



One step ahead in its region, everywhere in the world.

#ThinkHD







COMPANY | Corporate

HQ:	Denizli Turkey
Company:	HD Rubber Co.
Brand	HD(1959) TM
Staff:	≈ 300
Engineering:	≈ 20
R&D team location:	Turkey Denizli
Factory	30.000 m ² area and 3.000 tones production capacity
Logistic	Turkey Denizli
Market:	Worldwide 60 countries, 5 continents
Products	Air Springs
	Rubber and Rubber to Metal parts
	Suspension Parts





COMPANY | General

AIR SPRING & RUBBER PARTS

Turkey | DENiZLi

100% Private

35.000 M2





COMPANY | Product Portfolio











COMPANY | Product Portfolio

Rubber Parts

Whatever size or configuration our customers need, our team of engineers provide the experience and technical know-how to create the rubber parts specified to your needs.

-Protection against corrosion (for metal parts)
-Zinc, phosphate coating, top coat paint, protective oil processes
-Chemical application with homogeneous automatic paint machine
-The adhesion of the metal to the rubber is checked by the peeling test

The engineering processes are continually being developed and improved to strengthen our position as leader in the industry.

Our dedication to quality has resulted in innovative products, proprietary process patented and unique products.

The benefits of our rubber parts at a glance:

-Complete line of Rubber Part Solutions
-Customised Solutions
-Durability & Anticorrosive Technology
-Double sided welding Technology with 6 axle welding robot
-Innovative Parts Ready for assembly







QUALITY | Certificates

HD RUBBER - Co-Designer certified under all our products with and by URS for IATF 16949.











PRODUCTION | Full in House processing and manufacturing



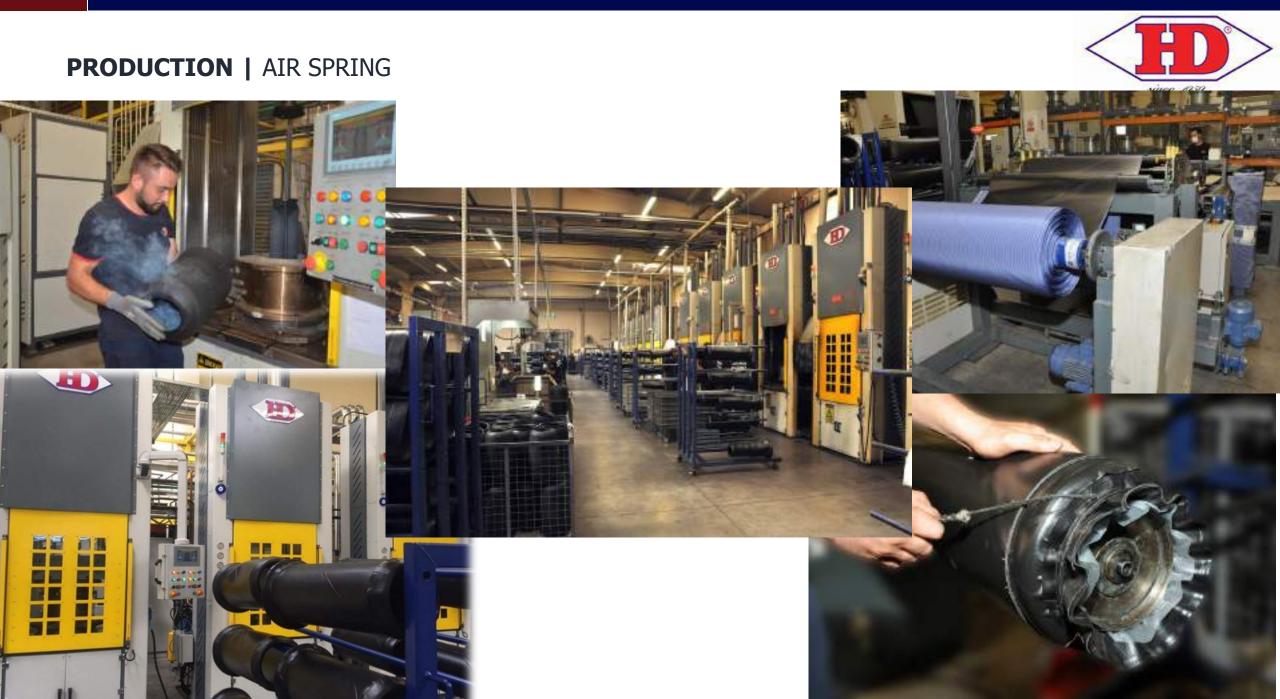
HD RUBBER leading edge production facility offer;

- Air Spring manufacturing area
- Sheet Metal Forming
- Molding, Welding
- Compound Mixing area
- 6 axes welding robot
- Rubber metal & Vulcanization
- Wet and dry paint facility
- Machining process
- Toolshop
- Surface Coating Process

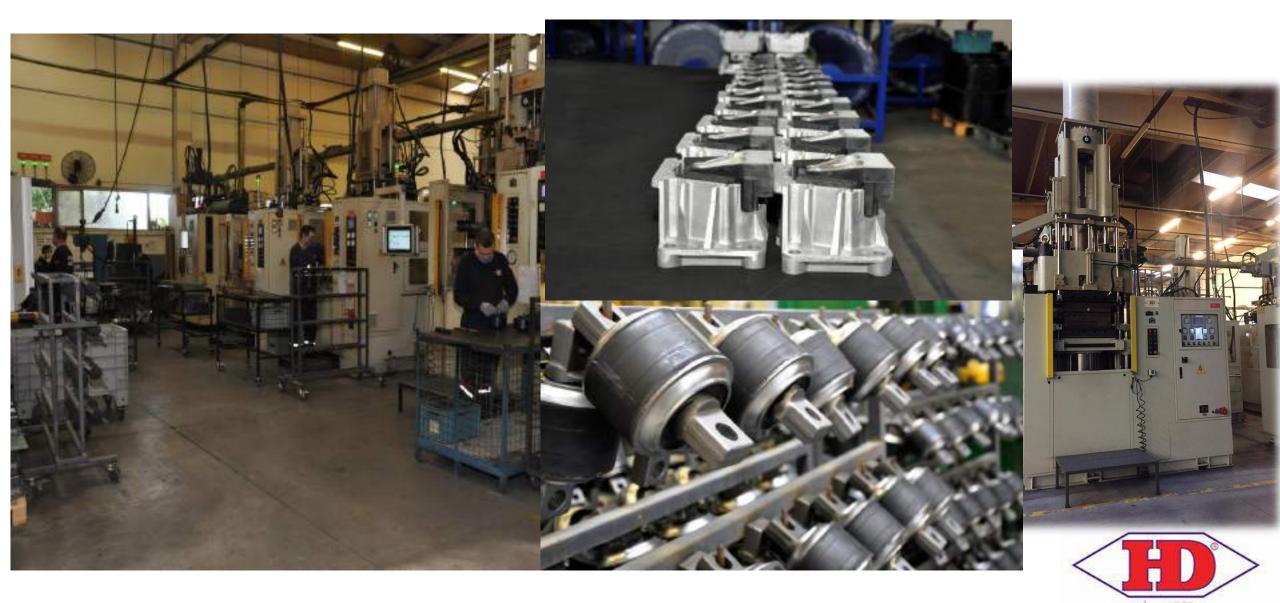
-R&D, design, engineering, production planning, production, assembling, packaging, international logistics

-Manufactured products are served to our business partners by our international sales and marketing teams located in Denizli / Turkey.





PRODUCTION | RUBBER PARTS

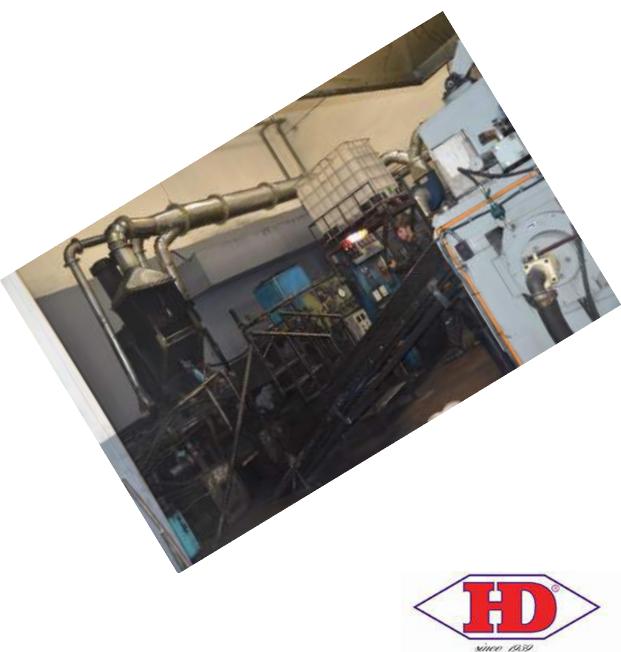


Nince 1959

PRODUCTION | COMPOUND MIXING AREA

- Production is made in-house from 40 shor to 90 shor.
- Using the best raw material (SMR)
- Test process in our laboratories after each production process
- We are manufacturing till 1,5 tones in house.
- Roller System







LEADING EDGE INNOVATION | PRODUCTION

R&D Department

- Solidworks model Design directly sent to the CNC machining with Siemens NX cam.
- Preventing interference on machining by unauthorized staff.
- <u>Mistake-proofing</u>
- Flow analysis Program(Moldex) can watch the behaviour of rubber.
- Moulding design

Manufacturing Execution System(MES)

- Instant notification of errors and stops
- Instant inspection follow-up in production
- <u>Predictive maintenance with artificial intelligence module (production interruption is prevented with prior</u> <u>error awareness.)</u>
- <u>Keeping quality records..</u>

Curing with Steam System

• <u>Innovative and unique curing with steam system.</u>

Compound Mixing Area

- Preparing the most suitable mixture for the working conditions of the part
- With the tests carried out, obtaining a homogeneous mixture is kept under control.







QA | INHOUSE ANALYSIS and TESTING CAPABILITIES

Rheometer Test

- When the compound was cured
- When the compound will start to burn
- At what time the compound starts to fluidize

Pull Off Test

How durable it shows by applying maximum force to the product

Blasting Test

 How durable the product is after applying the maximum force, pressure and water

Growth Test

• Measuring the durability of the product

Leaking Test

• It is checked whether the air spring leaks in the water.

Fatigue Test

- The wear time of the product is measured
- 5-7 bar pressure is applied to the product.
- 3,3 Hertz moving as real.
- It is available for each air spring.











4 axial fatigue testing facility,

This test is available for all Air Spring products









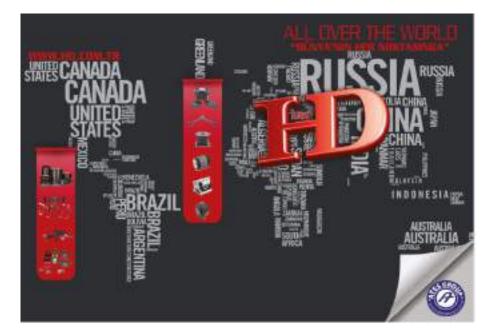
- IATF 16949 & ISO 9001 Certified
- All in house Production % 100
- Automotive grade raw material % 100
- 4 Weeks maximum production time
- New Developments time 7 weeks
- Unique assembly mould per reference
- Manufacturing Execution System

- Internal Tool-Shop certified
- R&D certified and validated by OE
- Quality department and process validated by OE
- OE supplier
- Patented production process
- Patented Technologies
- 6 simultaneous axial fatigue testing



Brand awareness & communication

- Istanbul
- Brazil
- Dubai
- Moscow
- Johannesburg
- Shanghai
- Frankfurt & Hannover
- Las Vegas
- Puebla















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Emre OZLUK Marketing & Sales Specialist Tel : +90 258 371 71 91 GSM : +90 533 033 81 82

e.ozluk@hd.com.tr www.hd.com.tr

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