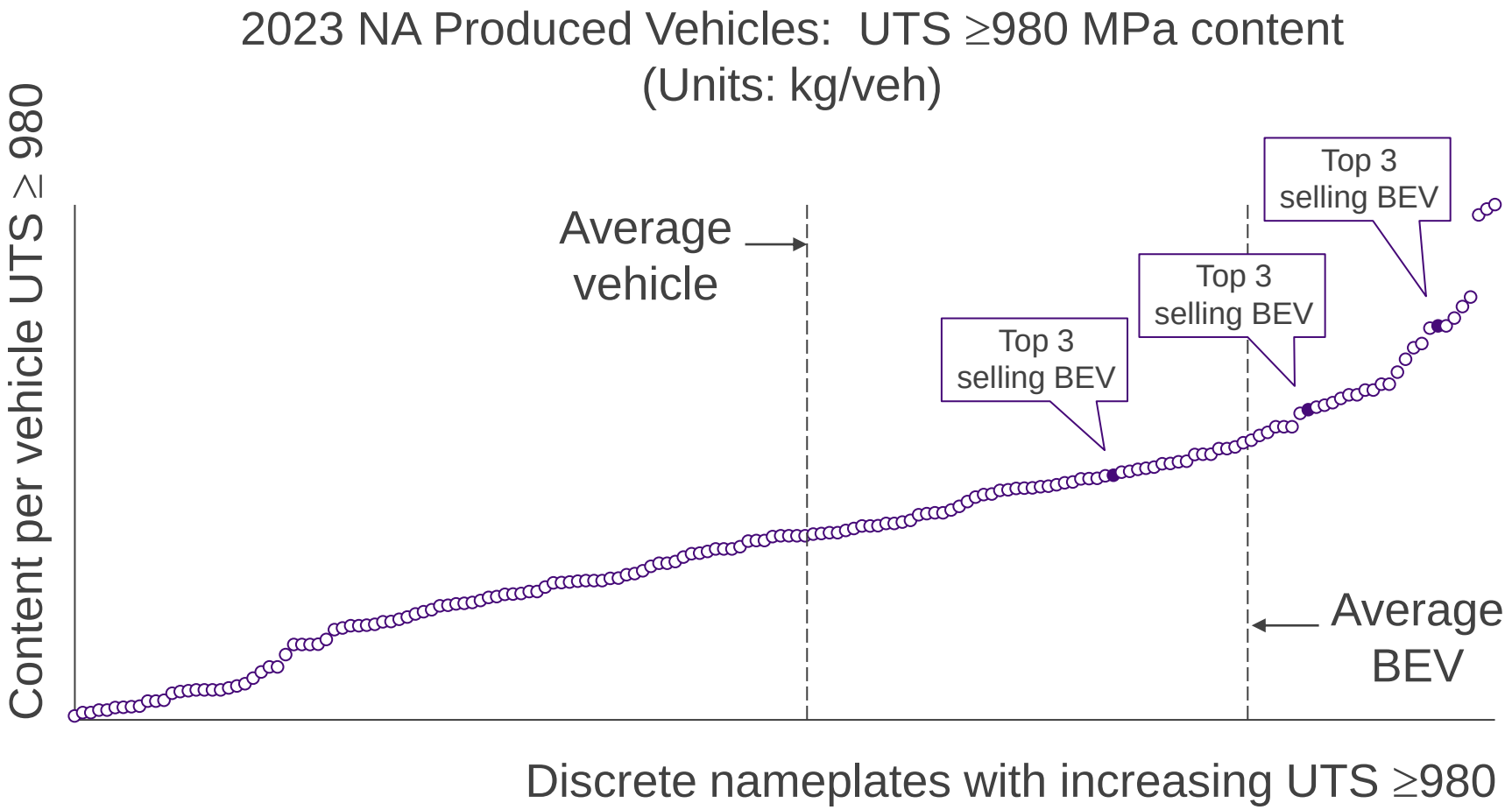
Trends: In 2023, the Most Advanced Vehicles as Measured by UTS were BEVs



9 BEV nameplates in the top 10 of highest UTS steel content per vehicle

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Trends: Door Rings and MPI are Becoming the Standard for BEVs

2028F NA Produced Vehicles: PHS content in Body Side structure
(Units: kg/veh)

BEVs incorporate a 50% higher proportion of PHS in the Body Side structure compared to other vehicles on a weighted average basis (2028F)

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Trends: Latest material challenge, Aluminum Die-Casting

Advantages	Disadvantages
• Part consolidation • Manufacturing simplification • Assembly line CAPEX savings • Speed??	• Higher part costs • Yields, defects, cracking! • Weight • Repairability • Insurance costs! • Redesigning load paths to protect die cast parts? • Lack of “multi-model” flexibility • Fit-up limitations

Steel multi-part solutions will prove better than traditional & die-casting approaches

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Ensuring steel remains the material of choice in the auto industry

- Our **leading products, and co-engineering capabilities**, largely stopped the advance of aluminum intensive vehicles
- Our design services have convinced multiple BEV makers to switch from all aluminum to **steel intensive vehicle designs**
- Our services are convincing automakers to shift to all steel, or at least **highly steel intensive, battery boxes**

ArcelorMittal is the leading supplier to the global automotive industry…

11.5 million metric tonnes of steel supplied to the automotive industry in 2023

The broadest product range in the industry

Automotive operations in Asia, Africa, Europe, and North and South America

Ranked #1 technology leader by 10 of the top 12 North American auto OEMs

ArcelorMittal has an unrivalled track record in innovation

Pioneer and world leaders in Press Hardenable Steels (PHS) – **Usibor®** and **Ductibor®**

Best performing 3rd generation product and portfolio - award-winning Fortiform®

Pioneer and market leading provider of hot dipped GI exposed steel - **Ultragal®, Extragal®,** and **Zagnelis®**

Efficient, cost-effective lightweight solutions including **tailor welded blank technology**

S-in motion® – collaborating with customers for lighter, safer, more environmentally friendly vehicles

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ArcelorMittal S-in motion® Steel Solutions are shaping the future of mobility

S-in motion® is a set of steel solutions developed by ArcelorMittal for carmakers who wish to create lighter, safer and more environmentally friendly vehicles

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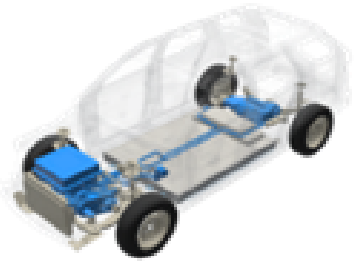
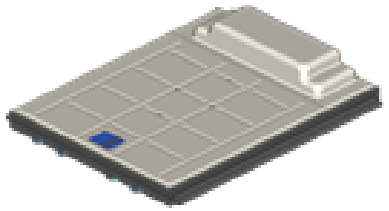
ArcelorMittal new solutions for vehicle electrification

S-in motion®
Mid-size SUV
PHEV

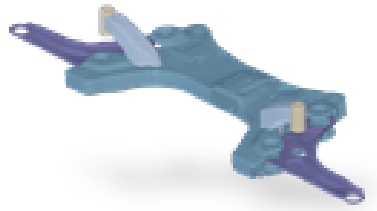


S-in motion®
Mid-size SUV
BEV

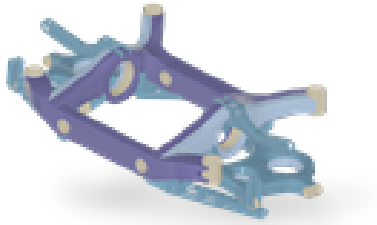
S-in motion®
B-segment
BEV



S-in motion®
HV-Battery
housing



S-in motion®
Front Chassis
PHEV



S-in motion®
Rear Chassis
BEV

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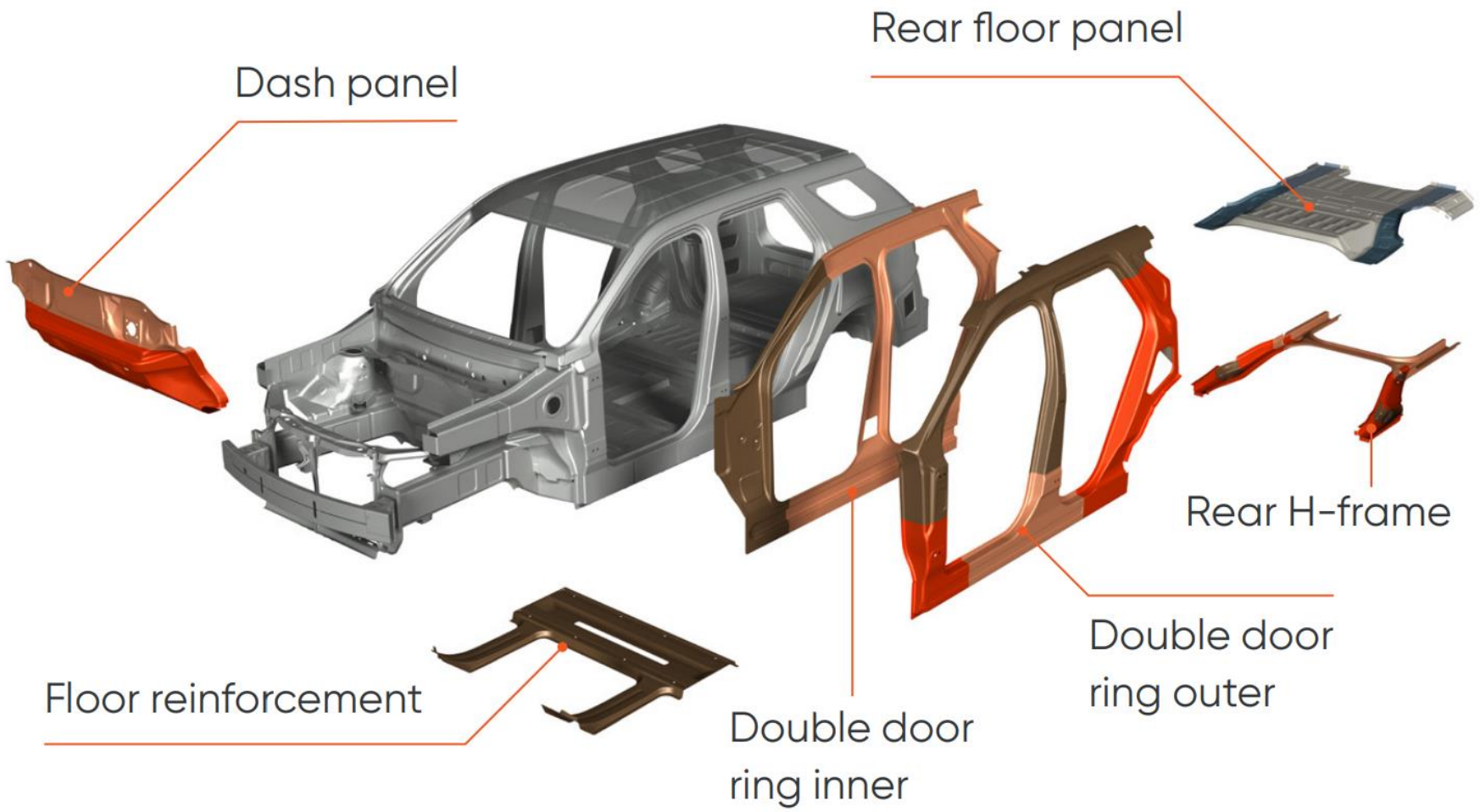
ArcelorMittal Multi Part Integration™ is a sustainable steel solution to simplify vehicle design and production



- Cost reduction
- Part reduction
- Crash optimisation
- Material usage optimisation
- CO_2 reduction
- Body shop simplification

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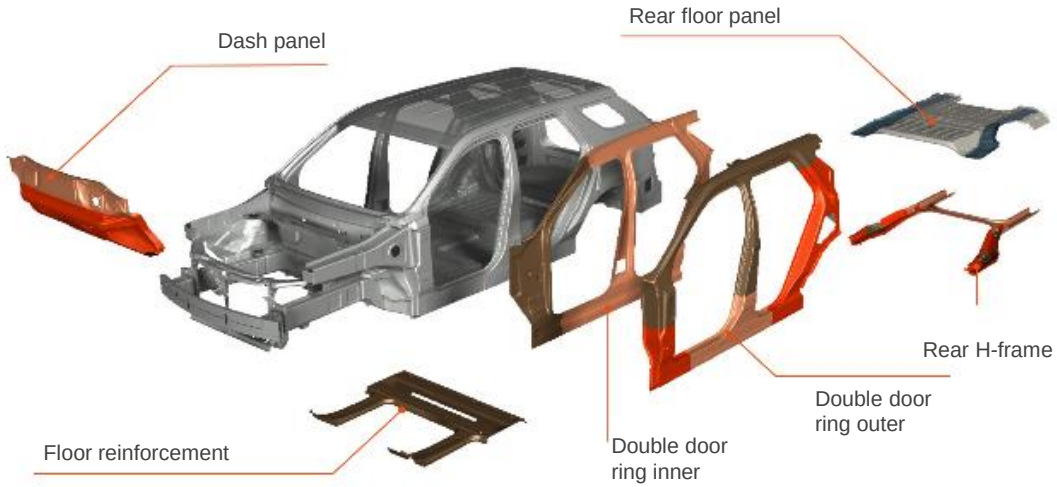
ArcelorMittal Multi Part Integration®: High savings in operations confirmed at the Body-in-White level

Scope considered in the current study:

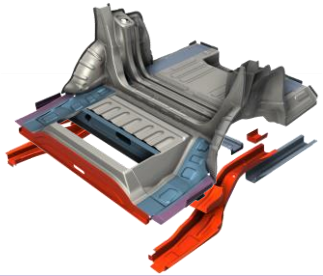


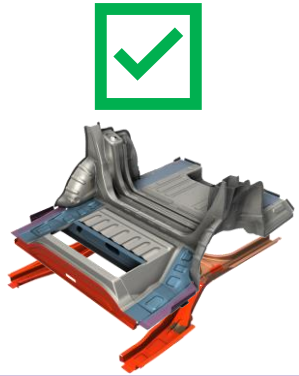
Alternative MPI solutions to potentially further improve gains:

	Impact of 6 MPI BiW level
Operators	-15% to -27%
Bodyshop area (m^2)	Up to -14%
Robots	-6% to -8%
CAPEX (€)	-7% to -9%
Assembly cost (€)	-10%
HPV (Hour of labor per vehicle)	-17% to -30%
Part count	-46
Spot welds	-567
Material Utilization Rate	+7%

ArcelorMittal Multi Part Integration®: A very competitive way to achieve simplification

- High Pressure Die Casting is a competing process
- Process was deeply investigated
- Steel based rear module with **MPI outperforms** aluminum HPDC design in part **cost**
  - Full steel module assembled is cheaper than only the raw aluminium (** and ***)
- Megacasting HPDC is heavier than an AHSS based steel solution

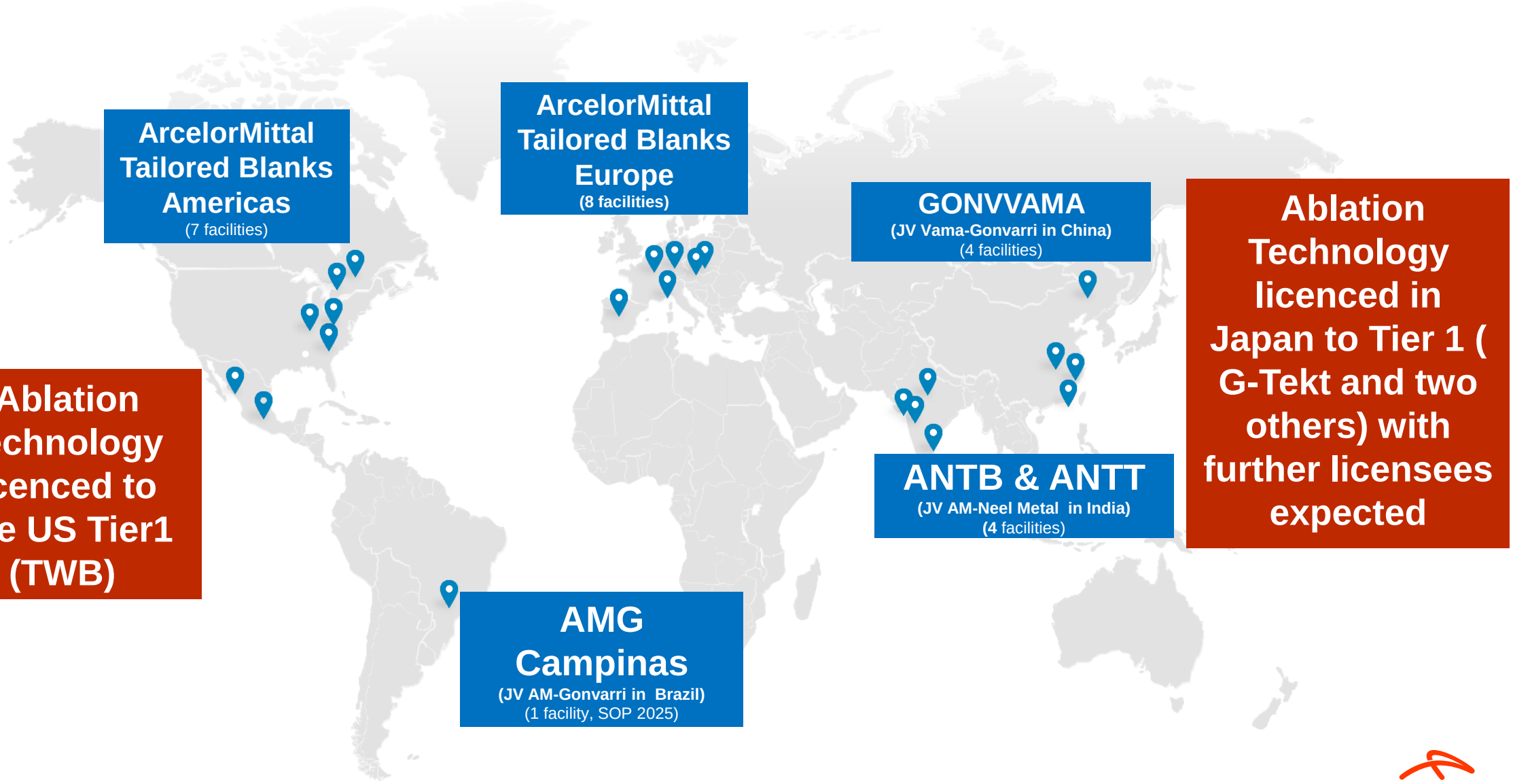




	Reference Standard design	Multi Part Integration	High Pressure Die Casting
Material	Steel	Laser Welded Blanks – other flat Steels	Cast Aluminium alloy
Mass position	Ref.	Lightweighting if material upgrade	- (10% heavier for rear module Gigacasting*)
Part integration	Ref.	+	+ +
Module cost **	Ref.	=	- - ** From +13% to +74% ***

** Benchmarking activities done on A2mac1 on car with both steel based and aluminium HPDC based rear module. Analysis done as the function level*
*** ArcelorMittal cost assessment done with consideration of amortizations, material and process costs*
**** Calculation done by S&P Global Mobility*

ArcelorMittal Press Hardened Steel LWB, a truly global offer



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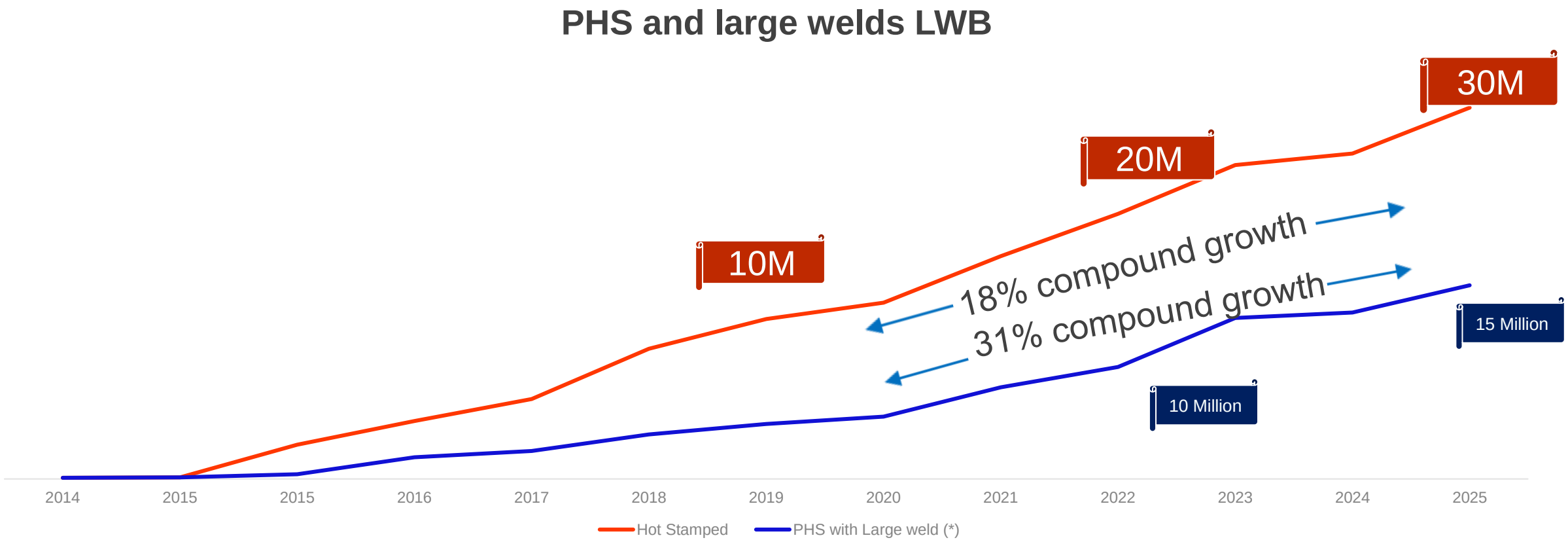
ArcelorMittal LWB PHS blanks expected to reach more than 30 Million in 2024



China adopting at approximately 2x growth rate

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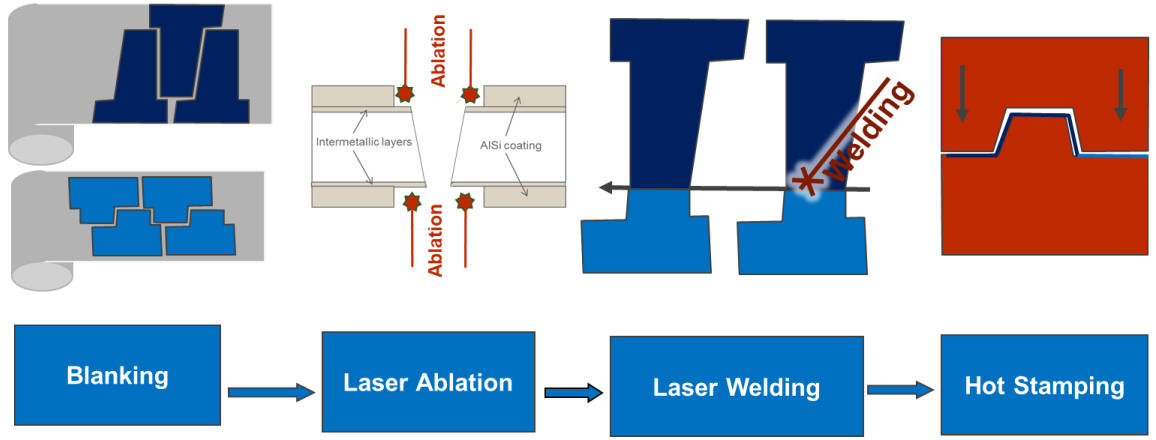
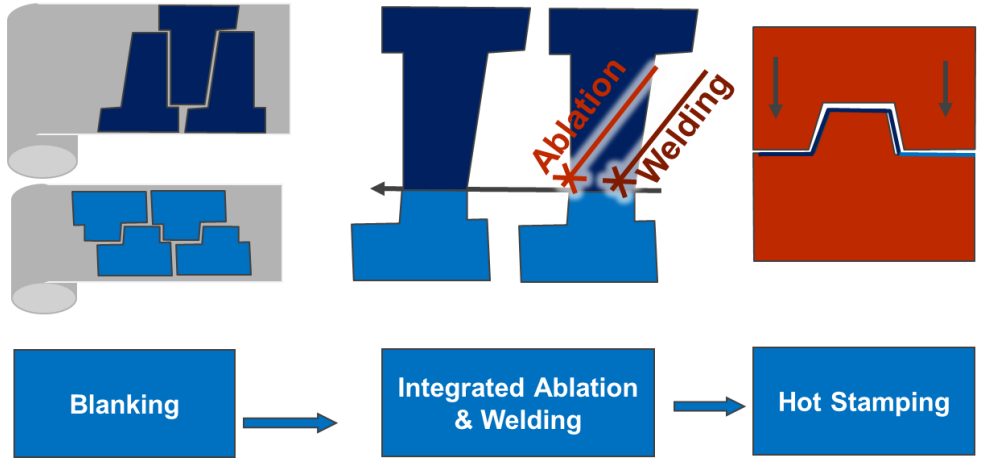
MPI Welding Process Evolution – ArcelorMittal driving down costs!!

CURRENT PROCESS



NEW PROCESS



Integrated Ablation & Welding

Design Freedom
- Gross Mass reduction
- Weld seam optimization

Process Simplification
- Reduced processing steps
- Improved inventory management

Higher Material Utilization

Fewer WIP Pallets

Smaller Footprint

Lower Capital Investment

Lower CO_2 Footprint

Cost Reduction

Integrated Ablation & Welding Optimizes the Cost & Carbon Footprint of MPI Applications

ArcelorMittal

We continue to innovate, focusing on the best steel solutions for our customers

Next generation of hot stamping steels

- Maintaining product and market leadership with Ductibor® 1500

Electrical Steels

- Mardyck France end of 2024
- Other projects at various stages

Innovative Ultra High Strength Steels

- New MP grade exceeds previous Martinsite® offering in North America

Thank you!

- G.D.I.S. = G.D.I.A(utomotive).
- ArcelorMittal is committed to remaining the #1 Global Steel Solution provider to automotive
- We understand all design solutions for body structures should be studied – but save money and improve your designs by not delaying in joining the steel MPI trend!!