



Automotive

Motorcycle Exhaust System

Changes to emission limits have led Honda to redesign this motorcycle exhaust system. The quality of the system has been improved with the switch to ferritic stainless steel grade 409.



Location/environment | BRAZIL/OUTDOOR

Product | STAINLESS STEEL PIPE

Fabrication process | FORMING AND WELDING

Grade/surface | 409/2B

Material thickness/diameter | 1.2 MM THICK AND 25.4 MM DIAMETER

Weight

Competing material | CARBON STEEL

Date of completion | DECEMBER 2008

Manufacturer | HONDA

Material supplier | ARCELORMITTAL INOX BRAZIL

Source of information | ARCELORMITTAL INOX BRAZIL

Remarks

Automotive Silencer Wool

Silencer wool is used in automotive exhausts to reduce noise emissions from the vehicle. The wool is obtained by placing static cutting tools on moving wire to produce a continuous chip. The stainless steel chips are then used to make stainless wool which is then pre-formed in various shapes such as sleeves to produce high performance silencers.



Location/environment | WORLDWIDE/INDOOR

Product | STAINLESS STEEL WIRE

Fabrication process | PEELED WOOL FROM DRAWN WIRE

Grade/surface | AISI 430(EN4016), 434(EN4113) OR 446 STAINLESS STEEL

Material thickness/diameter

Weight

Competing material | GLASS FIBRES AND CAST STAINLESS FIBRES

Date of completion

Manufacturer | NUOVA TEMAS

Material supplier

Source of information | NUOVA TEMAS/ISSF LONG PRODUCTS COMMITTEE

Remarks

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Transport

Bicycle Rim

Creating a bicycle rim from stainless steel provides added strength and an enhanced appearance. Stainless steel replaced aluminium in this application.



Location/environment | SUZHOU, CHINA/OUTDOOR

Product | LONG AND FLAT STAINLESS STEEL PRODUCTS

Fabrication process | STAMPING, FORMING AND WELDING

Grade/surface | 430TI/2B

Material thickness/diameter | 0.7 MM

Weight

Competing material | ALUMINIUM

Date of completion | SEPTEMBER 2008

Manufacturer

Material supplier | SHANGHAI KRUPP STAINLESS

Source of information | SHANGHAI KRUPP STAINLESS

Remarks

Transport

Folding Moped and Bicycle

Folding mopeds and bicycles are ideal as supplementary vehicles because they can be carried on to public transport or fitted into the boot of a car. They can be easily unfolded, used and folded together again.

The use of stainless steel enables the mopeds and bicycles to be used in seaside locations, where corrosion is a constant danger for bikes made with carbon steel. The stainless steel can also be thinner without compromising the bicycle's load-bearing capacity, making it lighter during transport by hand or by car.



Location/environment | ITALY/OUTDOOR

Product | STAINLESS STEEL TUBES AND SMALL ITEMS

Fabrication process

Grade/surface | EN 1.4301 (AISI 304); EN 1.4305 (AISI 303)

Material thickness/diameter

Weight

Competing material

Date of completion

Manufacturer | DI BLASI INDUSTRIALE SRL

Material supplier

Source of information | CENTRO INOX

Remarks

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Transport

Vespa Silencer

The era of the 1950s and 1960s is still evoked by the latest Vespa. The iconic scooter maintains its charm, even with the addition of advanced modern technology such as its stainless steel silencer. Made almost completely of stainless, the silencer for the LX 125cc and 151cc 4T models enhances the environmental credentials of the Vespa by reducing emissions and noise pollution. Studies and tests are still underway to ensure this delicate component is increasingly efficient, strong and continues to eliminate noise and other pollution.



Location/environment | WORLDWIDE/OUTDOOR

Product | STAINLESS STEEL SHEET AND TUBE

Fabrication process

Grade/surface | EN 1.4301 (AISI 304) / EN 1.4512 (AISI 409)

Material thickness/diameter

Weight | INTERNAL 1,654 KG; EXTERNAL 2,710 KG

Competing material

Date of completion

Manufacturer | PIAGGIO & C. SPA

Material supplier

Source of information | CENTRO INOX

Remarks

57

